

Fort Thomas Independent Schools

Guaranteed Energy Savings Contract

Owner:

Fort Thomas Independent Schools 28 North Fort Thomas Avenue Fort Thomas, KY 41075

Qualified Provider:

CMTA Energy Solutions 9519 Civic Way, Suite 100 Prospect, KY 40059

February 13, 2023



Table of Contents:

Executive Summary

AIA A141-2004 Standard Form of Agreement Between Owner and Design-Builder

Exhibit A Terms and Conditions

Exhibit B Not Used

Exhibit C Insurance and Bonds

Exhibit D Scope of Services and Energy Conservation Measures

Exhibit E Energy Savings Guarantee

Exhibit F Annual Reconciliation Statement

Exhibit G Support Services Agreement

Exhibit H BG-1 Form, Method, and Cost of Financing

Exhibit I Warranty and Title

Exhibit J Non-Collusion Affidavit

Exhibit K Project Plans and Specifications

Exhibit L Example District Energy Policy

February 13, 2023



Fort Thomas Independent Schools 28 North Fort Thomas Avenue Fort Thomas, KY 41075 Re: Guaranteed Energy Savings Contract

Mr. Robinson,

CMTA is pleased to provide you with this guaranteed energy savings contract for Fort Thomas Independent Schools. The project highlights include:

- 1. A major HVAC renovation at Highlands Middle School that includes replacement of all major central plant equipment, installation of a fan wall in AHU 1, installation of a new Variable Refrigerant Volume system in the Administration Offices, replacement of the existing roof mounted energy recovery unit, replacement of the domestic water heaters and a complete controls upgrade
- 2. Replacement of the boilers and an upgrade to the water source heat pump distribution pumps at Highlands High School
- 3. Controls retro-commissioning at Highlands High School, Field House, Johnson Elementary School, Moyer Elementary School and Woodfill Elementary School
- 4. LED lighting replacements and retrofits at Highlands Middle School, Highlands High School, Field House, Woodfill Elementary School, Board of Education and the Education Foundation.
- 5. Specialty LED lighting upgrades in the Highlands High School TV Studio

Exhibit D - Scope of Services and Energy Conservation Measures provides detailed information on the scope of work included in the project. The total cost for these upgrades is \$5,362,522, excluding financing fees and bond interest. The project is funded by a combination of energy and operation/maintenance savings over the 20-year project term and bonded funds from Fort Thomas Independent Schools. This includes direct purchase of materials that will be deducted from this total and purchased directly by Fort Thomas Independent Schools.

These upgrades are offered with a guaranteed utility cost savings of \$185,330 per year and operation and maintenance cost savings of \$29,009. CMTA guarantees the utility savings over the 20-year term and should the project not achieve the energy savings identified, CMTA will reimburse Fort Thomas Independent Schools the shortfall on an annual basis per the terms of the contract. The first year of the measurement and verification program is included in the contract price and additional years will be invoiced separately.

CMTA Energy Solutions is excited about this project and appreciates the opportunity to work with Fort Thomas Independent Schools. This project addresses substantial infrastructure needs across the district while improving the indoor learning environments at these facilities and reducing energy and operational costs. We are excited about getting started and look forward to working with the administration, board, and staff.

Sincerely,

Pamela Gerken Project Manager

CMTA Energy Solutions

Pamela Sorben

Standard Form of Agreement Between Owner and Design-Builder



This version of AIA Document A141™–2004 is modified by the Kentucky Department of Education. Publication of this version of AIA Document A141–2004 does not imply the American Institute of Architects' endorsement of any modification by the Kentucky Department of Education. A comparative version of AIA Document A141–2004 showing additions and deletions by the Kentucky Department of Education is available for review on the Kentucky Department of Education Web site.

Cite this document as "AIA Document A141™–2004, Standard Form of Agreement Between Owner and Design-Builder — KDE Version," or "AIA Document A141™–2004 — KDE Version."

Kentucky Department of Education Version of $\begin{tabular}{l} \blacksquare AIA \end{tabular}$ Document A141 $\begin{tabular}{l} \blacksquare AIA \end{tabular}$

Standard Form of Agreement Between Owner and Design-Builder

AGREEMENT made as of the Thirteenth day of February in the year Two Thousand and Twenty-Three (*In words, indicate day, month and year.*)

BETWEEN the Owner:

(Name, legal status, address and other information)
Fort Thomas Independent Schools Board of Education
28 North Fort Thomas Avenue
Fort Thomas, KY 41075

and the Qualified Provider:
(Name, legal status, address and other information)
CMTA, Inc.
9519 Civic Way
Prospect, KY 40059

for the following Project: (Name, location and detailed description)
Fort Thomas Independent Schools GESC
28 North Fort Thomas Avenue, Fort Thomas, KY 41075



This version of AIA Document A141–2004 is modified by the Kentucky Department of Education. Publication of this version of AIA Document A141 does not imply the American Institute of Architects' endorsement of any modification by the Kentucky Department of Education. A comparative version of AIA Document A141–2004 showing additions and deletions by the Kentucky Department of Education is available for review on the Kentucky Department of Education Web site.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Consultation with an attorney is also encouraged with respect to professional licensing requirements in the jurisdiction where the Project is located.

The Owner and Qualified Provider agree as follows.

TABLE OF ARTICLES

- 1 THE CONTRACT DOCUMENTS
- 2 WORK OF THIS CONTRACT
- 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION
- 4 CONTRACT SUM
- 5 PAYMENTS
- 6 DISPUTE RESOLUTION
- 7 MISCELLANEOUS PROVISIONS
- 8 ENUMERATION OF THE CONTRACT DOCUMENTS

TABLE OF EXHIBITS

- A TERMS AND CONDITIONS
- B (NOT USED)
- C INSURANCE AND BONDS
- D SCOPE OF SERVICES AND ENERGY CONSERVATION MEASURES
- **E ENERGY SAVINGS GUARANTEE**
- F ANNUAL RECONCILIATION STATEMENT
- G SUPPORT SERVICES
- H BG-1 FORM AND METHOD AND COST OF FINANCING

ARTICLE 1 THE CONTRACT DOCUMENTS

- § 1.1 The Contract Documents form the Guaranteed Energy Savings Contract. The Contract Documents consist of this Agreement between Owner and Qualified Provider (hereinafter, the "Agreement") and its attached Exhibits, including Owner's direct Purchase Orders, if any; Supplementary and other Conditions; Addenda issued prior to execution of the Agreement; the Project Criteria, including changes to the Project Criteria proposed by the Qualified Provider and accepted by the Owner, if any; the Qualified Provider's Proposal and written modifications to the Proposal accepted by the Owner, if any; other documents listed in this Agreement; and Modifications issued after execution of this Agreement. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Architect and Owner, (2) between the Owner and a Contractor or Subcontractor, or (3) between any persons or entities other than the Owner and Qualified Provider, including but not limited to any consultant retained by the Owner to prepare or review the Project Criteria. An enumeration of the Contract Documents, other than Modifications, appears in Article 8.
- § 1.2 The Guaranteed Energy Savings Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral.
- § 1.3 The Guaranteed Energy Savings Contract may be amended or modified only by a Modification. A Modification is (1) a written amendment to the Guaranteed Energy Savings Contract signed by both parties.

ARTICLE 2 THE WORK OF THE GUARANTEED ENERGY SAVINGS CONTRACT

§ 2.1 The Qualified Provider shall fully execute the Work described in the Contract Documents, except to the extent specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be the date of this Agreement unless a different date is stated below or provision is made for the date to be fixed in a notice issued by the Owner.

(Insert the date of commencement if it differs from the date of this Agreement or, if applicable, state that the date will be fixed in a notice to proceed.)

If, prior to the commencement of Work, the Owner requires time to sell bonds or obtain approval from the Kentucky Department of Education The Owner's time requirement shall be as follows: (Insert Owner's time requirements.)

§ 3.2 The Contract Time shall be measured from the date of commencement, subject to adjustments of this Contract Time as provided in the Contract Documents.

(Insert an amount, if any, for liquidated damages relating to failure to complete on time only if timely completion is critical to the Owner.)

§ 3.2.1 Liquidated Damages. As actual damages for delay in completion of the Work are impossible to determine, the Qualified Provider and his Surety shall be liable for and shall pay to the Owner the sum of Two Hundred and Fifty Dollars

(\$ 250)

not as a penalty, but as fixed, agreed and liquidated damages for each calendar day of delay until the Work is substantially completed as defined in Exhibit A, Section A.9.8. The Owner shall have the right to deduct liquidated damages from money in hand otherwise due, or to become due, to the Qualified Provider, or to sue and recover compensation for damages for failure to substantially complete the Work within the time stipulated herein. Said liquidated damages shall cease to accrue from the date of Substantial Completion.

§ 3.3 The Qualified Provider shall achieve Substantial Completion of the Work not later than

() from the date of commencement, or as follows:

(Insert number of calendar days. Alternatively, a calendar date may be used when coordinated with the date of commencement. Unless stated elsewhere in the Contract Documents, insert any requirements for earlier Substantial Completion of certain portions of the Work. Either list insurance and bond information here or refer to an exhibit attached to this Agreement.)

Portion of Work	Substantial Completion Date
Functional AC System at Highlands Middle and High School	August 4, 2023
LED Lighting Upgrades	October 31, 2023
Highlands Middle School HVAC & Controls Renovation	January 31, 2024
Highlands High School Central Plant Upgrades & Control	October 31, 2023
Controls Retro-Cx & Miscellaneous Upgrades	October 31, 2023

ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Qualified Provider the Contract Sum in current funds for the Qualified Provider's performance of the Guaranteed Energy Savings Contract. The Contract Sum shall be a Stipulated Sum in accordance with Section 4.2 below less the Owner's Direct Purchase Orders, if any, for Project materials or equipment.

),

§ 4.2 Stipulated Sum

§ 4.2.1 The Stipulated Sum shall be Five Million, Three Hundred Sixty-Two Thousand, Five Hundred and Twenty-Two (\$5,362,522), subject to additions and deductions as provided in the Contract Documents.

(List the total construction cost and sum of Owner's direct Purchase Orders. The Contract Sum shall equal the sum of Total Construction Cost, less Owner direct Purchase Orders.)

	Amount	
Total Construction Cost	\$	5,362,522
Sum of Owner's direct Purchase Orders	\$	1,149,998
Contract Sum (total construction cost less Owner direct Purchase Orders)	\$	4,212,524

§ 4.2.2 (Not Used)

§ 4.2.3 (Not Used)

§ 4.2.4 (Not Used)

§ 4.2.5 Assumptions or qualifications, if any, on which the Stipulated Sum is based, are as follows:

ARTICLE 5 PAYMENTS

§ 5.1 Progress Payments

§ 5.1.1 Based upon Applications for Payment submitted to the Owner by the Qualified Provider, the Owner shall make progress payments on account of the Contract Sum to the Qualified Provider as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

§ 5.1.3 Provided that an Application for Payment is received not later than the first day of month, the Owner shall make payment to the Qualified Provider not later than the last day of the same month. If an Application for Payment is received by the Owner after the application date fixed above, payment shall be made by the Owner not later than forty-five (45) days after the Owner receives the Application for Payment.

11 State law (KRS 371.405) requires the Owner to pay undisputed Applications for Payment within forty-five (45) business days following receipt of the invoices. If the Owner fails to pay the Qualified Provider within forty-five (45) business days following the receipt of an undisputed Application for Payment, state law requires the Owner shall pay interest to the Qualified Provider beginning on the forty-sixth business day after receipt of the Application for Payment, computed at the rate required by state law, or as stated in Section 7.7.2 herein.

§ 5.1.4 (Not Used)

§ 5.1.5 With each Application for Payment the Qualified Provider shall submit the most recent schedule of values in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. Compensation for design services shall be shown separately. The schedule of values shall

be prepared in such form and supported by such data to substantiate its accuracy as the Owner may require. This schedule of values, unless objected to by the Owner, shall be used as a basis for reviewing the Qualified Provider's Applications for Payment.

- § 5.1.6 In taking action on the Qualified Provider's Applications for Payment, the Owner shall be entitled to rely on the accuracy and completeness of the information furnished by the Qualified Provider and shall not be deemed to have made a detailed examination, audit or arithmetic verification of the documentation submitted in accordance with Sections 5.1.4 or 5.1.5, or other supporting data; to have made exhaustive or continuous on-site inspections; or to have made examinations to ascertain how or for what purposes the Qualified Provider has used amounts previously paid on account of the Agreement. Such examinations, audits and verifications, if required by the Owner, will be performed by the Owner's accountants acting in the sole interest of the Owner.
- § 5.1.7 Except with the Owner's prior approval, the Qualified Provider shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.2 Progress Payments—Stipulated Sum

- § 5.2.1 Applications for Payment where the Contract Sum is based upon a Stipulated Sum shall indicate the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.
- § 5.2.2 Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:
 - 11 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Contract Sum allocated to that portion of the Work in the schedule of values, less retainage of ten percent (10%) on the Work, other than services provided by design professionals and other consultants retained directly by the Qualified Provider.
 - .2 Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage of ten percent (10%);
 - .3 Subtract the aggregate of previous payments made by the Owner; and
 - .4 Subtract amounts, if any, for which the Owner has withheld payment from or nullified an Application for Payment as provided in Section A.9.5 of Exhibit A, Terms and Conditions.
- § 5.2.3 The progress payment amount determined in accordance with Section 5.2.2 shall be further modified under the following circumstances:
 - Add, upon Substantial Completion of the Work, a sum sufficient to increase the total payments to the full amount of the Contract Sum, less such amounts as the Owner shall determine for incomplete Work, retainage applicable to such work and unsettled claims; and
 - .2 Add, if final completion of the Work is thereafter materially delayed through no fault of the Qualified Provider, any additional amounts payable in accordance with Section A.9.10.3 of Exhibit A, Terms and Conditions.
- § 5.2.4 Reduction or limitation of retainage, if any, under Sections 5.2.2 and 5.2.3 shall be as follows:
 - 4.1 When Owner direct Purchase Orders are used, retainage that would otherwise be held on materials and equipment shall transfer to the Qualified Provider, and the material suppliers will be paid the full amount of their invoices. Except for payment of services by design professionals and other consultants retained directly by the Qualified Provider, the Owner shall retain ten percent (10%) from each Application for Payment, and an amount equal to ten percent (10%) of approved Purchase Order payments, up to fifty percent (50%) completion of the Work, then, provided the Work is on schedule and satisfactory, and upon written request of the Qualified Provider together with consent of surety, the Owner shall approve a reduction in retainage to five percent (5%) of the Contract Sum plus Purchase Orders, if any. No part of the five percent (5%) retainage shall be paid until after Substantial Completion of the Work, as defined in Section A.9.8 of Exhibit A, Terms and Conditions. After Substantial Completion of the Work or designated portion thereof, and with consent of Surety, the Owner shall release applicable retainage except for Work that is incomplete or deficient. The minimum lump sum retainage shall be twice the estimated cost to correct deficient or incomplete Work.

§ 5.3 (Not Used)

§ 5.4 (Not Used)

§ 5.5 Final Payment

Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Qualified Provider no later than 30 days after the Qualified Provider has fully performed the Contract, including the requirements in Section A.9.10 of Exhibit A, Terms and Conditions, except for the Qualified Provider's responsibility to correct non-conforming Work discovered after final payment or to satisfy other requirements, if any, which extend beyond final payment.

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 The parties appoint the following individual to serve as a Neutral pursuant to Section A.4.2 of Exhibit A, Terms and Conditions:

(Insert the name, address and other information of the individual to serve as a Neutral. If the parties do not select a Neutral, then the provisions of Section A.4.2.2 of Exhibit A, Terms and Conditions, shall apply.)

§ 6.2 If the parties do not resolve their dispute through mediation pursuant to Section A.4.3 of Exhibit A, Terms and	d
Conditions, the method of binding dispute resolution shall be the following:	
(If the parties do not select a method of binding dispute resolution, then the method of binding dispute resolution si	ha

(If the parties do not select a method of binding dispute resolution, then the method of binding dispute resolution shall be by litigation in a court of competent jurisdiction. Check one.)

	Arbitration pursuant to Section A.4.4 of Exhibit A, Terms and Conditions
\boxtimes	Litigation in a court of competent jurisdiction where the Project is located
	Other: (Specify)

§ 6.3 Arbitration

§ 6.3.1 If Arbitration is selected by the parties as the method of binding dispute resolution, then any claim, dispute or other matter in question arising out of or related to this Agreement shall be subject to arbitration as provided in Section A.4.4 of Exhibit A, Terms and Conditions.

ARTICLE 7 MISCELLANEOUS PROVISIONS

§ 7.1 The Architect, other design professionals and consultants engaged by the Qualified Provider shall be persons or entities duly licensed to practice their professions in the jurisdiction where the Project is located and are listed as follows: (Insert name, address, license number, relationship to Qualified Provider and other information. Either list this information here or refer to an exhibit attached to this Agreement.)

Name and Address License Number Entry CMTA, Inc.

Relationship to Qualified Provider Other Information Self

9519 Civic Way, Suite 100 Prospect, KY 40059 § 7.2 Consultants, if any, engaged directly by the Owner, their professions and responsibilities are listed below: (Insert name, address, license number, if applicable, and responsibilities to Owner and other information. Either list this information here or refer to an exhibit attached to this Agreement.)

		Responsibilities	
Name and Address	License Number	to Owner	Other Information

§ 7.3 Separate contractors, if any, engaged directly by the Owner, their trades and responsibilities are listed below: (Insert name, address, license number, if applicable, responsibilities to Owner and other information. Either list this information here or refer to an exhibit attached to this Agreement.)

Responsibilities
Name and Address License Number to Owner Other Information

§ 7.4 The Owner's Designated Representative: (*Insert name, address and other information.*)

Brian Robinson, Superintendent 28 North Fort Thomas Fort Thomas, KY 41075 § 7.4.1 The Owner's Designated Representative identified above shall be authorized to act on the Owner's behalf with respect to the Project.

§ 7.5 The Qualified Provider Designated Representative: (Insert name, address and other information.)
Pamela Gerken
9519 Civic Way, Suite 100
Prospect, KY 40059
502-548-2221

- § 7.5.1 The Qualified Provider's Designated Representative identified above shall be authorized to act on the Qualified Provider's behalf with respect to the Project.
- § 7.6 Neither the Owner's nor the Qualified Provider's Designated Representative shall be changed without ten days written notice to the other party.

§ 7.7 Other provisions:

(The Qualified Provider shall comply with the provisions of KRS 45A.352 (2), (3), (7), (8) and (9). The definitions in KRS 45A.445 apply to KRS 45A.352.)

- § 7.7.1 Where reference is made in this Agreement to a provision of another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.
- § 7.7.2 Payments due and unpaid under the Guaranteed Energy Savings Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

(Insert rate of interest agreed upon, if any.)

1.5% per month on upaid balance

(Usury laws and requirements under the Federal Truth in Lending Act, similar state and local consumer credit laws and other regulations at the Owner's and Qualified Provider's principal places of business, the location of the Project and elsewhere may affect the validity of this provision. Legal advice should be obtained with respect to deletions or modifications, and also regarding requirements such as written disclosures or waivers.)

ARTICLE 8 ENUMERATION OF THE CONTRACT DOCUMENTS

- § 8.1 The Contract Documents, except for Modifications issued after execution of this Agreement, are enumerated as follows:
- § 8.1.1 The Agreement is this executed edition of the AIA Document A141–2004, Standard Form of Agreement Between Owner and Design-Builder KDE Version.

§ 8.1.2 The Supplementary and other Conditions of the Agreement, if any, are as follows: (Either list applicable documents below or refer to an exhibit attached to this Agreement.)

Document Exhibit A	Title Terms and Conditions	Pages
Exhibit B (Not Used)		
Exhibit C	Insurance and Bonds	
Exhibit D	Scope of Services and Energy Conservation Measures.	
Exhibit E	Energy Savings Guarantee	
Exhibit F	Annual Reconciliation Statement	
Exhibit G	Support Services	
Exhibit H	BG-1 Form and Method and Cost of Financing	
Exhibit J	Warranty and Title	
Exhibit K	Project Plans and Specifications	
Exhibit L	Example District Energy Policy	

§ 8.1.3 The Project Criteria, including changes to the Project Criteria proposed by the Qualified Provider, if any, and accepted by the Owner, consist of the following:

(Either list applicable documents and their dates below or refer to an exhibit attached to this Agreement.)

Title	Date
Highlands Middle School Mechanical Plans	1/20/2023
Highlands High School Mechanical Plans	1/20/2023
Highlands Middle School Electrical Plans	1/20/2023
Highlands High School Electrical Plans	1/20/2023
Highlands Middle School Plumbing Plans	12/7/2022
Highlands Middle School General Trades	11/28/2022
Highlands Middle and High School Controls Drawings	12/8/2022
FTI Lighting Drawings	12/5/2022
Mechanical and Electrical Specifications	12/7/2022
Controls Specifications	12/8/2022

§ 8.1.4 The Qualified Provider's Propositions of the following: (Either list applicable documents belo Executive Summary	•	o this Agreement.)
§ 8.1.5 Amendments to the Qualified I (Either list applicable documents belo		
§ 8.1.6 The Addenda, if any, are as fol (Either list applicable documents belo		o this Agreement.)
Number	Date	Pages
	and conditions other than those cont	ained in AIA Document A141–2004, Exhibit A, ions and attach to this Agreement as Exhibit A.)
§ 8.1.9 Exhibit C, Insurance and Bond	s if annlicable	
		— KDE Version or indicate "not applicable.")

Printed name and title)	(Printed name and title)
OWNER (Signature)	QUALIFIED PROVIDER (Signature)
his Agreement entered into as of the day and ye	ear first written above.

Init.

1

Kentucky Department of Education Version of AIA Document A141 $^{\text{TM}}$ – 2004 Exhibit A

Terms and Conditions

for the following PROJECT:

(Name and location or address)
Fort Thomas Independent Schools GESC
28 North Fort Thomas Avenue, Fort Thomas, KY 41075

THE OWNER:

(Name, legal status and address)
Fort Thomas Independent Schools Board of Education
28 North Fort Thomas Avenue
Fort Thomas, KY 41075

THE QUALIFIED PROVIDER:

(Name, legal status and address) CMTA, Inc. 9519 Civic Way Prospect, KY 40059

TABLE OF ARTICLES

- A.1 GENERAL PROVISIONS
- A.2 OWNER
- A.3 QUALIFIED PROVIDER
- A.4 DISPUTE RESOLUTION
- A.5 AWARD OF CONTRACTS
- A.6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS
- A.7 CHANGES IN THE WORK
- A.8 TIME
- A.9 PAYMENTS AND COMPLETION
- A.10 PROTECTION OF PERSONS AND PROPERTY
- A.11 INSURANCE AND BONDS
- A.12 UNCOVERING AND CORRECTION OF WORK
- A.13 MISCELLANEOUS PROVISIONS
- A.14 TERMINATION OR SUSPENSION OF THE CONTRACT



This version of AIA Document A141-2004 Exhibit A is modified by the Kentucky Department of Education. Publication of this version of AIA Document A141 Exhibit A does not imply the American Institute of Architects' endorsement of any modification by the Kentucky Department of Education. A comparative version of AIA Document A141-2004 Exhibit A showing additions and deletions by the Kentucky Department of Education is available for review on the Kentucky Department of Education Web site.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Consultation with an attorney is also encouraged with respect to professional licensing requirements in the jurisdiction where the Project is located.

ARTICLE A.1 GENERAL PROVISIONS

§ A.1.1 Basic Definitions

§ A.1.1.1 The GUARANTEED ENERGY SAVINGS CONTRACT Documents

The Guaranteed Energy Savings Contract Documents are identified in Section 1.1 of the Agreement.

§ A.1.1.2 Project Criteria

The Project Criteria are identified in Section 8.1.3 of the Agreement and may describe the character, scope, relationships, forms, size and appearance of the Project, materials and systems and, in general, their quality levels, performance standards, requirements or criteria, and major equipment layouts.

§ A.1.1.3 Architect

The Architect is the person lawfully licensed to practice architecture or an entity lawfully practicing architecture identified as such in the Agreement and having a direct contract with the Qualified Provider to perform design services for all or a portion of the Work, and is referred to throughout the Contract Documents as if singular in number. The term "Architect" means the Architect or the Architect's authorized representative.

§ A.1.1.4 Contractor

A Contractor is a person or entity, other than the Architect, that has a direct contract with the Qualified Provider to perform all or a portion of the construction required in connection with the Work. The term "Contractor" is referred to throughout the Contract Documents as if singular in number and means a Contractor or an authorized representative of the Contractor. The term "Contractor" does not include a separate contractor, as defined in Section A.6.1.2, or subcontractors of a separate contractor.

§ A.1.1.5 Subcontractor

A Subcontractor is a person or entity who has a direct contract with a Contractor to perform a portion of the construction required in connection with the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor.

§ A.1.1.6 The Work

The term "Work" means the design, construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Qualified Provider to fulfill the Qualified Provider's obligations. The Work may constitute the whole or a part of the Project.

§ A.1.1.7 The Project

The Project is the total design and construction of which the Work performed under the Contract Documents may be the whole or a part, and which may include design and construction by the Owner or by separate contractors.

§ A.1.1.8 Neutral

The Neutral is the individual appointed by the parties to decide Claims and disputes pursuant to Section A.4.2.1.

§ A.1.2 Compliance with Applicable Laws

§ A.1.2.1 If the Qualified Provider believes that implementation of any instruction received from the Owner would cause a violation of any applicable law, statute, ordinance, building code, rule or regulation, the Qualified Provider shall notify the Owner in writing. Neither the Qualified Provider nor any Contractor or Architect shall be obligated to perform any act which they believe will violate any applicable law, ordinance, rule or regulation.

§ A.1.2.2 The Qualified Provider shall be entitled to rely on the completeness and accuracy of the information contained in the Project Criteria, but not that such information complies with applicable laws, regulations and codes, which shall be the obligation of the Qualified Provider to determine. In the event that a specific requirement of the Project Criteria conflicts with applicable laws, regulations and codes, the Qualified Provider shall furnish Work which complies with such laws, regulations and codes. In such case, the Owner shall prepare a Modification to the Agreement for compliance with such laws by the Qualified Provider unless the Qualified Provider recognized such non-compliance prior to execution of this Agreement and failed to notify the Owner.

§ A.1.3 Capitalization

Terms capitalized in these Terms and Conditions include those which are (1) specifically defined, (2) the titles of numbered articles and identified references to sections in the document, or (3) the titles of other documents published by the American Institute of Architects.

§ A.1.4 Interpretation

§ A.1.4.1 In the interest of brevity, the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ A.1.4.2 Unless otherwise stated in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§ A.1.5 Execution of the Design-Build Documents

§ A.1.5.1 The Contract Documents shall be signed by the Owner and Qualified Provider.

§ A.1.5.2 Execution of the Guaranteed Energy Savings Contract by the Qualified Provider is a representation that the Qualified Provider has visited the site, become generally familiar with local conditions under which the Work is to be performed and correlated personal observations with requirements of the Contract Documents.

§ A.1.6 Ownership and Use of Documents and Electronic Data

§ A.1.6.1 Drawings, specifications, and other documents including those in electronic form, prepared by the Architect and furnished by the Qualified Provider are Instruments of Service. The Qualified Provider, Qualified Provider 's Architect and other providers of professional services individually shall retain all common law, statutory and other reserved rights, including copyright in those Instruments of Services furnished by them. Drawings, specifications, and other documents and materials and electronic data are furnished for use solely with respect to this Project.

§ A.1.6.2 Upon execution of the Guaranteed Energy Savings Contract, the Qualified Provider grants to the Owner a non-exclusive license to reproduce and use the Instruments of Service solely in connection with the Project, including the Project's further development by the Owner and others retained by the Owner for such purposes, provided that the Owner shall comply with all obligations, including prompt payment of sums when due, under the Contract Documents. Subject to the Owner's compliance with such obligations, such license shall extend to those parties retained by the Owner for such purposes, including other design professionals. The Qualified Provider shall obtain similar non-exclusive licenses from its design professionals, including the Architect. The Owner shall not otherwise assign or transfer any license herein to another party without prior written agreement of the Qualified Provider. Any unauthorized reproduction or use of the Instruments of Service by the Owner or others shall be at the Owner's sole risk and expense without liability to the Qualified Provider and its design professionals. Except as provided in Section A.1.6.4, termination of this Agreement prior to completion of the Qualified Provider's services to be performed under this Agreement shall terminate this license.

§ A.1.6.3 Prior to any electronic exchange by the parties of the Instruments of Service or any other documents or materials to be provided by one party to the other, the Owner and the Qualified Provider shall agree in writing on the specific conditions governing the format thereof, including any special limitations or licenses not otherwise provided in the Contract Documents.

§ A.1.6.4 If this Agreement is terminated for any reason other than the default of the Owner, each of the Qualified Provider's design professionals, including the Architect, shall be contractually required to convey to the Owner a non-exclusive license to use that design professional's Instruments of Service for the completion, use and maintenance of the Project, conditioned upon the Owner's written notice to that design professional of the Owner's assumption of the Qualified Provider's contractual duties and obligations to that design professional and payment to that design professional of all amounts due to that design professional and its consultants. If the Owner does not assume the remaining duties and obligations of the Qualified Provider to that design professional under this Agreement, then the Owner shall indemnify and hold harmless that design professional from all claims and any expense, including legal fees, which that design professional shall thereafter incur by reason of the Owner's use of such Instruments of Service. The Qualified Provider shall incorporate the requirements of this Section A.1.6.4 in all agreements with its design professionals.

§ A.1.6.5 Submission or distribution of the Qualified Provider's documents to meet official regulatory requirements or for similar purposes in connection with the Project is not to be construed as publication in derogation of the rights reserved in Section A.1.6.1.

ARTICLE A.2 OWNER

§ A.2.1 General

§ A.2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Owner" means the Owner or the Owner's authorized representative. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all Project matters requiring the Owner's approval or authorization. The Owner shall render decisions in a timely manner and in accordance with the Qualified Provider's schedule submitted to the Owner.

§ A.2.1.2 The Owner shall furnish to the Qualified Provider within 15 days after receipt of a written request information necessary and relevant for the Qualified Provider to evaluate, give notice of or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.

§ A.2.2 Information and Services Required of the Owner

§ A.2.2.1 Information or services required of the Owner by the Design-Build Documents shall be furnished by the Owner with reasonable promptness. Any other information or services relevant to the Qualified Provider's performance of the Work under the Owner's control shall be furnished by the Owner after receipt from the Qualified Provider of a written request for such information or services.

§ A.2.2.2 If requested by Qualified Provider as necessary for the Project, The Owner shall provide surveys describing physical characteristics, legal limitations, and utility locations for the site of this Project, and a written legal description of the site. The surveys and legal information shall include, as applicable, grades and lines of streets, alleys, pavements, and adjoining property and structures; adjacent drainage; rights-of-way, restrictions, easements, encroachments, zoning, deed restriction, boundaries, and contours of the site; locations, dimensions, and necessary data pertaining to existing buildings, other improvements and trees; and information concerning available utility services and lines, both public and private, above and below grade, including inverts and depths. All the information on the survey shall be referenced to a Project benchmark.

§ A.2.2.3 The Owner shall provide, to the extent available to the Owner and if not required by the Contract Documents to be provided by the Qualified Provider, the results and reports of prior tests, inspections or investigations conducted for the Project involving structural or mechanical systems, chemical, air and water pollution, hazardous materials or environmental and subsurface conditions and information regarding the presence of pollutants at the Project site.

§ A.2.2.4 The Owner may obtain independent review of the Qualified Provider 's design, construction and other documents by a separate architect, engineer, and contractor or cost estimator under contract to or employed by the Owner. Such independent review shall be undertaken at the Owner's expense in a timely manner and shall not delay the orderly progress of the Work.

§ A.2.2.5 The Owner shall cooperate with the Qualified Provider in securing building and other permits, licenses and inspections. The Owner shall not be required to pay the fees for such permits, licenses and inspections unless the cost of such fees is excluded from the responsibility of the Qualified Provider under the Contract Documents.

§ A.2.2.6 The services, information, surveys and reports required to be provided by the Owner under Section A.2.2, shall be furnished at the Owner's expense, and the Qualified Provider shall be entitled to rely upon the accuracy and completeness thereof, except as otherwise specifically provided in the Contract Documents or to the extent the Owner advises the Qualified Provider to the contrary in writing.

§ A.2.2.7 If the Owner observes or otherwise becomes aware of a fault or defect in the Work or non-conformity with the Contract Documents, the Owner shall give prompt written notice thereof to the Qualified Provider Qualified Provider.

§ A.2.2.8 The Owner shall, at the request of the Qualified Provider, prior to execution of the Guaranteed Energy Savings Contract and promptly upon request thereafter, furnish to the Qualified Provider reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Design-Build Documents.

§ A.2.2.9 The Owner shall communicate through the Qualified Provider with persons or entities employed or retained by the Qualified Provider, unless otherwise directed by the Qualified Provider.

§ A.2.2.10 The Owner shall furnish the services of geotechnical engineers or other consultants, if not required by the Contract Documents to be provided by the Qualified Provider, for subsoil, air and water conditions when such services

AlA Document A141TM – 2004. Copyright © 2004 by The American Institute of Architects. All rights reserved. Kentucky Department of Education

of Architects for one-time use only, and may not be reproduced prior to its completion.

are deemed reasonably necessary by the Qualified Provider to properly carry out the design services provided by the Qualified Provider and the Provider 's Architect. Such services may include, but are not limited to, test borings, test pits, determinations of soil bearing values, percolation tests, evaluations of hazardous materials, ground corrosion and resistivity tests, and necessary operations for anticipating subsoil conditions. The services of geotechnical engineer(s) or other consultants shall include preparation and submission of all appropriate reports and professional recommendations.

§ A.2.2.11 The Owner shall promptly obtain easements, zoning variances, and legal authorizations regarding site utilization where essential to the execution of the Owner's program.

§ A.2.3 Owner Review and Inspection

§ A.2.3.1 The Owner shall review and approve or take other appropriate action upon the Qualified Provider 's submittals, including but not limited to design and construction documents, required by the Contract Documents, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Owner's action shall be taken with such reasonable promptness as to cause no delay in the Work or in the activities of the Qualified Provider or separate contractors. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details, such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Qualified Provider as required by the Contract Documents.

§ A.2.3.2 Upon review of the design documents, construction documents, or other submittals required by the Contract Documents, the Owner shall take one of the following actions:

- .1 Determine that the documents or submittals are in conformance with the Contract Documents and approve them.
- .2 Determine that the documents or submittals are in conformance with the Contract Documents but request changes in the documents or submittals which shall be implemented by a Change in the Work.
- .3 Determine that the documents or submittals are not in conformity with the Contract Documents and reject them.
- .4 Determine that the documents or submittals are not in conformity with the Contract Documents, but accept them by implementing a Modification to the Agreement.
- .5 Determine that the documents or submittals are not in conformity with the Contract Documents, but accept them and request changes in the documents or submittals which shall be implemented by Modification to the Agreement..
- **§ A.2.3.3** The Qualified Provider shall submit to the Owner for the Owner's approval, pursuant to Section A.2.3.1, any proposed change or deviation to previously approved documents or submittals. The Owner shall review each proposed change or deviation to previously approved documents or submittals which the Qualified Provider submits to the Owner for the Owner's approval with reasonable promptness in accordance with Section A.2.3.1 and shall make one of the determinations described in Section A.2.3.2.
- § A.2.3.4 Notwithstanding the Owner's responsibility under Section A.2.3.2, the Owner's review and approval of the Qualified Provider's documents or submittals shall not relieve the Qualified Provider of responsibility for compliance with the Contract Documents unless a) the Qualified Provider has notified the Owner in writing of the deviation prior to approval by the Owner or, b) the Owner has approved a Modification to the Agreement reflecting any deviations from the requirements of the Contract Documents.
- § A.2.3.5 The Owner may visit the site to keep informed about the progress and quality of the portion of the Work completed. However, the Owner shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. Visits by the Owner shall not be construed to create an obligation on the part of the Owner to make on-site inspections to check the quantity or quality of the Work. The Owner shall neither have control over or charge of, nor be responsible for, the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Qualified Provider's rights and responsibilities under the Contract Documents, except as provided in Section A.3.3.7.
- § A.2.3.6 The Owner shall not be responsible for the Qualified Provider's failure to perform the Work in accordance with the requirements of the Contract Documents. The Owner shall not have control over or charge of and will not be responsible for acts or omissions of the Qualified Provider, Architect, Contractors, or their agents or employees, or any other persons or entities performing portions of the Work for the Qualified Provider.

of Architects for one-time use only, and may not be reproduced prior to its completion.

§ A.2.3.7 The Owner may reject Work that does not conform to the Contract Documents. Whenever the Owner considers it necessary or advisable, the Owner shall have authority to require inspection or testing of the Work in accordance with Section A.13.5.2, whether or not such Work is fabricated, installed or completed. However, neither this authority of the Owner nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Owner to the Qualified Provider, the Architect, Contractors, material and equipment suppliers, their agents or employees, or other persons or entities performing portions of the Work.

§ A.2.3.8 The Owner may appoint an on-site project representative to observe the Work and to have such other responsibilities as the Owner and the Qualified Provider agree to in writing.

§ A.2.3.9 The Owner shall conduct inspections to determine the date or dates of Substantial Completion and the date of final completion.

§ A.2.4 Owner's Right to Stop Work

If the Qualified Provider fails to correct Work which is not in accordance with the requirements of the Contract Documents as required by Section A.12.2 or persistently fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Qualified Provider to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Qualified Provider or any other person or entity, except to the extent required by Section A.6.1.3.

§ A.2.5 Owner's Right to Carry Out the Work

If the Qualified Provider defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may after such seven-day period give the Qualified Provider a second written notice to correct such deficiencies within a three-day period. If the Qualified Provider within such three-day period after receipt of such second notice fails to commence and continue to correct any deficiencies, the Owner may, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case, an appropriate Modification to the Agreement shall be issued deducting from payments then or thereafter due the Qualified Provider the reasonable cost of correcting such deficiencies. If payments due the Qualified Provider are not sufficient to cover such amounts, the Qualified Provider shall pay the difference to the Owner.

ARTICLE A.3 QUALIFIED PROVIDER

§ A.3.1 General

§ A.3.1.1 The Qualified Provider is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Qualified Provider shall be a person or business experienced in the design, implementation, and installation of energy, water, and wastewater conservation measure and is determined to be qualified by the Owner. The Qualified Provider shall be responsible for and shall provide the Owner with the following information regarding guaranteed energy, water, and wastewater savings contracts: Project design and specifications, construction management, construction, commissioning, on-going services as require, measurement and verification of savings for guaranteed energy, water, and wastewater savings contracts, and annual reconciliation statements as provided in KRS 45A.352(8). Qualified Provider The term "Qualified Provider" means the Qualified Provider or the Qualified Provider's authorized representative. The Qualified Provider's representative is authorized to act on the Qualified Provider's behalf with respect to the Project.

§ A.3.1.2 The Qualified Provider shall perform the Work in accordance with the Design-Build Documents.

§ A.3.2 Design Services and Responsibilities

of Architects for one-time use only, and may not be reproduced prior to its completion.

§ A.3.2.1 When applicable law requires that services be performed by licensed professionals, the Qualified Provider shall provide those services through the performance of qualified persons or entities duly licensed to practice their professions. The Owner understands and agrees that the services performed by the Qualified Provider's Architect and the Qualified Provider's other design professionals and consultants are undertaken and performed in the sole interest of and for the exclusive benefit of the Qualified Provider.

§ A.3.2.2 The agreements between the Qualified Provider and Architect or other design professionals identified in the Agreement, and in any subsequent Modifications, shall be in writing. These agreements, including services and financial arrangements with respect to this Project, shall be promptly and fully disclosed to the Owner upon the Owner's written request.

- § A.3.2.3 The Qualified Provider shall be responsible to the Owner for acts and omissions of the Qualified Provider's employees, Architect, Contractors, Subcontractors and their agents and employees, and other persons or entities, including the Architect and other design professionals, performing any portion of the Qualified Provider's obligations under the Contract Documents.
- § A.3.2.4 The Qualified Provider shall carefully study and compare the documents, plans, materials and other information provided by the Owner pursuant to Section A.2.2, shall take field measurements of any existing conditions related to the Work, shall observe any conditions at the site affecting the Work, and report promptly to the Owner any errors, inconsistencies or omissions discovered.
- § A.3.2.5 The Qualified Provider shall provide to the Owner for Owner's written approval design documents sufficient to establish the size, quality and character of the Project; its architectural, structural, mechanical and electrical systems; and the materials and such other elements of the Project to the extent required by the Contract Documents. Deviations, if any, from the Contract Documents shall be disclosed in writing.
- § A.3.2.6 Upon the Owner's written approval of the design documents submitted by the Qualified Provider, the Qualified Provider shall provide construction documents for review and written approval by the Owner. The construction documents shall set forth in detail the requirements for construction of the Project. The construction documents shall include drawings and specifications that establish the quality levels of materials and systems required. Deviations, if any, from the Contract Documents shall be disclosed in writing. Construction documents may include drawings, specifications, and other documents and electronic data setting forth in detail the requirements for construction of the Work, and shall
 - .1 be consistent with the approved design documents;

of Architects for one-time use only, and may not be reproduced prior to its completion.

- .2 provide information for the use of those in the building trades; and
- .3 include documents customarily required for regulatory agency approvals.
- § A.3.2.7 The Qualified Provider shall meet with the Owner periodically to review progress of the design and construction documents.
- § A.3.2.8 Upon the Owner's written approval of construction documents, the Qualified Provider, with the assistance of the Owner, shall prepare and file documents required to obtain necessary approvals of governmental authorities having jurisdiction over the Project. The Owner's approval of construction documents shall be by Board Order.
- § A.3.2.9 The Qualified Provider shall obtain from each of the Qualified Provider's professionals and furnish to the Owner certifications with respect to the documents and services provided by such professionals (a) that, to the best of their knowledge, information and belief, the documents or services to which such certifications relate (i) are consistent with the Project Criteria set forth in the Contract Documents, except to the extent specifically identified in such certificate, (ii) comply with applicable professional practice standards, and (iii) comply with applicable laws, ordinances, codes, rules and regulations governing the design of the Project; and (b) that the Owner and its consultants shall be entitled to rely upon the accuracy of the representations and statements contained in such certifications.
- § A.3.2.10 If the Owner requests the Qualified Provider, the Architect or the Qualified Provider's other design professionals to execute certificates other than those required by Section A.3.2.9, the proposed language of such certificates shall be submitted to the Qualified Provider, or the Architect and such design professionals through the Qualified Provider, for review and negotiation at least 14 days prior to the requested dates of execution. Neither the Qualified Provider, the Architect nor such other design professionals shall be required to execute certificates that would require knowledge, services or responsibilities beyond the scope of their respective agreements with the Owner or Qualified Provider.

§ A.3.3 Construction

- § A.3.3.1 The Qualified Provider shall perform no construction Work prior to the Owner's approval. The Qualified Provider shall perform no portion of the Work for which the Contract Documents require the Owner's review of submittals, such as Shop Drawings, Product Data and Samples, until the Owner has approved each submittal.
- § A.3.2 The construction Work shall be in accordance with approved submittals, except that the Qualified Provider shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Owner's approval of design and construction documents or other submittals such as Shop Drawings, Product Data, Samples or other submittals unless the Qualified Provider has specifically informed the Owner in writing of such deviation at the time of submittal and (1) the Owner has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Qualified

AIA Document A141™ - 2004. Copyright © 2004 by The American Institute of Architects. All rights reserved. Kentucky Department of Education

Provider shall not be relieved of responsibility for errors or omissions in design and construction documents or other submittals such as Shop Drawings, Product Data, Samples or other submittals by the Owner's approval thereof.

- § A.3.3.3 The Qualified Provider shall direct specific attention, in writing or on resubmitted design and construction documents or other submittals such as Shop Drawings, Product Data, Samples or similar submittals, to revisions other than those requested by the Owner on previous submittals. In the absence of such written notice, the Owner's approval of a resubmission shall not apply to such revisions.
- § A.3.4 When the Contract Documents require that a Contractor provide professional design services or certifications related to systems, materials or equipment, or when the Qualified Provider in its discretion provides such design services or certifications through a Contractor, the Qualified Provider shall cause professional design services or certifications to be provided by a properly licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professionals, if prepared by others, shall bear such design professional's written approval. The Owner shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals.
- § A.3.3.5 The Qualified Provider shall be solely responsible for and have control over all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Design-Build Documents.
- § A.3.3.6 The Qualified Provider shall keep the Owner informed of the progress and quality of the Work.
- § A.3.7 The Qualified Provider shall be responsible for the supervision and direction of the Work, using the Qualified Provider's best skill and attention. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Qualified Provider shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures. If the Qualified Provider determines that such means, methods, techniques, sequences or procedures may not be safe, the Qualified Provider shall give timely written notice to the Owner and shall not proceed with that portion of the Work without further written instructions from the Owner. If the Qualified Provider is then instructed to proceed with the required means, methods, techniques, sequences or procedures without acceptance of changes proposed by the Qualified Provider, the Owner shall be solely responsible for any resulting loss or damage.
- § A.3.3.8 The Qualified Provider shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

§ A.3.4 Labor and Materials

- § A.3.4.1 Unless otherwise provided in the Contract Documents, the Qualified Provider shall provide or cause to be provided and shall pay for design services, labor, materials, equipment, tools, construction equipment and machinery, transportation and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.
 - .1 The Owner shall provide and pay for water, gas and electricity used by the Qualified Provider for Work of facility alterations, system modifications or replacements, except temporary wiring, piping, hoses required to complete the Work shall be provided and paid for by the Qualified Provider.
- § A.3.4.2 When a material is specified in the Contract Documents, the Qualified Provider may make substitutions only with the consent of the Owner.
- § A.3.4.3 The Qualified Provider shall enforce strict discipline and good order among the Qualified Provider's employees and other persons carrying out the Contract. The Qualified Provider shall not permit employment of unfit persons or persons not skilled in tasks assigned to them, and, consistent with the intent of KRS 160.38, Subsection (3), shall prohibit employment of violent offenders or workers convicted of a felony sex crime.

§ A.3.5 Warranty

The Qualified Provider warrants to the Owner that materials and equipment furnished under the Contract Documents will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted by law or otherwise, and that the Work will conform to the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The Qualified Provider's warranty excludes remedy for damage or defect caused by abuse, modifications not executed by the Qualified Provider, improper

of Architects for one-time use only, and may not be reproduced prior to its completion.

or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Owner, the Qualified Provider shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

§ A.3.6 Taxes

The Qualified Provider shall pay all sales, consumer, use and similar taxes for the Work provided by the Qualified Provider which had been legally enacted on the date of the Agreement, whether or not yet effective or merely scheduled to go into effect. If utilized, Owner-direct Purchase Orders for Project materials and equipment are exempt from Kentucky Sales and Use Tax.

§ A.3.7 Permits, Fees and Notices

- § A.3.7.1 The Qualified Provider shall secure and pay for building and other permits and governmental fees, licenses and inspections necessary for the proper execution and completion of the Work which are customarily secured after execution of the Contract and which were legally required on the date the Owner accepted the Qualified Provider's proposal.
- **§ A.3.7.2** The Qualified Provider shall comply with and give notices required by laws, ordinances, rules, regulations and lawful orders of public authorities relating to the Project.
- **§ A.3.7.3** It is the Qualified Provider's responsibility to ascertain that the Work is in accordance with applicable laws, ordinances, codes, rules and regulations.
- **§ A.3.7.4** If the Qualified Provider performs Work contrary to applicable laws, ordinances, codes, rules and regulations, the Qualified Provider shall assume responsibility for such Work and shall bear the costs attributable to correction.

§ A.3.8 (Not Used)

§ A.3.9 Qualified Provider's Schedule

§ A.3.9.1 The Qualified Provider, promptly after execution of the Contract, shall prepare and submit for the Owner's information the Qualified Provider's schedule for the Work. The schedule shall not exceed time limits and shall be in such detail as required under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project to the extent required by the Contract Documents, shall provide for expeditious and practicable execution of the Work and shall include allowances for periods of time required for the Owner's review and for approval of submissions by authorities having jurisdiction over the Project.

§ A.3.9.2 (Not Used)

§ A.3.9.3 The Qualified Provider shall perform the Work in general accordance with the most recent schedules submitted to the Owner.

§ A.3.10 Documents and Samples at the Site

The Qualified Provider shall maintain at the site for the Owner one record copy of the drawings, specifications, addenda, and Modifications, in good order and marked currently to record field changes and selections made during construction, and one record copy of Shop Drawings, Product Data, Samples and similar required submittals. These shall be delivered to the Owner upon completion of the Work.

§ A.3.11 Shop Drawings, Product Data and Samples

- **§ A.3.11.1** Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Qualified Provider or a Contractor, Subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.
- § A.3.11.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Qualified Provider to illustrate materials or equipment for some portion of the Work.
- § A.3.11.3 Samples are physical examples that illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.
- § A.3.11.4 Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate for those portions of the Work for which submittals are required by the Contract Documents the way by which the Qualified Provider proposes to conform to the Contract Documents.

§ A.3.11.5 The Qualified Provider shall review for compliance with the Contract Documents and approve and submit to the Owner only those Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors.

§ A.3.11.6 By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Qualified Provider represents that the Qualified Provider has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

§ A.3.12 Use of Site

The Qualified Provider shall confine operations at the site to areas approved by the Owner and permitted by law, ordinances, permits and the Contract Documents, and shall not store materials on roofs or unreasonably encumber the site with materials or equipment.

§ A.3.13 Cutting and Patching

§ A.3.13.1 The Qualified Provider shall be responsible for cutting, fitting or patching required to complete the Work or to make its parts fit together properly.

§ A.3.13.2 The Qualified Provider shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or separate contractors by cutting, patching or otherwise altering such construction or by excavation. The Qualified Provider shall not cut or otherwise alter such construction by the Owner or a separate contractor except with written consent of the Owner and of such separate contractor; such consent shall not be unreasonably withheld. The Qualified Provider shall not unreasonably withhold from the Owner or a separate contractor the Qualified Provider's consent to cutting or otherwise altering the Work.

§ A.3.14 Cleaning Up

§ A.3.14.1 The Qualified Provider shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work, the Qualified Provider shall remove from and about the Project waste materials, rubbish, the Qualified Provider's tools, construction equipment, machinery and surplus materials.

§ A.3.14.2 If the Qualified Provider fails to clean up as provided herein, the Owner may do so and the cost thereof shall be charged to the Qualified Provider.

§ A.3.15 Access to Work

The Qualified Provider shall provide the Owner access to the Work in preparation and progress wherever located.

§ A.3.16 Royalties, Patents and Copyrights

of Architects for one-time use only, and may not be reproduced prior to its completion.

The Qualified Provider shall pay all royalties and license fees. The Qualified Provider shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required or where the copyright violations are contained in drawings, specifications or other documents prepared by or furnished to the Qualified Provider by the Owner. However, if the Qualified Provider has reason to believe that the required design, process or product is an infringement of a copyright or a patent, the Qualified Provider shall be responsible for such loss unless such information is promptly furnished to the Owner.

§ A.3.17 Indemnification

§ A.3.17.1 To the fullest extent permitted by law, the Qualified Provider shall indemnify and hold harmless the Owner, Owner's consultants, and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death or to injury to or destruction of tangible property other than the Work itself, but only to the extent caused by the negligent acts or omissions of the Qualified Provider, Architect, a Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section A.3.17.

§ A.3.17.2 In claims against any person or entity indemnified under this Section A.3.17 by an employee of the Qualified Provider, the Architect, a Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Section A.3.17.1 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Qualified Provider, the Architect or a Contractor or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

ARTICLE A.4 DISPUTE RESOLUTION

§ A.4.1 Claims and Disputes

- § A.4.1.1 Definition. A Claim is a demand or assertion by one of the parties seeking, as a matter of right, adjustment or interpretation of Contract terms, payment of money, extension of time or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Qualified Provider arising out of or relating to the Contract. Claims must be initiated by written notice. The responsibility to substantiate Claims shall rest with the party making the Claim.
- § A.4.1.2 Time Limits on Claims. Claims by either party must be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later. Claims must be initiated by written notice to the other party.
- **§** A.4.1.3 Continuing Performance. Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section A.9.7.1 and Article A.14, the Qualified Provider shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.
- § A.4.1.4 Claims for Concealed or Unknown Conditions. If conditions are encountered at the site which are (1) subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then the observing party shall give notice to the other party promptly before conditions are disturbed and in no event later than 21 days after first observance of the conditions. The Owner shall promptly investigate such conditions and, if they differ materially and cause an increase or decrease in the Qualified Provider's cost of, or time required for, performance of any part of the Work, shall negotiate with the Qualified Provider an equitable adjustment in the Contract Sum or Contract Time, or both. If the Owner determines that the conditions at the site are not materially different from those indicated in the Design-Build Documents and that no change in the terms of the Design-Build Contract is justified, the Owner shall so notify the Qualified Provider in writing, stating the reasons. Claims by the Qualified Provider in opposition to such determination must be made within 21 days after the Owner has given notice of the decision. If the conditions encountered are materially different, the Contract Sum and Contract Time shall be equitably adjusted, but if the Owner and Qualified Provider cannot agree on an adjustment in the Contract Sum or Contract Time, the adjustment shall proceed pursuant to Section A.4.2.
- § A.4.1.5 Claims for Additional Cost. If the Qualified Provider wishes to make Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section A.10.6.
- § A.4.1.6 If the Qualified Provider believes additional cost is involved for reasons including but not limited to (1) an order by the Owner to stop the Work where the Qualified Provider was not at fault, (2) a written order for the Work issued by the Owner, (3) failure of payment by the Owner, (4) termination of the Contract by the Owner, (5) Owner's suspension or (6) other reasonable grounds, Claim shall be filed in accordance with this Section A.4.1.

§ A.4.1.7 Claims for Additional Time

of Architects for one-time use only, and may not be reproduced prior to its completion.

- § A.4.1.7.1 If the Qualified Provider wishes to make Claim for an increase in the Contract Time, written notice as provided herein shall be given. The Qualified Provider's Claim shall include an estimate of the time and its effect on the progress of the Work. In the case of a continuing delay, only one Claim is necessary.
- § A.4.1.7.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated and had an adverse effect on the scheduled construction.
- § A.4.1.8 Injury or Damage to Person or Property. If either party to the Contract suffers injury or damage to person or property because of an act or omission of the other party or of others for whose acts such party is legally responsible, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable

AIA Document A141™ - 2004. Copyright © 2004 by The American Institute of Architects. All rights reserved. Kentucky Department of Education

time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

§ A.4.1.9 (Not Used)

- § A.4.1.10 Claims for Consequential Damages. Qualified Provider and Owner waive Claims against each other for consequential damages arising out of or relating to the Contract. This mutual waiver includes
 - .1 damages incurred by the Owner for rental expenses and for losses of use; and
 - .2 damages incurred by the Qualified Provider for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article A.14. Nothing contained in this Section A.4.1.10 shall be deemed to preclude an award of liquidated direct damages, when applicable, in accordance with the requirements of the Documents.

§ A.4.1.11 If the enactment or revision of codes, laws or regulations or official interpretations which govern the Project cause an increase or decrease of the Qualified Provider's cost of, or time required for, performance of the Work, the Qualified Provider shall be entitled to an equitable adjustment in Contract Sum or Contract Time. If the Owner and Qualified Provider cannot agree upon an adjustment in the Contract Sum or Contract Time, the Qualified Provider shall submit a Claim pursuant to Section A.4.1.

§ A.4.2 Resolution of Claims and Disputes

- § A.4.2.1 Decision by Neutral. If the parties have identified a Neutral in Section 6.1 of the Agreement or elsewhere in the Contract Documents, then Claims, excluding those arising under Sections A.10.3 through A.10.5, shall be referred initially to the Neutral for decision. An initial decision by the Neutral shall be required as a condition precedent to mediation of all Claims between the Owner and Qualified Provider arising prior to the date final payment is due, unless 30 days have passed after the Claim has been referred to the Neutral with no decision having been rendered by the Neutral. Unless the Neutral and all affected parties agree, the Neutral will not decide disputes between the Qualified Provider and persons or entities other than the Owner.
- § A.4.2.2 Decision by Owner. If the parties have not identified a Neutral in Section 6.1 of the Agreement or elsewhere in the Contract Documents then, except for those claims arising under Sections A.10.3 and A.10.5, the Owner shall provide an initial decision. An initial decision by the Owner shall be required as a condition precedent to mediation of all Claims between the Owner and Qualified Provider arising prior to the date final payment is due, unless 30 days have passed after the Claim has been referred to the Owner with no decision having been rendered by the Owner.
- **§ A.4.2.3** The initial decision pursuant to Sections A.4.2.1 and A.4.2.2 shall be in writing, shall state the reasons therefore and shall notify the parties of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties but subject first to mediation under Section A.4.3 and thereafter to such other dispute resolution methods as provided in Section 6.2 of the Agreement or elsewhere in the Contract Documents.
- § A.4.2.4 In the event of a Claim against the Qualified Provider, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Qualified Provider's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.
- § A.4.2.5 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines prior to initial resolution of the Claim.

§ A.4.3 Mediation

- § A.4.3.1 Any Claim arising out of or related to the Contract, except those waived as provided for in Sections A.4.1.10, A.9.10.4 and A.9.10.5, shall, after initial decision of the Claim or 30 days after submission of the Claim for initial decision, be subject to mediation as a condition precedent to arbitration or the institution of legal or equitable or other binding dispute resolution proceedings by either party.
- § A.4.3.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be in accordance with the Construction Industry Mediation Rules of the American Arbitration Association currently in effect at the time of the mediation. Request for mediation shall be filed in writing with the other party to the Contract and with the American Arbitration Association. The request may be made concurrently with the

filing of a demand for arbitration or other binding dispute resolution proceedings but, in such event, mediation shall proceed in advance thereof or of legal or equitable proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order.

§ A.4.3.3 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ A.4.4 Arbitration

§ A.4.4.1 Claims, except those waived as provided for in Sections A.4.1.10, A.9.10.4 and A.9.10.5, for which initial decisions have not become final and binding, and which have not been resolved by mediation but which are subject to arbitration pursuant to Sections 6.2 and 6.3 of the Agreement or elsewhere in the Contract Documents, shall be decided by arbitration which, unless the parties mutually agree otherwise, shall be in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association currently in effect at the time of the arbitration. The demand for arbitration shall be filed in writing with the other party to the Design-Build Contract and with the American Arbitration Association.

§ A.4.4.2 A demand for arbitration may be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when institution of legal or equitable proceedings based on such Claim would be barred by the applicable statute of limitations as determined pursuant to Section A.13.6.

§ A.4.4.3 An arbitration pursuant to this Section A.4.4 may be joined with an arbitration involving common issues of law or fact between the Owner or Qualified Provider and any person or entity with whom the Owner or Qualified Provider has a contractual obligation to arbitrate disputes which does not prohibit consolidation or joinder. No other arbitration arising out of or relating to the Guaranteed Energy Savings Contract shall include, by consolidation, joinder or in any other manner, an additional person or entity not a party to the Contract or not a party to an agreement with the Owner or Qualified Provider, except by written consent containing a specific reference to the Design-Build Contract signed by the Owner and Qualified Provider and any other person or entities sought to be joined. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent or with a person or entity not named or described therein. The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by the parties to the Agreement shall be specifically enforceable in accordance with applicable law in any court having jurisdiction thereof.

§ A.4.4.4 Claims and Timely Assertion of Claims. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

§ A.4.4.5 Judgment on Final Award. The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

ARTICLE A.5 AWARD OF CONTRACTS

§ A.5.1 Unless otherwise stated in the Contract Documents or proposal requirements, the Qualified Provider, as soon as practicable after award of the Contract, shall furnish in writing to the Owner the names of additional persons or entities not originally included in the Qualified Provider's proposal or in substitution of a person or entity (including those who are to furnish design services or materials or equipment fabricated to a special design) proposed for each principal portion of the Work. The Owner will promptly reply to the Qualified Provider in writing stating whether or not the Owner has reasonable objection to any such proposed additional person or entity. Failure of the Owner to reply promptly shall constitute notice of no reasonable objection.

§ A.5.2 (Not Used)

§ A.5.3 (Not Used)

§ A.5.4 The Qualified Provider shall not change a person or entity previously selected if the Owner makes reasonable objection to such substitute.

§ A.5.5 Contingent Assignment of Contracts

of Architects for one-time use only, and may not be reproduced prior to its completion.

§ A.5.5.1 Each agreement for a portion of the Work is assigned by the Qualified Provider to the Owner provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section A.14.2 and only for those agreements which the Owner accepts by notifying the contractor in writing; and
- **.2** assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Guaranteed Energy Savings Contract.

§ A.5.5.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Contractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

ARTICLE A.6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

§ A.6.1 Owner's Right to Perform Construction and to Award Separate Contracts

§ A.6.1.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces and to award separate contracts in connection with other portions of the Project or other construction or operations on the site. The Qualified Provider shall cooperate with the Owner and separate contractors whose work might interfere with the Qualified Provider's Work. If the Qualified Provider claims that delay or additional cost is involved because of such action by the Owner, the Qualified Provider shall make such Claim as provided in Section A.4.1.

§ A.6.1.2 The term "separate contractor" shall mean any contractor retained by the Owner pursuant to Section A.6.1.1.

§ A.6.1.3 The Owner shall provide for coordination of the activities of the Owner's own forces and of each separate contractor with the work of the Qualified Provider, who shall cooperate with them. The Qualified Provider shall participate with other separate contractors and the Owner in reviewing their construction schedules when directed to do so. The Qualified Provider shall make any revisions to the construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Qualified Provider, separate contractors and the Owner until subsequently revised.

§ A.6.2 Mutual Responsibility

§ A.6.2.1 The Qualified Provider shall afford the Owner and separate contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities and shall connect and coordinate the Qualified Provider's construction and operations with theirs as required by the Contract Documents.

§ A.6.2.2 If part of the Qualified Provider's Work depends for proper execution or results upon design, construction or operations by the Owner or a separate contractor, the Qualified Provider shall, prior to proceeding with that portion of the Work, promptly report to the Owner apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Qualified Provider so to report shall constitute an acknowledgment that the Owner's or separate contractor's completed or partially completed construction is fit and proper to receive the Qualified Provider's Work, except as to defects not then reasonably discoverable.

§ A.6.2.3 The Owner shall be reimbursed by the Qualified Provider for costs incurred by the Owner which are payable to a separate contractor because of delays, improperly timed activities or defective construction of the Qualified Provider. The Owner shall be responsible to the Qualified Provider for costs incurred by the Qualified Provider because of delays, improperly timed activities, damage to the Work or defective construction of a separate contractor.

§ A.6.2.4 The Qualified Provider shall promptly remedy damage wrongfully caused by the Qualified Provider to completed or partially completed construction or to property of the Owner or separate contractors.

§ A.6.2.5 The Owner and each separate contractor shall have the same responsibilities for cutting and patching as are described in Section A.3.13.

§ A.6.3 Owner's Right to Clean Up

If a dispute arises among the Qualified Provider, separate contractors and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Owner shall allocate the cost among those responsible.

ARTICLE A.7 CHANGES IN THE WORK § A.7.1 (Not Used)

§ A.7.2 (Not Used)

§ A.7.3 (Not Used)

§ A.7.4 Minor Changes in the Work

The Owner shall have authority to order minor changes in the Work not involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the Design-Build Documents. Such changes shall be effected by written order and shall be binding on the Qualified Provider. The Qualified Provider shall carry out such written orders promptly.

ARTICLE A.8 TIME

§ A.8.1 Definitions

- § A.8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.
- § A.8.1.2 The date of commencement of the Work shall be the date stated in the Agreement unless provision is made for the date to be fixed in a notice to proceed issued by the Owner.
- § A.8.1.3 The date of Substantial Completion is the date determined by the Owner in accordance with Section A.9.8.
- § A.8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

§ A.8.2 Progress and Completion

- § A.8.2.1 Time limits stated in the Contract Documents are of the essence of the Guaranteed Energy Savings Contract. By executing the Design-Build Contract, the Qualified Provider confirms that the Contract Time is a reasonable period for performing the Work.
- § A.8.2.2 The Qualified Provider shall not knowingly, except by agreement or instruction of the Owner in writing, prematurely commence construction operations on the site or elsewhere prior to the effective date of insurance required by Article A.11 to be furnished by the Qualified Provider and Owner. The date of commencement of the Work shall not be changed by the effective date of such insurance. Unless the date of commencement is established by the Contract Documents or a notice to proceed given by the Owner, the Qualified Provider shall notify the Owner in writing not less than five days or other agreed period before commencing the Work to permit the timely filing of mortgages, mechanic's liens and other security interests.
- § A.8.2.3 The Qualified Provider shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

§A.8.3 Delays and Extensions of Time

- **§A.8.3.1** If the Qualified Provider is delayed at any time in the commencement or progress of the Work by an act or neglect of the Owner or of a separate contractor employed by the Owner, or by changes ordered in the Work, or by labor disputes, fire, disruptions in labor materials resulting from a health crisis including but not limited to COVID-19 regardless of whether an infection, disease, epidemic, pandemic, or isolated to areas from which such labor and materials are supplied, unusual delay in deliveries, unavoidable casualties or other causes beyond the Qualified Provider's control, or by delay authorized by the Owner pending resolution of disputes pursuant to the Contract Documents, or by other causes which the Owner determines may justify delay, then the Contract Time shall be extended by Modification to the Contract for such reasonable time as the Owner may determine.
- **§A.8.3.2** Claims relating to time shall be made in accordance with applicable provisions of Section A.4.1.7.
- **§A.8.3.3** This Section A.8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

ARTICLE A.9 PAYMENTS AND COMPLETION

§ A.9.1 Contract Sum

The Contract Sum is stated in the Contract Documents and, including authorized adjustments, is the total amount payable by the Owner to the Qualified Provider for performance of the Work under the Guaranteed Energy Savings Contract.

§ A.9.2 Schedule of Values

Before the first Application for Payment, where the Contract Sum is based upon a Stipulated Sum, the Qualified Provider shall submit to the Owner an initial schedule of values allocated to various portions of the Work prepared in

such form and supported by such data to substantiate its accuracy as the Owner may require. This schedule, unless objected to by the Owner, shall be used as a basis for reviewing the Qualified Provider's Applications for Payment. The schedule of values may be updated periodically to reflect changes in the allocation of the Contract Sum.

§ A.9.3 Applications for Payment

§ A.9.3.1 At least ten days before the date established for each progress payment, the Qualified Provider shall submit to the Owner an itemized Application for Payment for operations completed in accordance with the current schedule of values. Such application shall be notarized, if required, and supported by such data substantiating the Qualified Provider's right to payment as the Owner may require, such as copies of requisitions from Contractors and material suppliers, and reflecting retainage for in the Contract Documents.

§ A.9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Qualified Provider with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest and shall include the costs of applicable insurance, storage and transportation to the site for such materials and equipment stored off the site.

§ A.9.3.3 The Qualified Provider warrants that title to all Work other than Instruments of Service covered by an Application for Payment will pass to the Owner no later than the time of payment. The Qualified Provider further warrants that, upon submittal of an Application for Payment, all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Qualified Provider's knowledge, information and belief, be free and clear of liens, Claims, security interests or encumbrances in favor of the Qualified Provider, Contractors, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials and equipment relating to the Work.

§ A.9.3.4 (Not Used)

§ A.9.5 Decisions to Withhold Payment

§ A.9.5.1 The Owner may withhold a payment in whole or in part to the extent reasonably necessary to protect the Owner due to the Owner's determination that the Work has not progressed to the point indicated in the Application for Payment or that the quality of Work is not in accordance with the Contract Documents. The Owner may also withhold a payment or, because of subsequently discovered evidence, may nullify the whole or a part of an Application for Payment previously issued to such extent as may be necessary to protect the Owner from loss for which the Qualified Provider is responsible, including loss resulting from acts and omissions, because of the following:

- .1 Defective Work not remedied;
- .2 Third-party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to the Owner is provided by the Qualified Provider;
- **.3** Failure of the Qualified Provider to make payments properly to Contractors or for design services labor, materials or equipment;
- .4 Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 Damage to the Owner or a separate contractor;
- Reasonable evidence that the Work will not be completed within the Contract Time and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 Persistent failure to carry out the Work in accordance with the Contract Documents.

§ A.9.5.2 When the above reasons for withholding payment are removed, payment will be made for amounts previously withheld.

§ A.9.6 Progress Payments

§ A.9.6.1 The Owner shall make payment of the amount, in the manner and within the time provided in the Contract Documents and as required by State law.

§ A.9.6.2 The Qualified Provider shall promptly pay the Architect, each design professional and other consultants retained directly by the Qualified Provider, upon receipt of payment from the Owner, out of the amount paid to the Qualified Provider on account of each such party's respective portion of the Work, the amount to which each such party is entitled.

§ A.9.6.3 The Qualified Provider shall promptly pay each Contractor, upon receipt of payment from the Owner, out of the amount paid to the Qualified Provider on account of such Contractor's portion of the Work, the amount to which said Contractor is entitled, reflecting percentages actually retained from payments to the Qualified Provider on account of the Contractor's portion of the Work. The Qualified Provider shall, by appropriate agreement with each Contractor, require each Contractor to make payments to Subcontractors in a similar manner.

§ A.9.6.4 The Owner shall have no obligation to pay or to see to the payment of money to a Contractor except as may otherwise be required by law.

§ A.9.6.5 Payment to material suppliers shall be treated in a manner similar to that provided in Sections A.9.6.3 and A.9.6.4.

§ A.9.6.6 A progress payment, or partial or entire use or occupancy of the Project by the Owner, shall not constitute acceptance of Work not in accordance with the Contract Documents.

§ A.9.7 Failure of Payment

If for reasons other than those enumerated in Section A.9.5.1, the Owner does not issue a payment within the time period required by Section 5.1.3 of the Agreement, then the Qualified Provider may, upon seven additional days' written notice to the Owner, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Qualified Provider's reasonable costs of shutdown, delay and start-up, plus interest as provided for in the Contract Documents.

§ A.9.8 Substantial Completion

§ A.9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or use the Work or a portion thereof for its intended use. The ability to occupy and utilize the Work or designated portion thereof may require an occupancy permit issued by the Kentucky Department of Housing, Building, and Construction and other other agencies having statutory authority and approval requirements.

§ A.9.8.2 When the Qualified Provider considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Qualified Provider shall prepare and submit to the Owner a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Qualified Provider to complete all Work in accordance with the Contract Documents.

§ A.9.8.3 Upon receipt of the Qualified Provider's list, the Owner shall make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Owner's inspection discloses any item, whether or not included on the Qualified Provider's list, which is not substantially complete, the Qualified Provider shall complete or correct such item. In such case, the Qualified Provider shall then submit a request for another inspection by the Owner to determine whether the Qualified Provider's Work is substantially complete.

§ A.9.8.4 In the event of a dispute regarding whether the Qualified Provider's Work is substantially complete, the dispute shall be resolved pursuant to Article A.4.

§ A.9.8.5 When the Work or designated portion thereof is substantially complete, the Qualified Provider shall prepare for the Owner's signature an Acknowledgement of Substantial Completion which, when signed by the Owner, shall establish (1) the date of Substantial Completion of the Work, (2) responsibilities between the Owner and Qualified Provider for security, maintenance, heat, utilities, damage to the Work and insurance, and (3) the time within which the Qualified Provider shall finish all items on the list accompanying the Acknowledgement. When the Owner's inspection discloses that the Work or a designated portion thereof is substantially complete, the Owner shall sign the Acknowledgement of Substantial Completion. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Acknowledgement of Substantial Completion.

§ A.9.8.6 Upon execution of the Acknowledgement of Substantial Completion and consent of surety the Owner shall make payment of retainage applying to such Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§ A.9.9 Partial Occupancy or Use

of Architects for one-time use only, and may not be reproduced prior to its completion.

§ A.9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Qualified Provider, provided such occupancy or use is

AlA Document A141™ – 2004. Copyright © 2004 by The American Institute of Architects. All rights reserved. Kentucky Department of Education

consented to by the insurer, if so required by the insurer, and authorized by public authorities having jurisdiction over the Work. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Qualified Provider have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for completion or correction of the Work and commencement of warranties required by the Contract Documents. When the Qualified Provider considers a portion substantially complete, the Qualified Provider shall prepare and submit a list to the Owner as provided under Section A.9.8.2. Consent of the Qualified Provider to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Qualified Provider.

§ A.9.9.2 Immediately prior to such partial occupancy or use, the Owner and Qualified Provider shall jointly inspect the area to be occupied or portion of the Work to be used to determine and record the condition of the Work.

§ A.9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

§ A.9.10 Final Completion and Final Payment

§ A.9.10.1 Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Owner shall promptly make such inspection and, when the Owner finds the Work acceptable under the Contract Documents and fully performed, the Owner shall, subject to Section A.9.10.2, promptly make final payment to the Qualified Provider.

.1 Upon receipt and approval of the final Application for Payment, for the Contract and each Purchase Order, if any, the Qualified Provider will prepare, and with the Owner complete their portion of the Kentucky Department of Education BG-4 Contract Closeout Form – 2013, and forward the board-approved BG-4 form to the Kentucky Department of Education with a copy of the final Application for Payment upon the Board authorizing the BG-4 form, accepting the Work, and approving final payment to the Contractor or Material Supplier.

§ A.9.10.2 Neither final payment nor any remaining retained percentage will become due until the Qualified Provider submits to the Owner (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be cancelled or allowed to expire until at least 30 days' prior written notice has been given to the Owner, (3) a written statement that the Qualified Provider knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety to final payment, and (5) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Guaranteed Energy Savings Contract, to the extent and in such form as may be designated by the Owner. If a Contractor refuses to furnish a release or waiver required by the Owner, the Qualified Provider may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Qualified Provider shall refund to the Owner all money that the Owner may be liable to pay in connection with the discharge of such lien, including all costs and reasonable attorneys' fees.

§ A.9.10.3 If, after the Owner determines that the Qualified Provider's Work or designated portion thereof is substantially completed, final completion thereof is materially delayed through no fault of the Qualified Provider or by issuance of a Change Order or a Construction Change Directive affecting final completion, the Owner shall, upon application by the Qualified Provider, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, the written consent of surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Qualified Provider. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

§ A.9.10.4 The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

- .1 liens, Claims, security interests or encumbrances arising out of the Contract Documents and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents; or
- .3 terms of special warranties required by the Contract Documents.

§ A.9.10.5 Acceptance of final payment by the Qualified Provider, a Contractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE A.10 PROTECTION OF PERSONS AND PROPERTY

§ A.10.1 Safety Precautions and Programs

§ A.10.1.1 The Qualified Provider shall be responsible for initiating and maintaining all safety precautions and programs in connection with the performance of the Guaranteed Energy Savings Contract.

§ A.10.2 Safety of Persons and Property

§ A.10.2.1 The Qualified Provider shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site or under the care, custody or control of the Qualified Provider or the Qualified Provider's Contractors or Subcontractors; and
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

§ A.10.2.2 The Qualified Provider shall give notices and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.

§ A.10.2.3 The Qualified Provider shall erect and maintain, as required by existing conditions and performance of the Contract Documents, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities.

§ A.10.2.4 When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Qualified Provider shall notify the Owner in writing ten (10) days in advance of such action and exercise utmost care and carry on such activities under supervision of properly qualified personnel.

§ A.10.2.5 The Qualified Provider shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections A.10.2.1.2 and A.10.2.1.3 caused in whole or in part by the Qualified Provider, the Architect, a Contractor, a Subcontractor, or anyone directly or indirectly employed by any of them or by anyone for whose acts they may be liable and for which the Qualified Provider is responsible under Sections A.10.2.1.2 and A.10.2.1.3, except damage or loss attributable to acts or omissions of the Owner or anyone directly or indirectly employed by the Owner, or by anyone for whose acts the Owner may be liable, and not attributable to the fault or negligence of the Qualified Provider. The foregoing obligations of the Qualified Provider are in addition to the Qualified Provider's obligations under Section A.3.17.

§ A.10.2.6 The Qualified Provider shall designate in writing to the Owner a responsible individual whose duty shall be the prevention of accidents.

§ A.10.2.7 The Qualified Provider shall not load or permit any part of the construction or site to be loaded so as to endanger its safety.

§ A.10.3 Hazardous Materials

§ A.10.3.1 If reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Qualified Provider, the Qualified Provider shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Owner.

§ A.10.3.2 Unless there is a hazardous materials survey on record, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Qualified Provider and, in the event such material or substance is found to be present, to verify that it has been rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Qualified Provider the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of such material or substance or who are to perform the task of removal or safe containment of such material or substance. The Qualified Provider shall promptly reply to the Owner in writing stating whether or not the Qualified Provider has reasonable objection to the persons or entities proposed by the Owner. If the Qualified Provider has an objection to a person or

entity proposed by the Owner, the Owner shall propose another to whom the Qualified Provider has no reasonable objection. When the material or substance has been rendered harmless, work in the affected area shall resume upon written agreement of the Owner and Qualified Provider. The Contract Time shall be extended appropriately, and the Contract Sum shall be increased in the amount of the Qualified Provider's reasonable additional costs of shutdown, delay and start-up, which adjustments shall be accomplished by a Modification to the Contract.

§ A.10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Qualified Provider, Contractors, Subcontractors, Architect, Architect's consultants and the agents and employees of any of them from and against Claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance exists on site as of the date of the Agreement, is not disclosed in the Design-Build Documents and presents the risk of bodily injury or death as described in Section A.10.3.1 and has not been rendered harmless, provided that such Claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death or to injury to or destruction of tangible property (other than the Work itself) to the extent that such damage, loss or expense is not due to the negligence of the Qualified Provider, Contractors, Subcontractors, Architect, Architect's consultants and the agents and employees of any of them.

§ A.10.4 The Owner shall not be responsible under Section A.10.3 for materials and substances brought to the site by the Qualified Provider unless such materials or substances were required by the Contract Documents.

§ A.10.5 If, without negligence on the part of the Qualified Provider, the Qualified Provider is held liable for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall indemnify the Qualified Provider for all cost and expense thereby incurred.

§ A.10.6 Emergencies

In an emergency affecting safety of persons or property, the Qualified Provider shall act, at the Qualified Provider's discretion, to prevent threatened damage, injury or loss. Additional compensation or extension of time claimed by the Qualified Provider on account of an emergency shall be determined as provided in a Modification to the Contract.

ARTICLE A.11 INSURANCE AND BONDS

§ A.11.1 Except as may otherwise be set forth in the Agreement or elsewhere in the Contract Documents, the Owner and Qualified Provider shall purchase and maintain the following types of insurance with limits of liability and deductible amounts and subject to such terms and conditions, as set forth in this Article A.11.

§ A.11.2 Qualified Provider's Liability Insurance

§ A.11.2.1 The Qualified Provider shall purchase from and maintain in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located such insurance as will protect the Qualified Provider from claims set forth below that may arise out of or result from the Qualified Provider's operations under the Guaranteed Energy Savings Contract and for which the Qualified Provider may be legally liable, whether such operations be by the Qualified Provider, by a Contractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- .1 Claims under workers' compensation, disability benefit and other similar employee benefit acts which are applicable to the Work to be performed;
- .2 Claims for damages because of bodily injury, occupational sickness or disease, or death of the Qualified Provider's employees;
- .3 Claims for damages because of bodily injury, sickness or disease, or death of any person other than the Qualified Provider's employees;
- .4 Claims for damages insured by usual personal injury liability coverage;
- .5 Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
- .6 Claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle;
- .7 Claims for bodily injury or property damage arising out of completed operations; and
- **.8** Claims involving contractual liability insurance applicable to the Qualified Provider's obligations under Section A.3.17.

§ A.11.2.2 The insurance required by Section A.11.2.1 shall be written for not less than limits of liability specified in the Contract Documents or required by law, whichever coverage is greater. Coverages, whether written on an occurrence or claims-made basis, shall be maintained without interruption from date of commencement of the Work until date of final payment and termination of any coverage required to be maintained after final payment.

§ A.11.2.3 Certificates of insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the Work. These certificates and the insurance policies required by this Section A.11.2 shall contain a provision that coverages afforded under the policies will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner. If any of the foregoing insurance coverages are required to remain in force after final payment and are reasonably available, an additional certificate evidencing continuation of such coverage shall be submitted with the final Application for Payment as required by Section A.9.10.2. Information concerning reduction of coverage on account of revised limits or claims paid under the General Aggregate, or both, shall be furnished by the Qualified Provider with reasonable promptness in accordance with the Qualified Provider's information and belief.

§ A.11.3 Owner's Liability Insurance

The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance.

§ A.11.4 Property Insurance

§ A.11.4.1 Unless otherwise provided, the Owner shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance written on a builder's risk, "all-risk" or equivalent policy form in the amount of the initial Contract Sum (and Owner-direct Purchase Orders if utilized), plus the value of subsequent Design-Build Contract modifications and cost of materials supplied or installed by others, comprising total value for the entire Project at the site on a replacement cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in Section A.9.10 or until no person or entity other than the Owner has an insurable interest in the property required by this Section A.11.4 to be covered, whichever is later. This insurance shall include interests of the Owner, Qualified Provider, Contractors and Subcontractors in the Project.

§ A.11.4.1.1 Property insurance shall be on an "all-risk" or equivalent policy form and shall include, without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, falsework, testing and startup, temporary buildings and debris removal, including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Qualified Provider's services and expenses required as a result of such insured loss.

§ A.11.4.1.2 If the Owner does not intend to purchase such property insurance required by the Guaranteed Energy Savings Contract and with all of the coverages in the amount described above, the Owner shall so inform the Qualified Provider in writing prior to commencement of the Work. The Qualified Provider may then effect insurance that will protect the interests of the Qualified Provider, Contractors and Subcontractors in the Work, and, by appropriate Modification to the Contract, the cost thereof shall be charged to the Owner. If the Qualified Provider is damaged by the failure or neglect of the Owner to purchase or maintain insurance as described above without so notifying the Qualified Provider in writing, then the Owner shall bear all reasonable costs properly attributable thereto.

§ A.11.4.1.3 If the property insurance requires deductibles, the Owner shall pay costs not covered because of such deductibles.

§ A.11.4.1.4 This property insurance shall cover portions of the Work stored off the site and also portions of the Work in transit.

§ A.11.4.1.5 Partial occupancy or use in accordance with Section A.9.9 shall not commence until the insurance company or companies providing property insurance have consented to such partial occupancy or use, by endorsement or otherwise. The Owner and the Qualified Provider shall take reasonable steps to obtain consent of the insurance company or companies and shall, without mutual written consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of insurance.

§ A.11.4.2 Boiler and Machinery Insurance. The Owner shall purchase and maintain boiler and machinery insurance required by the Contract Documents or by law, which shall specifically cover such insured objects during installation and until final acceptance by the Owner; this insurance shall include interests of the Owner, Qualified Provider, Contractors and Subcontractors in the Work, and the Owner and Qualified Provider shall be named insureds.

§ A.11.4.3 Loss of Use Insurance. The Owner, at the Owner's option, may purchase and maintain such insurance as will insure the Owner against loss of use of the Owner's property due to fire or other hazards, however caused. The Owner waives all rights of action against the Qualified Provider, Architect, the Qualified Provider's other design professionals,

if any, Contractors and Subcontractors for loss of use of the Owner's property, including consequential losses due to fire or other hazards, however caused.

§ A.11.4.4 If the Qualified Provider requests in writing that insurance for risks other than those described herein or other special causes of loss be included in the property insurance policy, the Owner shall, if possible, include such insurance, and the cost thereof shall be charged to the Qualified Provider by appropriate Modification to the Contract.

§ A.11.4.5 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, the Owner shall waive all rights in accordance with the terms of Section A.11.4.7 for damages caused by fire or other causes of loss covered by this separate property insurance. All separate policies shall provide this waiver of subrogation by endorsement or otherwise.

§ A.11.4.6 Before an exposure to loss may occur, the Owner shall file with the Qualified Provider a copy of each policy that includes insurance coverages required by this Section A.11.4. Each policy shall contain all generally applicable conditions, definitions, exclusions and endorsements related to this Project. Each policy shall contain a provision that the policy will not be canceled or allowed to expire and that its limits will not be reduced until at least 30 days' prior written notice has been given to the Qualified Provider.

§ A.11.4.7 Waivers of Subrogation. The Owner and Qualified Provider waive all rights against each other and any of their consultants, separate contractors described in Section A.6.1, if any, Contractors, Subcontractors, agents and employees, each of the other, and any of their contractors, subcontractors, agents and employees, for damages caused by fire or other causes of loss to the extent covered by property insurance obtained pursuant to this Section A.11.4 or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by the Owner as fiduciary. The Owner or Qualified Provider, as appropriate, shall require of the separate contractors described in Section A.6.1, if any, and the Contractors, Subcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, even though the person or entity did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

§ A.11.4.8 A loss insured under Owner's property insurance shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section A.11.4.10. The Qualified Provider shall pay Contractors their just shares of insurance proceeds received by the Qualified Provider, and, by appropriate agreements, written where legally required for validity, shall require Contractors to make payments to their Subcontractors in similar manner.

§ A.11.4.9 If required in writing by a party in interest, the Owner as fiduciary shall, upon occurrence of an insured loss, give bond for proper performance of the Owner's duties. The cost of required bonds shall be charged against proceeds received as fiduciary. The Owner shall deposit in a separate account proceeds so received, which the Owner shall distribute in accordance with such agreement as the parties in interest may reach. If after such loss no other special agreement is made and unless the Owner terminates the Guaranteed Energy Savings Contract for convenience, replacement of damaged property shall be performed by the Qualified Provider after a Modification to the Contract.

§ A.11.4.10 The Owner as fiduciary shall have power to adjust and settle a loss with insurers unless one of the parties in interest shall object in writing within five days after occurrence of loss to the Owner's exercise of this power.; The Owner as fiduciary shall, in the case of a decision or award, make settlement with insurers in accordance with directions of a decision or award. If distribution of insurance proceeds by arbitration is required, the arbitrators will direct such distribution.

§ A.11.5 Performance Bond and Payment Bond

of Architects for one-time use only, and may not be reproduced prior to its completion.

The Qualified Provider shall furnish bonds covering faithful performance of the Guaranteed Energy Savings Contract and payment of obligations arising thereunder, including payment to design professionals engaged by or on behalf of the Qualified Provider, specifically required in the Agreement or elsewhere in the Contract Documents on the date of execution of the Guaranteed Energy Savings Contract. A surety company authorized to do business in Kentucky shall execute bonds, and the cost thereof shall be included in the Contract Sum. Unless otherwise provided, the amount of each bond shall be equal to 100% of the Contract Sum plus Owner-direct Purchase Orders if utilized.

AIA Document A141™ - 2004. Copyright © 2004 by The American Institute of Architects. All rights reserved. Kentucky Department of Education

Version of AIA Document A141™-2004. Copyright © 2014 by The American Institute of Architects. All rights reserved. WARNING: This AIA® Document

ARTICLE A.12 UNCOVERING AND CORRECTION OF WORK

§ A.12.1 Uncovering of Work

§ A.12.1.1 If a portion of the Work is covered contrary to requirements specifically expressed in the Contract Documents, it must be uncovered for the Owner's examination and be replaced at the Qualified Provider's expense without change in the Contract Time.

§ A.12.1.2 If a portion of the Work has been covered which the Owner has not specifically requested to examine prior to its being covered, the Owner may request to see such Work and it shall be uncovered by the Qualified Provider. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement shall, by appropriate Modification to the Contract, be at the Owner's expense. If such Work is not in accordance with the Design-Build Documents, correction shall be at the Qualified Provider's expense unless the condition was caused by the Owner or a separate contractor, in which event the Owner shall be responsible for payment of such costs.

§ A.12.2 Correction of Work

§ A.12.2.1 Before or After Substantial Completion

§ A.12.2.1.1 The Qualified Provider shall promptly correct Work rejected by the Owner or failing to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing, shall be at the Qualified Provider's expense.

§ A.12.2.2 After Substantial Completion

§ A.12.2.2.1 In addition to the Qualified Provider's obligations under Section A.3.5, if, within one year after the date of Substantial Completion or after the date for commencement of warranties established under Section A.9.8.5 or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Qualified Provider shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Qualified Provider a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Qualified Provider and give the Qualified Provider an opportunity to make the correction, the Owner waives the rights to require correction by the Qualified Provider and to make a claim for breach of warranty. If the Qualified Provider fails to correct non-conforming Work within a reasonable time during that period after receipt of notice from the Owner, the Owner may correct it in accordance with Section A.2.5.

§ A.12.2.2.2 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work.

§ A.12.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Qualified Provider pursuant to this Section A.12.2.

§ A.12.2.3 The Qualified Provider shall remove from the site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by the Qualified Provider nor accepted by the Owner.

§ A.12.2.4 The Qualified Provider shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the Owner or separate contractors caused by the Qualified Provider's correction or removal of Work which is not in accordance with the requirements of the Contract Documents.

§ A.12.2.5 Nothing contained in this Section A.12.2 shall be construed to establish a period of limitation with respect to other obligations the Qualified Provider might have under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section A.12.2.2 relates only to the specific obligation of the Qualified Provider to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Qualified Provider's liability with respect to the Qualified Provider's obligations other than specifically to correct the Work.

§ A.12.3 Acceptance of Nonconforming Work

of Architects for one-time use only, and may not be reproduced prior to its completion.

If the Owner prefers to accept Work not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be equitably adjusted by Modification to the Contract. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE A.13 MISCELLANEOUS PROVISIONS

§ A.13.1 Governing Law

The Guaranteed Energy Savings Contract shall be governed by the law of the place where the Project is located.

§ A13.1.1 None of the Contract Documents for this project shall be construed against the party preparing documents on the grounds that the party prepared or drafted the document, or any portion thereof.

§ A.13.2 Successors and Assigns

§ A.13.2.1 The Owner and Qualified Provider respectively bind themselves, their partners, successors, assigns and legal representatives to the other party hereto and to partners, successors, assigns and legal representatives of such other party in respect to covenants, agreements and obligations contained in the Contract Documents.

§ A.13.3 Written Notice

Written notice shall be deemed to have been duly served if delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended, or if sent by registered or certified mail to the last business address known to the party giving notice.

§ A.13.4 Rights and Remedies

§ A.13.4.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law.

§ A.13.4.2 No action or failure to act by the Owner or Qualified Provider shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

§ A.13.5 Tests and Inspections

§ A.13.5.1 Tests, inspections and approvals of portions of the Work required by the Contract Documents or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction shall be made at an appropriate time. Unless otherwise provided, the Qualified Provider shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. The Qualified Provider shall give timely notice of when and where tests and inspections are to be made so that the Owner may be present for such procedures.

§ A.13.5.2 If the Owner or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection or approval not included under Section A.13.5.1, the Owner shall in writing instruct the Qualified Provider to make arrangements for such additional testing, inspection or approval by an entity acceptable to the Owner, and the Qualified Provider shall give timely notice to the Owner of when and where tests and inspections are to be made so that the Owner may be present for such procedures. Such costs, except as provided in Section A.13.5.3, shall be at the Owner's expense.

§ A.13.5.3 If such procedures for testing, inspection or approval under Sections A.13.5.1 and A.13.5.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures, shall be at the Qualified Provider's expense.

§ A.13.5.4 Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Qualified Provider and promptly delivered to the Owner.

§ A.13.5.5 If the Owner is to observe tests, inspections or approvals required by the Contract Documents, the Owner will do so promptly and, where practicable, at the normal place of testing.

§ A.13.5.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ A.13.6 Commencement of Statutory Limitation Period

§ A.13.6.1 As between the Owner and Qualified Provider:

of Architects for one-time use only, and may not be reproduced prior to its completion.

1 Before Substantial Completion. As to acts or failures to act occurring prior to the relevant date of Substantial Completion, any applicable statute of limitations shall commence to run and any alleged

AIA Document A141™ - 2004. Copyright © 2004 by The American Institute of Architects. All rights reserved. Kentucky Department of Education

- cause of action shall be deemed to have accrued in any and all events not later than such date of Substantial Completion;
- .2 Between Substantial Completion and Final Application for Payment. As to acts or failures to act occurring subsequent to the relevant date of Substantial Completion and prior to issuance of the final Application for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of issuance of the final Application for Payment; and
- .3 After Final Application for Payment. As to acts or failures to act occurring after the relevant date of issuance of the final Application for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of any act or failure to act by the Qualified Provider pursuant to any Warranty provided under Section A.3.5, the date of any correction of the Work or failure to correct the Work by the Qualified Provider under Section A.12.2, or the date of actual commission of any other act or failure to perform any duty or obligation by the Qualified Provider or Owner, whichever occurs last.

ARTICLE A.14 TERMINATION OR SUSPENSION OF THE GUARANTEED ENERGY SAVINGS CONTRACT § A.14.1 Termination by the QUALIFIED PROVIDER

§ A.14.1.1 The Qualified Provider may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Qualified Provider or a Contractor, Subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Qualified Provider, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction which requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency which requires all Work to be stopped;
- .3 The Owner has failed to make payment to the Qualified Provider in accordance with the Contract Documents; or
- .4 The Owner has failed to furnish to the Qualified Provider promptly, upon the Qualified Provider's request, reasonable evidence as required by Section A.2.2.8.

§ A.14.1.2 The Qualified Provider may terminate the Contract if, through no act or fault of the Qualified Provider or a Contractor, Subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Qualified Provider, repeated suspensions, delays or interruptions of the entire Work by the Owner, as described in Section A.14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ A.14.1.3 If one of the reasons described in Sections A.14.1.1 or A.14.1.2 exists, the Qualified Provider may, upon seven days' written notice to the Owner, terminate the Contract and recover from the Owner payment for Work executed and for proven loss with respect to materials, equipment, tools, and construction equipment and machinery, including reasonable overhead, profit and damages.

§ A.14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Qualified Provider or a Contractor or their agents or employees or any other persons performing portions of the Work under a direct or indirect contract with the Qualified Provider because the Owner has persistently failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Qualified Provider may, upon seven additional days' written notice to the Owner, terminate the Contract and recover from the Owner as provided in Section A.14.1.3.

§ A.14.2 Termination by the Owner For Cause

§ A.14.2.1 The Owner may terminate the Contract if the Qualified Provider

- .1 persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Contractors for services, materials or labor in accordance with the respective agreements between the Qualified Provider and the Architect, other design professionals and Contractors;
- .3 persistently disregards laws, ordinances or rules, regulations or orders of a public authority having jurisdiction; or
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ A.14.2.2 When any of the above reasons exist, the Owner may without prejudice to any other rights or remedies of the Owner and after giving the Qualified Provider and the Qualified Provider's surety, if any, seven days' written notice, terminate employment of the Qualified Provider and may, subject to any prior rights of the surety,

- .1 take possession of the site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Qualified Provider;
- .2 accept assignment of contracts pursuant to Section A.5.5.1; and
- .3 finish the Work by whatever reasonable method the Owner may deem expedient. Upon request of the Qualified Provider, the Owner shall furnish to the Qualified Provider a detailed accounting of the costs incurred by the Owner in finishing the Work.
- § A.14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section A.14.2.1, the Qualified Provider shall not be entitled to receive further payment until the Work is finished.
- § A.14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Qualified Provider. If such costs and damages exceed the unpaid balance, the Qualified Provider shall pay the difference to the Owner.

§ A.14.3 Suspension by the Owner for Convenience

§ A.14.3.1 The Owner may, without cause, order the Qualified Provider in writing to suspend, delay or interrupt the Work in whole or in part for such period of time as the Owner may determine.

- § A.14.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay or interruption as described in Section A.14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent
 - .1 that performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Qualified Provider is responsible; or
 - .2 that an equitable adjustment is made or denied under another provision of the Contract.

§ A.14.4 Termination by the Owner for Convenience

§ A.14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

- § A.14.4.2 Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Qualified Provider shall
 - .1 cease operations as directed by the Owner in the notice;
 - .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
 - .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing contracts and purchase orders and enter into no further contracts and purchase orders.
- § A.14.4.3 In the event of termination for the Owner's convenience prior to commencement of construction, the Qualified Provider shall be entitled to receive payment for design services performed, costs incurred by reason of such termination and reasonable overhead and profit on design services not completed. In case of termination for the Owner's convenience after commencement of construction, the Qualified Provider shall be entitled to receive payment for Work executed and costs incurred by reason of such termination, along with reasonable overhead and profit on the Work not executed.

Kentucky Department of Education Version of MAIA Document A141™ – 2004 Exhibit C

Insurance and Bonds

for the following PROJECT:

(Name and location or address)

Fort Thomas Independent Schools GESC

28 North Fort Thomas Avenue, Fort Thomas, KY 41075

THE OWNER:

(Name, legal status and address)
Fort Thomas Independent Schools Board of Education
28 North Fort Thomas Avenue
Fort Thomas, KY 41075

THE QUALIFIED PROVIDER:

(Name, legal status and address) CMTA, Inc. 9519 Civic Way Prospect, KY 40059

ARTICLE C.1

The Owner and Qualified Provider shall provide policies of liability insurance as required by the Contract Documents, or as follows:

(Specify changes, if any, to the requirements of the Contract Documents, and for each type of insurance identify applicable limits and deductible amounts. Either list liability insurance requirements here or refer to an exhibit attached to this Agreement.)

C.1.1 Insurance required by Exhibit A — KDE Version, Article A.11, shall be no less than the following limits, or greater if required by law:

.1 Worker's Compensation:

a. State
b. Applicable Federal
c. Employer' Liability
Statutory
\$500,000

.2 Comprehensive or Commercial General Liability (including Premises-Operations; Independent Contractor's Protection; Product Liability and Completed Operations; Broad Form Property Damage);

a. General Aggregate (except Products-Completed Operations)
 b. Products-Completed Operations Aggregate \$1,000,000
 c. Personal/Advertising Injury (per person/organization) \$1,000,000
 d. Each Occurrence (Bodily Injury and Property Damage) \$1,000,000
 e. Limit per Person Medical Expense \$10,000

f. Exclusions of Property in Contractor's Care, Custody or Control shall be eliminated.

g. Property Damage Liability Insurance shall provide Coverage for Explosion, Collapse, and Underground Damage.



This version of AIA Document A141–2004 is modified by the Kentucky Department of Education. Publication of this version of AIA Document A141 does not imply the American Institute of Architects' endorsement of any modification by the Kentucky Department of Education. A comparative version of AIA Document A141–2004 showing additions and deletions by the Kentucky Department of Education is available for review on the Kentucky Department of Education Web site.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Consultation with an attorney is also encouraged with respect to professional licensing requirements in the jurisdiction where the Project is located. **.3** Contractual Liability:

a. General Aggregate \$1,000,000

b. Each Occurrence (Bodily Injury and Property Damage)

\$1,000,000

.4 Automobile Liability:

a. Bodily Injury \$500,000 each person

\$1,000,000 each accident

b. Property Damage \$500,000 each accident, or a combined single

limit of \$1,000,000

.5 Liability coverage for the Owner shall be provided by endorsement as additional insureds on the Qualified Provider's Liability Policy.

.6 Excess Liability Umbrella Form:

 a. General Aggregate
 \$1,000,000

 b. Each Occurrence
 \$1,000,000

.7 There shall be an endorsement in each of the above policies as follows: "It is hereby agreed that in the event of a claim arising under this policy, the company may not deny liability by reason of the insured being a state, county, municipal corporation or governmental agency."

ARTICLE C.2

The Qualified Provider shall provide surety bonds as follows:

(Specify type and penal sum of bonds. Either list insurance and bond information here or refer to an exhibit attached to this Agreement.)

Type

Performance and Payment Bonds written on AIA Document A312–2010, Performance Bond and Payment Bond — KDE Version

Penal Sum (\$0.00)

100% of the Contract Sum plus Owner's Direct Purchase Orders, if any, for Project materials and equipment.

- **§ C.2.1** Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Agreement, the Qualified Provider shall promptly furnish a copy of the bonds or shall permit a copy to be made.
- **§ C.2.2** Coverage under the Performance and Payment Bond shall not extend to the Energy Savings Guarantee, as set forth in Exhibit E, or any related provisions.



Exhibit B is not used



Exhibit C – Insurance and Bonds

The following page provides CMTA's Certificate of Insurance.

Payment and Performance Bond documentation will be provided to the district following the execution of the contract.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 01/30/2023

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

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

	mer rigine to the comments heres in hea er	out on the order of the order o	
PRODUCER MARSH RISK & INSURANCE SERVICE FOUR EMBARCADERO CENTER, SUI			FAX A/C, No):
CALIFORNIA LICENSE NO. 0437153 SAN FRANCISCO, CA 94111		E-MAIL ADDRESS:	
SAN FRANCISCO, CA 94111		INSURER(S) AFFORDING COVERAGE	NAIC#
CN 10246455-CMTA-GAUWP-22-24		INSURER A: Zurich American Insurance Company	16535
INSURED CMTA, Inc.		INSURER B: American Guarantee and Liability Insurance Compa	ny 26247
10411 Meeting St.		INSURER C: Allied World Surplus Lines Insurance Company	24319
Prospect, KY 40059		INSURER D:	
		INSURER E:	
		INSURER F:	
COVERACES	CEDTICICATE NUMBER.	SEA 00200E204 01 DEVICION NUM	DED. 1

COVERAGES CERTIFICATE NUMBER: SEA-003895204-01 REVISION NUMBER: 1

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

INSR LTR		ADDL	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	S
A	X COMMERCIAL GENERAL LIABILITY	Х	Х	GLO 4340749 – 01	06/20/2022	06/20/2023	EACH OCCURRENCE	\$ 2,000,000
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 300,000
							MED EXP (Any one person)	\$ 10,000
							PERSONAL & ADV INJURY	\$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$ 4,000,000
	POLICY X PRO- JECT LOC						PRODUCTS - COMP/OP AGG	\$ 4,000,000
	OTHER:							\$
A	AUTOMOBILE LIABILITY	Х	Х	BAP 4340750 – 01	06/20/2022	06/20/2023	COMBINED SINGLE LIMIT (Ea accident)	\$ 5,000,000
	X ANY AUTO						BODILY INJURY (Per person)	\$
	OWNED SCHEDULED AUTOS						BODILY INJURY (Per accident)	\$
	HIRED NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	\$
								\$
В	X UMBRELLA LIAB X OCCUR	Х	Χ	AUC 4340745-01	06/20/2022	06/20/2023	EACH OCCURRENCE	\$ 10,000,000
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	\$ 10,000,000
	DED RETENTION \$							\$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY		Х	WC 4340748 – 01	06/20/2022	06/20/2023	X PER OTH- STATUTE ER	
	ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?	N/A					E.L. EACH ACCIDENT	\$ 1,000,000
	(Mandatory in NH)	,					E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	\$ 1,000,000
С	Professional Liability			0313-2020	12/31/2021	06/20/2023	Limit:	5,000,000
							SIR:	250,000

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

Fort Thomas Independent Schools is included as additional insured, except for workers' compensation, where required by written contract and allowed by law. This insurance shall be primary and non-contributory and limited to liability arising out of the operations of the named insured. Waiver of Subrogation is

applicable where required by written contract and allowed by law.

CERTIFICATE HOLDER	CANCELLATION
Fort Thomas Independent Schools Attn: Jerry Wissman 28 North Fort Thomas Ave. Fort Thomas, KY 41075	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE of Marsh Risk & Insurance Services
_	Marsh Risk & Insurance Services

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DESIGNATED INSURED FOR COVERED AUTOS LIABILITY COVERAGE

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM BUSINESS AUTO COVERAGE FORM MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by this endorsement.

This endorsement identifies person(s) or organization(s) who are "insureds" for Covered Autos Liability Coverage under the Who Is An Insured provision of the Coverage Form. This endorsement does not alter coverage provided in the Coverage Form.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

Named Insured: LEGENCE HOLDINGS, LLC

Endorsement Effective Date: 06/20/2022

SCHEDULE

Name Of Person(s) Or Organization(s):

Any person or organization to whom or which you are required to provide additional insured status or additional insured status on a primary, non-contributory basis, in a written contract or written agreement executed prior to loss, except where such contract or agreement is prohibited by law.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

Each person or organization shown in the Schedule is an "insured" for Covered Autos Liability Coverage, but only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured provision contained in Paragraph A.1. of Section II – Covered Autos Liability Coverage in the Business Auto and Motor Carrier Coverage Forms and Paragraph D.2. of Section I – Covered Autos Coverages of the Auto Dealers Coverage Form.

POLICY NUMBER: BAP 4340750 01

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (WAIVER OF SUBROGATION)

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM BUSINESS AUTO COVERAGE FORM MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

Named Insured: LEGENCE HOLDINGS, LLC

Endorsement Effective Date: 06/20/2022

SCHEDULE

Name(s) Of Person(s) Or Organization(s):

ALL PERSONS AND/OR ORGANIZATIONS THAT ARE REQUIRED BY WRITTEN CONTRACT OR AGREEMENT WITH THE INSURED, EXECUTED PRIOR TO THE ACCIDENT OR LOSS, THAT WAIVER OF SUBROGATION BE PROVIDED UNDER THIS POLICY

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The Transfer Of Rights Of Recovery Against Others To Us condition does not apply to the person(s) or organization(s) shown in the Schedule, but only to the extent that subrogation is waived prior to the "accident" or the "loss" under a contract with that person or organization.



Additional Insured – Owners, Lessees Or Contractors – Scheduled Person Or Organization

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.				
Policy No. GLO 4340749 01	Effective Date: 06/20/2022			

This endorsement modifies insurance provided under the following:

Commercial General Liability Coverage Part

SCHEDULE

ame of Person o	or Organization:		

- A. Section II Who Is An Insured is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of your ongoing operations performed for that insured.
- B. With respect to the insurance afforded to these additional insureds, the following exclusion is added:

2. Exclusions

This insurance does not apply to "bodily injury" or "property damage" occurring after:

- (1) All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the site of the covered operations has been completed; or
- (2) That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

All other terms, conditions, provisions and exclusions of this policy remain the same.



Additional Insured – Owners, Lessees Or Contractors – Completed Operations

Policy No. GLO 4340749 01	Effective Date: 06/20/2022
This endorsement modifies insurance provided und	der the following:
Commercial General Liability Coverage Par	-
Commercial General Liability Coverage Fai	•
	SCHEDULE
Name of Person or Organization:	
•	
Landing And Bonnielland Committee	Manage 1
	tions: her consolidated insurance program location or project, for which a wrap-up or other consolidated insurance program
Additional Premium: INCL	
but only with respect to liability arising out of "your	iclude as an insured the person or organization shown in the Schedule r work" at the location designated and described in the schedule of this led in the "products-completed operations hazard".

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

All other terms, conditions, provisions and exclusions of this policy remain the same.



Waiver Of Subrogation (Blanket) Endorsement

Policy No.	Eff. Date of Pol.	Exp. Date of Pol.	Eff. Date of End.	Producer	Add'l. Prem	Return Prem.
GLO 4340749 01	06/20/2022	06/20/2023	06/20/2022	18232000	\$	\$

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement modifies insurance provided under the:

Commercial General Liability Coverage Part

The following is added to the Transfer Of Rights Of Recovery Against Others To Us Condition:

If you are required by a written contract or agreement, which is executed before a loss, to waive your rights of recovery from others, we agree to waive our rights of recovery. This waiver of rights shall not be construed to be a waiver with respect to any other operations in which the insured has no contractual interest.

INTERNAL USE ONLY U-GL-925-B CW (12/01)

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

ALL PERSONS AND/OR ORGANIZATIONS THAT ARE REQUIRED BY WRITTEN CONTRACT OF AGREEMENT WITH THE INSURED, EXECUTED PRIOR TO THE ACCIDENT OR LOSS, THAT WAIVER OF SUBROGATION BE PROVIDED UNDER THIS POLICY FOR WORK PERFORMED BY YOU FOR THAT PERSON AND/OR ORGANIZATION
This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated. (The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

COMPANY

Insurance Company: ZURICH AMERICAN INSURANCE

Endorsement Effective Policy No. WC4340748-01 Endorsement No. Insured: LEGENCE HOLDINGS, LLC Premium \$

Countersigned by



Exhibit D - Scope of Services and Energy Conservation Measures

A detailed description of each Energy Conservation Measure (ECM) is organized in the following categories:

Electrical Upgrades

- E.1 LED Lighting Upgrades
- E.1a TV Studio LED Lighting Upgrades

Controls Upgrades

- C.1 New DDC System Installation
- C.2 Central Plant Controls
- C.3 Controls Upgrades
- C.4 Controls Retro-Commissioning
- C.5 Programmable Thermostats

HVAC Upgrades

- H.1 HVAC Renovation
- H.2 Central Plant Upgrades

Plumbing Upgrades

- P.1 Domestic Water Heater Replacement
- P.2 Cooling Tower Deduct Meter

Utility Upgrades

U.1 Duke Utility Rate Changes



Table D.1 – Scope of Work Summary

	ECM Summary Matrix									
Category	ECM	Description	Highlands Middle	Highlands High	Field House	Johnson Elementary	Moyer Elementary	Woodfill Elementary	Board of Education	Education Foundation
Electrical	E.1	LED Lighting Upgrades	Х	Х	Х			Х	Х	Х
Electrical	E.1a	TV Studio LED Lighting Upgrades		X						
	C.1	New DDC System Installation	Х							
	C.2	Central Plant Controls		X						
Controls	C.3	Controls Upgrades		Х				Х		
	C.4	Controls Retro-Cx		х	х	X	Х	X		
	C.5	Programmable Thermostats							x	
HVAC	H.1	HVAC Renovation	Х							
HVAC	H.2	Central Plant Upgrades		х						
Plumbing	P.1	Domestic Water Heater Replacement	X							
Plumbing	P.2	Cooling Tower Deduct Meter	Х	Х						
Utility	U.1	Duke Utility Rate Changes				X	Х	Х	Х	

Energy Conservation Measure Narratives

The design drawings and specifications, located in Exhibit K, detail the specifics of the scope of services and energy conservation measures (ECMs) at each building. A summary of the work to be performed through each measure is outlined below. Refer to design drawings and specifications for full scope of work details.

E.1: LED Lighting Upgrades

Refer to lighting drawings included in Exhibit K for specific upgrades.

- LED Lighting upgrades will be implemented where existing lighting technology is not LED. Unless otherwise specified in the design drawings, existing LED fixtures are to remain.
- Including interiors and exteriors, over 13,950 lighting fixtures will be either replaced with new LED fixtures or retrofitted with high efficiency LED lamps and kits.
- Linear fluorescent fixtures at Highlands Middle School, the Field House and the Board of Education will be retrofitted with linear LED tubes.
- Linear fluorescent fixtures (T5) at Highlands High School will be retrofitted with LED drivers and LED tubes
- Linear fluorescent fixtures (T8) at Woodfill Elementary School will be retrofitted with LED drivers and LED tubes



- Exterior decorative acorn fixtures at Highlands High School and Middle School will be retrofitted with an LED lamp. Existing poles and bases to be reused.
- Exterior HID pole lighting at Woodfill Elementary shall be replaced with new LED fixtures. Existing poles and bases to be reused.
- Remaining miscellaneous exterior lighting shall be retrofitted or replaced as outlined in plans and specifications
- Gymnasium fixtures in Highlands High School, Highlands Middle School and Woodfill Elementary School will be replaced with new high bay LED fixtures

E.1a: LED Lighting Upgrades Alternatives

Refer to lighting drawings included in Exhibit K for specific upgrades.

 Existing theatrical lighting in the Highlands High School TV Studio will be replaced with new theatrical fixtures

C.1: New DDC System Installation

The New Direct Digital Control (DDC) System Installation design drawings and specifications, located in Exhibit K, detail the specifics of the scope of services at Highlands Middle School.

A summary of the work to be performed is outlined below.

- Full DDC system upgrade as a part of the HVAC Renovation
- Updated graphics
- Install electric meter on main switch gear to monitor energy and demand
- Equipment schedules, optimal start logic, demand limiting controls sequences, and other energy saving controls sequences will be implemented

C.2: Central Plant Controls

The Central Plant Controls design drawings and specifications, located in Exhibit K, detail the specifics of the scope of services at Highlands High School.

A summary of the work to be performed is outlined below.

- Existing Comfort Systems USA BACnet controller in Central Plant will remain
- New equipment installed as part of the Central Plant Upgrades will be pulled into the existing controller
- Graphics will be updated to reflect changes to the central plant
- Equipment schedules, demand limiting controls sequences, and other energy saving controls sequences will be implemented

C.3: Controls Upgrades

A summary of the work to be performed is as part of the Controls Upgrade is outlined below.



- Demand Limiting Controls (Highlands High School)
 - o Install electric meter on main switch gear to monitor energy and demand
 - o Implement Demand Limiting Sequences
- Geothermal Wellfield Bypass Valve (Woodfill Elementary School)
 - Install an Actuator on Existing Geothermal Bypass Valve
 - o Implement New Sequence to Bypass Geothermal Wellfield
- District Niagara Upgrades
 - o Upgrade existing District Niagara N4 supervisor and all JACES to Current N4 revision
- Isolation Valve Replacements
 - o Replace actuators on (8) WSHP isolation valves at Highlands High School
 - o Replace actuators on (8) WSHP isolation valves at Woodfill Elementary School

C.4: Controls Retro-Commissioning

Controls Retro-Commissioning will be performed at schools with existing DDC controls systems, replacement or upgrades of the existing controls hardware is not included. This measure will ensure that the existing buildings, equipment, and systems operate at their maximum efficiency. Retro-commissioning will address any deviations or shortcomings in setpoints, scheduling, and controls sequences that are negatively affecting building energy performance while maintaining occupant comfort.

H.1: HVAC Renovation

The HVAC Renovation design drawings and specifications, located in Exhibit K, detail the specifics of the scope of services at Highlands Middle School. Highlights of this renovation include:

- 1. Water-Cooled Chiller Replacement and conversion to variable-primary chilled water system
 - a. Replace (1) chiller with a new magnetic bearing, variable speed chiller
 - b. Replace (2) primary chiller pumps and VFDs. Demo secondary chiller pumps.
- 2. Boiler Replacement and conversion to variable-primary hot water system
 - a. Replace (2) standard efficiency boilers with (2) new condensing boilers
 - b. Replace (2) primary hot water pumps and add VFDs.
- 3. Cooling tower replacement
 - a. Replace existing cooling tower with a new counter flow cooling tower
 - b. Replace condenser pumps with new and add VFDs
- 4. Water to water heat pump installation
 - a. Install (1) new water to water heat pump unit to generate hot water to allow for summer dehumidification
- 5. Roof-mounted heat recovery unit replacement
 - a. Replace existing heat recovery unit with a new heat recovery unit
- 6. Fan wall system installation in AHU-1
 - a. Replace existing AHU-1 fans with (2) new fan wall assemblies, each with (7) fans
- 7. Install new ductwork and Variable Air Volume (VAV) terminal units for three classrooms



- 8. Replace (4) standard VAV boxes with fan powered VAV boxes in select hallways
- 9. Variable Refrigerant Volume system installation to condition the Administration Offices
 - a. Replace existing VAV boxes with new heat recovery VRF system
 - b. Each space will be conditioned by either a ceiling cassette or ducted unit
- 10. Energy Recovery Ventilation unit installations for Gymnasium and Administration Offices
 - a. Install a new ERV to precondition outside air for the Gymnasium
 - b. Install a new ERV to precondition outside air for the Administration Office
- 11. AHU-2, AHU-3, AHU-4 fan motor and VFD replacements
- 12. A mini split will be installed in the Media Center IT Help Desk Room
- 13. Replace all VAV terminal unit reheat coil valves
- 14. Replace all AHU hot water, chilled water and preheat valves

H.2: Central Plant Upgrades

The Central Plant Upgrades design drawings and specifications, located in Exhibit K, detail the specifics of the scope of services at Highlands High School. Highlights of this upgrade include:

- 1. Boiler Replacements
 - a. Replace (3) standard efficiency boilers with (2) condensing boilers
- 2. Heat Pump Loop Piping/Pumping Reconfiguration
 - a. Remove North Building WSHP loop pumps and shell and tube heat exchanger
 - b. Remove South Building WSHP loop pumps and shell and tube heat exchanger
 - c. Reconfiger pumping and install three new WSHP loop pumps and VFDs
- 3. Plate and Frame Heat Exchanger Rebuild
 - a. Refurbish the existing heat exchanger by replacing plates and gaskets
- 4. Isolation Valve Installation on CT-1

P.1: Domestic Water Heater Replacement

The Domestic Water Heater Replacement design drawings and specifications, located in Exhibit K, detail the specifics of the scope of services at Highlands Middle School. Highlights of this replacement include:

- 1. Replace (2) existing domestic water heaters with (2) new condensing water heaters
- 2. Install new expansion tank

P.2: Cooling Tower Deduct Meters

CMTA will work with Sanitation District #1 to implement a sewer credit for the make up water used for the cooling towers at both Highlands Middle School and Highlands High School. The district is to read the existing make up water meters, fill out the SD1 spreadsheets and send to SD1 by February 1, May 1, August 1, and November 1 each year. The district is to receive a sewer credit for 70% of the makeup water consumed.



U.1: Duke Utility Rate Change

CMTA worked with Duke Energy of Kentucky to change the following accounts from rate DS01 to rate EH.

Facility	Duke Energy Electric Account #			
Johnson Elementary School	9101-2069-8562			
Moyer Elementary School	9101-2069-8661			
Woodfill Elementary School	9101-2069-8489			
Board of Education	9101-2069-8984			

This rate change was effective in September of 2022.



Exhibit E – Energy Savings Guarantee

E.1 Energy Usage Baseline

The energy usage baseline is established based on the average consumption analysis for each of the facilities as in *Table E.1.1*. This data was furnished by the Owner. The Owner and Qualified Provider agree that the energy usage baselines represented in *Table E.1.1* are accurate. Refer to section E.13 for a list of utility counts used to develop baseline.

Table E.1.1 –Energy Usage Baselines (January 2021 – December 2022)

Baseline Conditions									
Facility	Floor Area (SF)	Electric (kWh/yr)	Billed Demand (kW/yr)	Natural Gas (Therms/yr)	EUI (kBtu/sf)	Water/Sewer (kGal)			
Highlands Middle School	98,088	1,084,670	5,216	27,242	65.5	1,325			
Highlands High School	183,454	2,318,593	6,825	22,594	55.4	3,666			
Field House	16,038	147,267	1,253	3,769	54.8	-			
Johnson Elementary School	64,080	763,314	4,002	-	40.6	-			
Moyer Elementary School	86,221	1,014,205	4,733	-	40.1	-			
Woodfill Elementary School	59,885	692,881	3,220	-	39.5	-			
Board of Education	6,700	93,884	314	-	47.8	-			
Education Foundation	2,300	8,123	15	-	12.0	-			

The following months of utility data were included in this analysis by school:

Table E.1.2 – Months of Utility Data Included in Baseline By Facility

Months of Utility Data Included in Baseline By Facility							
Facility	Electric	Natural Gas	Water/Sewer				
Highlands Middle School	1/2021 – 12/2022	1/2021 – 12/2022	1/2021 – 12/2022				
Highlands High School	1/2021 – 12/2022	1/2021 – 12/2022	1/2021 – 12/2022				
Field House	1/2021 – 12/2022	1/2021 – 12/2022	-				
Johnson Elementary School	7/2021 – 12/2022*	-	-				
Moyer Elementary School	1/2021 – 12/2022	-	-				
Woodfill Elementary School	1/2021 – 12/2022	-	-				
Board of Education	1/2021 – 12/2022	-	-				
Education Foundation	1/2022 – 12/2022		-				

^{*}School was opened in August 2021.



Future adjustments to the baseline may be made to accommodate changes in building consumption as set forth in *E.12 – Adjustments to the Guarantee*.

E.2 Utility Rates

The following utility rates were used as the basis of the energy cost savings calculations and are used throughout the term of the contract. The following schedules will be used to reconcile the value of the guaranteed energy savings in future years.

Table E.1.3 – Facility Utility Account Numbers and Associated Rates

Facility	Utility	Account Number	Baseline Rate	Savings Rate
	Duke Energy (Electric)	9101-2069-8801	DS01	DS01
Highlands Middle	Duke Energy (Natural Gas)	9101-2069-8710	General Service	General Service
School	Northern Kentucky Water District	7924631221	NA	NA
	Sanitation District #1	31380209937- 001	NA	NA
	Duke Energy (Electric)	9101-2069-8851	TOD	TOD
	Duke Energy (Electric)	9101-2069-9034	DS01	DS01
Highlands High School	Duke Energy (Natural Gas)	9101-2069-8851	General Service	General Service
Highlands High School	Duke Energy (Natural Gas)	9101-2069-8629	General Service	General Service
	Northern Kentucky Water District	0000836470	NA	NA
	Sanitation District #1	3138025100-000	NA	NA
	Duke Energy (Electric)	9101-2069-8760	DS01	DS01
Field House	Duke Energy (Natural Gas)	9101-2069-8760	General Service	General Service
Johnson Elementary School	Duke Energy (Electric)	9101-2069-8562	DS01	EH
Moyer Elementary School	Duke Energy (Electric)	9101-2069-8661	DS01	ЕН
Woodfill Elementary School	Duke Energy (Electric)	9101-2069-8489	DS01	ЕН
Board of Education	Duke Energy (Electric)	9101-2069-8984	DS01	EH
Education Foundation	Duke Energy (Electric)	9101-2069-9117	DS01	DS01

Electric Service

Duke Energy - Distribution Service - Secondary

Customer Charge per month:	\$ 30.00
Demand Charge (\$/kW):	
First 15 kW:	\$0.00



Additional kW:	\$9.00
	+ Taxes, Fees, Riders, Adjustments, Surcharges
Demand Savings Rate:	\$9.548/kW
Energy Charge (\$/kWh):	
First 6,000 kWh:	\$ 0.089170
Next 300 kWh/kW:	\$ 0.055342*
Additional kWh:	\$ 0.045604
	+ Taxes, Fees, Riders, Adjustments, Surcharges
Energy Savings Rate:	\$0.083/kWh

^{*}Tier at which savings will be realized.

Monthly Billing Demand – The monthly billing demand shall in no event be less than the greater of (a) 85% of the highest monthly kW demand established in the summer period and effect for the next succeeding eleven (11) months or (b) one (1) kW for single phase secondary voltage service and five (5) kW for three phase secondary voltage service.

Duke Energy – Time-of-Day Rate for Service at Distribution Voltage (TOD)

Service Charge Per Month:	\$ 127.00
Demand Charge (\$/kW):	
Summer	
On Peak kW:	\$14.85
Off Peak kW:	\$1.34
Winter	
On Peak kW:	\$14.05
Off Peak kW:	\$1.34
	+ Taxes, Fees, Riders, Adjustments, Surcharges
Demand Savings Rate:	\$15.471/kW
Energy Charge (\$/kWh):	
Summer On Peak kWh:	\$0.048389
Winter On Peak kWh:	\$0.046262
Off Peak kWh:	\$0.039909
	+ Taxes, Fees, Riders, Adjustments, Surcharges
Energy Savings Rate:	\$0.070/kWh

Monthly Billing Demand

The On Peak billing demand shall be the kilowatts derived from Duke's demand meter for the fifteen-minute period of greatest use in the on peak rating period adjusted for power factor as provided herein. The Off-Peak billing demand shall be the kilowatts derived from Duke's demand meter for the fifteen minute period of greatest use in the off peak rating period adjusted for power factor minus the On Peak billing demand. In no case shall the Off Peak billing demand be less than zero.

Rating Period

The rating periods applicable to the demand charge are as follows:

On Peak Period Summer - 11 a.m. to 8 p.m. Monday through Friday, excluding holidays.



On Peak Winter - 9 a.m. to 2 p.m. and 5 p.m. to 9 p.m., Monday through Friday, excluding holidays.

Off Peak Period - All hours Monday through Friday not included above plus all day Saturday and Sunday, as well as New Year's Day, President's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day and Christmas Day on the day nationally designated to be celebrated as such.

Duke Energy – Electric Space Heating (EH)

Service Charge Per Month:	\$ 30.00
Demand Charge (\$/kW):	\$ 0.00
Energy Charge (\$/kWh):	\$ 0.069268
	+ Taxes, Fees, Riders, Adjustments, Surcharges
Energy Savings Rate:	\$ 0.10/kWh

Summer Billing Period: For Energy used during the summer period (four revenue months of June through September) the demand and energy shall be billed in accordance with Rate DS01.

Gas Service

Duke Energy Kentucky – General Service (GS)

Gas rates are volatile and subject to pricing changes depending on the timing of ordered deliveries. The following rate is based on the average cost per therm for January 2022 to December 2022.

Gas Cost Per Therm:	\$1.12
---------------------	--------

Water Service

Northern Kentucky Water District

First 11.22 kGal (\$/kGallon):	\$ 6.38
Next 1,223 kGal (\$/kGallon):	\$ 5.94*
Over 1,234 kGal (\$/kGallon):	\$ 4.34
	+ Taxes, Fees, Riders, Adjustments, Surcharges
Water Savings Rate:	\$ 6.11/kGal

^{*}Tier at which savings will be realized.

Sewer Service

SD1

0.00 – 3.74 kGal (\$/kGallon):	\$12.53
3.74 – 18.70 kGal (\$/kGallon):	\$11.26
Over 18.70 kGal (\$/kGallon):	\$8.70*
	+ Taxes, Fees, Riders, Adjustments, Surcharges
Water Savings Rate:	\$ 8.70/kGal

^{*}Tier at which savings will be realized.



E.3 Guaranteed Energy Savings

The Qualified Provider guarantees the annual level of energy savings to be achieved as a result of the installation and operation of the Energy Conservation Measures and provision of services provided for in this Contract in accordance with the methods of savings measurement and verification as set forth in E.13 - Measurement and Verification Plan. The Energy and Cost Savings Guarantee is set forth in annual increments for the term of the Contract as specified in Tables E.3.1 and E.3.2 and has been structured by the Qualified Provider to be sufficient to cover the portion of annual payments required to be made by the Owner as set forth in Exhibit H.



Table E.3.1 – Guaranteed Energy and Water/Sewer Unit Savings

Guaranteed Savings							
Facility	Utility	Account Number	Electric (kWh/yr)	Demand (kW/yr)	Fuel (Therms/yr)	Water (kGal/yr)	Sewer (kGal/yr)
	Duke Energy (Electric)	9101-2069-8801	301,853	879	-	-	-
Highlands Middle School	Duke Energy (Natural Gas)	9101-2069-8710	-	-	11,771	-	-
Highlanus Middle School	Northern Kentucky Water District	7924631221	-	-	-	130	-
	Sanitation District #1	31380209937-001	-	-	-	-	272
	Duke Energy (Electric)	9101-2069-8851	414,008	887	-	-	-
	Duke Energy (Electric)	9101-2069-9034	414,008		-	-	-
Highlands High School	Duke Energy (Natural Gas)	9101-2069-8851	-	-	6,421	-	-
riigilialius riigil School	Duke Energy (Natural Gas)	9101-2069-8629	-	-	0,421	-	-
	Northern Kentucky Water District	0000836470	-	-	-	400	-
	Sanitation District #1	3138025100-000	-	-	-	-	684
Field House	Duke Energy (Electric)	9101-2069-8760	18,332	-		-	-
Field House	Duke Energy (Natural Gas)	9101-2069-8760	-	-	481	-	-
Johnson Elementary School	Duke Energy (Electric)	9101-2069-8562	9,390	-	-	-	-
Moyer Elementary School	Duke Energy (Electric)	9101-2069-8661	12,635	-	-	-	-
Woodfill Elementary School	Duke Energy (Electric)	9101-2069-8489	129,880	62	-	-	-
Board of Education	Duke Energy (Electric)	9101-2069-8984	12,764	-	-	-	-
Education Foundation	Duke	9101-2069-9117	1,274	-	-	-	-



Table E.3.2 -Calculated Year 1 Utility Cost Savings

Energy and Water/Sewer Cost Savings			
Facility	Calculated 1st Year Utility Cost Savings		
Highlands Middle School	\$49,877		
Highlands High School	\$58,234		
Field House	\$2,066		
Johnson Elementary School	\$20,940		
Moyer Elementary School	\$23,632		
Woodfill Elementary School	\$27,612		
Board of Education	\$2,864		
Education Foundation	\$106		
Total	\$185,330		

E.4 Energy Cost Escalation Rate

The projected annual energy escalation rate used for determining energy cost savings is 3% for Electric, Natural Gas and Water/Sewer. Refer to section E.2 for utility rates used.

E.5 Operational and Maintenance (O&M) Savings

The O&M savings identified in *Table E.5.1* are the result of the project scope and have been reviewed and validated with the Owner and are agreed to and stipulated for this contract. These O&M savings will not be further measured or verified.

Agreed Upon Operational and Maintenance Savings				
Facility	Description	Calculated First Year Avoided Costs		
Himbler de Middle Cabe el	Reduction in Lighting Material	\$1,985		
Highlands Middle School	Reduction in HVAC and Controls Maintenance	\$17,151		
Highlands High School	Reduction in Lighting Material	\$4,709		
riigilialius riigil School	Reduction in HVAC and Controls Maintenance	\$3,103		
Field House	Reduction in Lighting Material	\$109		
Johnson Elementary School	None.	\$0		
Moyer Elementary School	None.	\$0		
Woodfill Elementary School	Reduction in Lighting Material	\$1,657		
Board of Education	Reduction in Lighting Material	\$238		
Education Foundation	Reduction in Lighting Material	\$57		
	Total:	\$29,009		



E.6 Operational and Maintenance (O&M) Cost Escalation Rate

The projected annual O&M cost escalation rate used for determining O&M cost savings is 3%. The Owner and Qualified Provider agree that this is indicative of inflation and is an appropriate rate.

E.7 Construction Phase Energy Savings

The energy consumption will be reduced during the construction period due to downtime of the building mechanical and electrical systems. The amount of energy savings will be determined by comparing the energy bills against the documented baseline period for each facility (where applicable). The construction phase energy savings will be credited towards the first-year energy savings figures on the Year 1 M&V reconciliation.

E.8 Rebates and Incentives

Duke Energy currently offers commercial energy efficiency rebates. CMTA will work to acquire these rebates for Fort Thomas Independent Schools.

The Owner agrees to allocate the Section 179D commercial buildings energy efficiency tax deduction(s) resulting from the upgrades of this contract to the Qualified Provider.

E.9 Commencement Date

The Commencement Date of the Energy Savings Guarantee shall be the first day of the month after the month in which the project has been accepted by the Owner as Final Completion and Acceptance.

The Commencement Date shall not occur and the Owner shall not be required to accept the work under this Contract unless and until all Equipment installation for the Project Site(s) is completed by the Qualified Provider in accordance with the terms and conditions of this Contract. The Owner shall have 30 days after notification by the Qualified Provider to inspect and accept the project scope. The Owner reserves the right to reject the Equipment if installation fails to meet reasonable standards of workmanship, does not comply with applicable building codes, or is otherwise not in compliance with this Contract. The Qualified Provider shall be paid in full, including retainage, after the punch list is completed and the Qualified Provider has satisfied any and all claims for labor and materials and the BG-4 has been signed. The project close out will not be unreasonably withheld by the Owner.

Compensation payments due to the Qualified Provider for on-going services and maintenance under this Contract as set forth in *Exhibit G* and shall begin no earlier than 30 days from the Commencement Date as defined herein.



E.10 Owner Responsibilities

The Owner acknowledges that their involvement in this project is vital to achieve the guaranteed energy and O&M savings and agree to the following:

- Provide the Qualified Provider with online access to utility bills (where applicable), and/or provide
 utility bills in a timely fashion (within 14 days of receipt from the Utility Company) for the term of
 the contract.
- 2. Provide the Qualified Provider with clearance for remote access to the building automation system for the term of the contract.
- 3. Properly operate, maintain, repair, and replace all equipment, components and systems with similar operating functionality and/or efficiencies.
- 4. Maintain temperature setpoints and occupancy schedules as specified in *E.14 Standards of Comfort and Occupancy Schedules*.
- 5. Notify the Qualified Provider of any changes to the buildings, utilization schedules, automation system sequences, or temperature setpoints. Any changes should be sub-metered or modeled with approved software to determine impact on energy usage.
- 6. Provide the Qualified Provider with access to the buildings to perform evaluations and analysis of system operation.
- 7. Continue the Measurement and Verification program as outlined in *Exhibit G Support Services*. Should the M&V program be cancelled in any given year by the owner, the Owner relieves the Qualified Provider of the guarantee per this contract. The Owner has the right to cancel the M&V program at any point throughout the term of the 20-year guarantee period.

E.11 Annual Review and Reimbursement/Reconciliation

Energy-related cost savings shall be measured and/or calculated as specified in *E.13 - Measurement and Verification Plan* and compared to *E.1 – Energy Usage Baseline*, and a report provided within ninety (90) days of the end of the guarantee year for the previous year for each anniversary of the Commencement Date.

In the event the Energy and Cost Savings achieved during such guarantee year are less than the Guaranteed Energy and Cost Savings as defined in *Tables E.3.1, and E.3.2* the Qualified Provider shall pay the Owner an amount equal to the deficiency.

The Qualified Provider shall remit such payments to the Owner within 30 days of the reconciliation statement that determines monies are due. When the total energy savings in any one year during the guarantee period exceed the Energy and Cost Savings Guarantee as set forth in *E.3*, such excess savings shall first be applied to reimburse the Qualified Provider for any payment the Qualified Provider made to Owner to meet the guarantee for previous years in which the energy savings fell short of the Qualified Provider's Guaranteed Savings under the terms as set in this Exhibit.



In the event the Energy and Cost Savings achieved during a guarantee year are more than the Guaranteed Energy and Cost Savings as defined in E.3, the surplus savings shall carry forward for the cost reconciliation future guarantee years.

E.12 Adjustments to the Guarantee

The Owner acknowledges that CMTA cannot be held responsible for items reasonably outside of CMTA's control. These include the following factors:

- 1. Changes in the building construction, such as architectural features, square footage additions, building system changes, etc.
- 2. Changes in utility account status, addition of new utility accounts, addition new utility metering devices, etc.
- 3. Weather variance from baseline years to current years. For purposes of documenting the baseline years, the following parameters define the baseline period.
 - a. The average heating and cooling degree days during Fort Thomas Independent School's baseline period (1/2021 to 12/2022) were established as:
 - b. Heating Degree Days (base 55°F): 2,860.75 (average per year)
 - c. Cooling Degree Days (base 55°F): 2,931.9 (average per year)
 - d. These values were generated with the webpage *degreedays.net* and Weather Station ID "KLUK"
- 4. Addition of energy consuming equipment at the site.
- 5. Changes in occupancy
- 6. Owner's failure to adhere to operating and maintenance requirements as defined by the equipment manufacturer.

CMTA reserves the right to appropriately adjust the baseline for any of the above factors before calculating achieved savings. Adjustments shall be made with sub-metering equipment or by using modeled data from approved software. The Owner shall notify the Qualified Provider in writing 60 days in advance of a circumstance that may warrant a baseline adjustment during the term of the 20-year guarantee period.

E.13 Measurement and Verification Plan

The annual measurement and verification for this project will be based on the *International Performance Measurement and Verification Protocol (IPMVP)*. IPMVP provides four options for determining savings (Options A, B, C and D). These options are summarized as follows:

Option A – Partially Measured Retrofit Isolation: Savings are determined by field measurement of the key performance parameter(s) which define the energy use of the energy conservation measure's (ECM) affected system(s) and/or the success of the project. Parameters not selected for field measurement are estimated. Estimates can be based on historical data, manufacturer's specifications, or engineering judgment. Documentation of the source or justification of the estimated parameter is required. Typical



applications may include a lighting retrofit, where the power drawn can be measured and hours of operation can be estimated. Savings that are guaranteed using this method are stipulated based on the assumptions used in the calculation methodology and are agreed to by the Owner.

Option B - Retrofit Isolation: Savings are determined by field measurement of all key performance parameters which define the energy use of the ECM-affected system. Typical applications may include a variable frequency drive retrofit where both energy usage and hours of operation are documented.

Option C - Whole Facility Meter Comparison: Savings are determined by measuring energy use at the whole facility or sub-facility level. This approach is likely to require a regression analysis or similar to account for independent variables such as weather conditions. Typical examples may include measurement of a facility where several ECMs have been implemented, or where the ECM is expected to affect all equipment in a facility.

Option D - Calibrated Simulation: Savings are determined through simulation of the energy use of the whole facility, or of a sub-facility. Simulation routines are demonstrated to adequately model actual energy performance measured in the facility. This Option usually requires considerable skill in calibrated simulation. Typical applications may include measurement of a facility where several ECMs have been implemented, but no historical energy data is available.

The Measurement and Verification Plan utilized to reconcile the savings excess/shortfall is illustrated in Table E.13.1.

Table E.13.1 – Measurement and Verification Plan

Facility	Utility	Account Number	M&V Method
	Duke Energy (Electric)	9101-2069-8801	С
Highlands Middle School	Duke Energy (Natural Gas)	9101-2069-8710	С
Highlands Middle School	Northern Kentucky Water District	7924631221	С
	Sanitation District #1	31380209937-001	С
	Duke Energy (Electric)	9101-2069-8851	С
	Duke Energy (Electric)	9101-2069-9034	С
Highlands High School	Duke Energy (Natural Gas)	9101-2069-8851	С
Highlands High School	Duke Energy (Natural Gas)	9101-2069-8629	С
	Northern Kentucky Water District	0000836470	С
	Sanitation District #1	3138025100-000	С
Field House	Duke Energy (Electric)	9101-2069-8760	С
rieid House	Duke Energy (Natural Gas)	9101-2069-8760	С
Johnson Elementary School	Duke Energy (Electric)	9101-2069-8562	С
Moyer Elementary School	Duke Energy (Electric)	9101-2069-8661	С
Woodfill Elementary School	Duke Energy (Electric)	9101-2069-8489	С



Facility	Utility	Account Number	M&V Method
Board of Education	Duke Energy (Electric)	9101-2069-8984	A
Education Foundation	Duke Energy (Electric)	9101-2069-9117	A

Option C – Savings Guarantee:

M&V Plan Summary

- 1. Measurement and Verification Method: Option C Whole Facility Meter Comparison: Savings are determined by measuring energy use at the whole facility or sub-facility level.
- 2. What is measured: Utility Bill (Units).
- 3. Sample size (or population) measured: A sample of 12 of months will be used as an average.
- 4. How measurements are performed: CMTA will have remote access to the building utility information to track guarantee.
- 5. How measurements are used to determine the actual savings: 12 months of building demand data will be analyzed to verify that the metered demand and/or metered consumptions is sufficient to cover the guarantee.
- 6. How often measurements are performed: CMTA will monitor utility bills monthly and compare to guarantee.
- 7. A list of all utilities used to track energy usage are in Table E.13.1.

During CMTA's audit of Highlands High School, the (2) Innovent and (1) Addison dedicated outside air units that provide outside air to the North and South Buildings were inoperable. If these units become operable again, it could significantly impact the Highlands High School baseline and may require a baseline adjustment.

Option A – LED Lighting Upgrades

Option A Measurement and Verification method will be utilized for lighting retrofit savings only in support building or facilities where HVAC controls are not present and will not be installed during the course of the project.

Savings Calculations:

Lighting energy savings for both the baseline (old) and post-project (new) conditions were based upon the following equations:

$$kW \ Savings = (kW)_{old} - (kW)_{new}$$



 $kWh Savings = kW Savings \times Annual Operating Hours$

Where,

 kW_{old} = the total power consumed by the baseline fixture

 kW_{new} = the total power consumed by the retrofit/new fixture

Annual Operating hours = the existing annual burn hours for the fixture

Savings Guarantee:

M&V Plan Summary

- 1. Measurement and Verification Method: Method A Field measurements will be performed on defined variables. Other variables will be stipulated.
- 2. What is measured: The power (watts) of existing fixtures and the power (watts) of the new retrofitted or replaced fixtures will be measured.
- 3. Sample size (or population) measured: The power (watts) of 3% of each type of fixture will be measured if manufacturer's data is unavailable. For cases where 3% of the number of fixtures is less than one (i.e. if there are less than 20 fixtures of a certain type), no measurements will be performed due to minimal impact on the overall savings.
- 4. How measurements are performed: Manufacturer data will be used from the actual project submittal. Where manufacturer data is not available, power (watt) measurements will be performed with a handheld true-RMS meter. Where applicable, the measurements will be performed at a wall switch. If it is not possible to isolate the fixtures on one switch, then measurements will be performed at the individual fixture.
- 5. How measurements are used to determine the actual savings: The average pre- and postmeasurements (watts) will be inserted in the calculation spreadsheet to determine the actual savings.

How often measurements are performed: Pre-retrofit power measurements will be taken once, immediately before work begins. Post-retrofit power measurements will be taken once, after installation.

E.14 Standards of Comfort and Occupancy Schedules

As indicated in *E.10 – Owner Responsibilities*, the parameters established in this section are important to the realization of the guaranteed savings and the Owner shares the responsibility for ensuring these parameters are adhered to and enforced. The Qualified Provider will assist in the maintenance of temperature setpoints and occupancy schedules as part of the Support Services program. Spaces will be controlled to maintain temperatures and occupancy schedules as indicated in *Table E.14.1 – Occupancy Schedules and Temperature Setpoints*.



The ventilation systems will be scheduled on M-F from 7:30am – 3:30pm.

The buildings will be in the unoccupied mode during weekends, holidays, snow days, spring break, winter break and summer break.

Ventilation systems are designed to ventilate a fully occupied building. When schedules are overridden to the occupied mode to accommodate staff during in service days or during building cleaning, the ventilation system will not be enabled for such events unless there is a need (i.e. ventilation air to dilute cleaning chemicals, floor waxing, painting, etc.).

Special functions, sporting events, and weekend and summer programs that coincide with an unoccupied mode will be overridden to the occupied mode by exception only and only for the duration required. Occupied setpoints may also be adjusted temporarily to accommodate large crowds at special events.

Table E.14.1 – Occupancy Schedules and Temperature Setpoints

Occupancy Schedules and Temperature Setpoints - Elementary Schools					
Space	Occupancy Schedules	Occupied Setpoint	Unoccupied Cooling Setpoint	Unoccupied Heating Setpoint	
Classrooms	M-F 6AM - 3PM	72°F +/- 2°F	80°F	55°F	
Media Centers	M-F 6AM - 3PM	72°F +/- 2°F	80°F	55°F	
Workrooms	M-F 6AM - 3PM	72°F +/- 2°F	80°F	55°F	
Common Areas	M-F 6AM - 3PM	72°F +/- 2°F	80°F	55°F	
Kitchen	M-F 4AM - 2PM	72°F +/- 2°F	80°F	55°F	
Admin	M-F 5AM - 5PM	72°F +/- 2°F	80°F	55°F	
Cafeteria	M-F 5AM - 9AM 11AM - 1PM	72°F +/- 2°F	80°F	55°F	
Gym	M-F 5AM - 5PM	72°F +/- 2°F	80°F	55°F	

Exhibit E – Energy Savings Guarantee Guaranteed Energy Savings Contract Fort Thomas Independent Schools



	Occupancy Schedules a	nd Temperature Setpoint	ts – Middle/High School	
Space	Occupancy Schedules	Occupied Cooling Setpoint	Unoccupied Cooling Setpoint	Unoccupied Heating Setpoint
Classrooms	M-F 5AM - 3PM	72°F +/- 2°F	80°F	55°F
Media Centers	M-F 5AM - 3PM	72°F +/- 2°F	80°F	55°F
Workrooms	M-F 5AM - 3PM	72°F +/- 2°F	80°F	55°F
Common Areas	M-F 5AM - 3PM	72°F +/- 2°F	80°F	55°F
Kitchen	M-F 4AM - 2PM	72°F +/- 2°F	80°F	55°F
Admin	M-F 5AM - 5PM	72°F +/- 2°F	80°F	55°F
Cafeteria	M-F 5AM - 9AM 11AM - 1PM	72°F +/- 2°F	80°F	55°F
Gym	M-F 5AM - 5PM	72°F +/- 2°F	80°F	55°F



Henry County Schools Guaranteed Energy Savings Contract 2017 - 2018 Annual Reconciliation Report

326 South Main Street New Castle, Kentucky, 40050

September 18, 2018

CMTA, Inc. 10411 Meeting Street Prospect, KY 40059





September 18, 2018

Henry County Public Schools 326 S. Property Road New Castle, KY 40050

Attn: Mr. Terry Price

Re: Annual Reconciliation Report

Mr. Price,

CMTA Energy Solutions is pleased to provide you with the attached report showing how well the completed guaranteed energy savings contract for Henry County Public Schools has performed over the previous year.

In 2013, CMTA completed a guaranteed energy savings project that included renovating Eastern Elementary and the Middle Schools HVAC Systems with new geothermal systems along with new lighting, and water conservation throughout the district. The attached report outlines and tracks the performance of the schools compared to the guaranteed performance in the contract.

The fifth year of measurement and verification for Henry County Public Schools is complete and shows that the project has performed very well. The natural gas, water/sewer, and electric consumption savings guarantees were all beaten this year. The actual cost savings exceeded the guarantee by 7%. This resulted in an excess savings of \$10,487. In total, \$152,667 was saved as a result of this project in 2017-2018 compared to the baseline year.

We appreciated the opportunity to work with Henry County Schools on this project. This project drastically improved the indoor environments at the Middle School and Eastern Elementary while reducing the operational costs of these systems. The following report shows real, meter read, data compared to our guarantee and the original baseline provided for each individual school and the overall outcome. Please let me know if you have any questions.

Sincerely,

Jeremy Kelly, PE

CMTA Energy Solutions



Overall Energy and Water Savings:

The following table shows the districts overall savings based on the original guarantee compared to the actual meter data from the previous year. Each energy type is shown individually with the associated cost. As you can see, the overall dollar savings guarantee of \$142,180 (which includes a 4% energy escalation each year) was exceeded by \$10,487 for this year. This is 7% greater than the savings guaranteed. The savings are 11% higher than the guarantee when weather normalization is considered. This is discussed in the last section of this report. The second table below shows the energy savings for each building. Our guaranteed water savings were not met due to leaks that will be discussed later in this report. In the third table, you will see the running total of our excess savings that has gone above our guarantee for each of the previous years that is \$124,288.

	Energy ar	nd Resources	s Savings		Cost Savings	
	Guaranteed	Actual	% to Guarantee	Guaranteed	Actual	% to Guarantee
Electricity Consumption (kWh)	530,088	982,199	185%	\$23,013	\$36,490	159%
Electricity Demand (kW)	1,731	1,432	83%	\$25,889	\$26,452	102%
Natural Gas (ccf)	20,270	21,281	105%	\$18,951	\$14,454	76%
Water/Sewer (kgal)	3,490	3,448	99%	\$33,043	\$27,243	82%
Propane	11,645	11,645	100%	\$23,291	\$23,291	100%
Utility Rates	0	0	0%	\$17,993	\$24,738	137%
			Total Cost Savings	\$142,180	\$152,667	107%

Table 1 District wide summary showing an excess savings of 7%.

Building	kWh Saved	kW Saved	CCF Saved	Propane Saved	Water Saved	\$ S	aved
Eastern Elementary	191,160	607	0	11,645	265	\$ 4	43,015
Henry County Middle School	325,152	510	16,526	0	3,183	\$ 5	58,475
Henry County High School	320,400	457	4,329	0	0	\$ 2	22,376
New Castle Elementary	115,800	-141	426	0	0	\$	1,384
Field House	21,600	0	0	0	0	\$	1,820
Bus Garage	8,087	0	0	0	0	\$	860
Utility Rates	0	0	0	0	0	\$ 2	24,738
					Total	\$ 15	52,667

Table 2 Summary showing savings per building.

Excess Savings									
	Year	+/-							
1	2013-2014	\$	33,468						
2	2014-2015	\$	22,747						
3	2015-2016	\$	38,283						
4	2016-2017	\$	29,790						
5	2017-2018	\$	10,487						
Total		\$	124,288						

Table 3 Monetary value of excess savings since the completion of construction.



Eastern Elementary:

Eastern Elementary School underwent a full HVAC renovation. Two boilers, the associated fluid cooler, and propane were eliminated from the school and replaced with a geothermal well field. This is an extremely efficient way to heat and cool a building, as you can see in the large drop in energy usage, in the tables below. All existing console heat pumps were replaced with more efficient above ceiling 2-stage heat pumps. A dedicated outside air unit with energy recovery was installed and small lighting upgrades were completed, as well. In table 4, you will notice that the kGal savings were not met. This is due to leaks that existed from July 2017 through November 2017. When the leaks were resolved, we exceeded the savings guarantee for the months that followed. Following the savings tables, there is a line graph that shows the cumulative electric consumption, in kilowatt hours (kWh), comparing the actual consumption over a full year to the baseline year. The overall monetary savings for the last year was \$43,015 compared to the guaranteed savings of \$37,797.

				Guarante	ed Usage		Actual Usage					
	Electri	cal	Water/	Sewer	Elect	trical	Water/	Sewer	Electrical		Water/ Sewer	
Month	Consumption kWh	Demand kW	Kgal	Kgal	Consump tion kWh	Demand kW	Kgal	Kgal	Consumption kWh	Demand kW	Kgal	Kgal
July 2017	30,780	83	18,730	1,400	23,996	45	9,370	700	9,300	64	8,720	44,500
Aug 2017	35,970	146	37,820	6,600	28,042	79	18,921	3,302	12,540	68	10,880	24,500
Sep 2017	49,830	149	46,620	17,500	38,847	81	23,323	8,755	16,980	78	23,660	48,600
Oct 2017	30,360	141	38,470	12,300	23,669	76	19,246	6,153	16,080	85	11,020	32,400
Nov 2017	30,960	121	35,450	14,400	24,136	66	17,735	7,204	16,500	83	22,910	38,300
Dec 2017	33,330	131	123,650	14,400	25,984	71	61,860	7,204	19,560	81	15,790	12,100
Jan 2018	32,550	139	51,970	9,100	25,376	76	26,000	4,553	27,780	104	8,980	9,000
Feb 2018	33,210	149	54,380	16,300	25,891	81	27,205	8,155	22,320	97	13,280	12,000
Mar 2018	34,410	129	38,540	14,100	26,826	70	19,281	7,054	20,580	52	8,810	18,600
Apr 2018	27,420	126	55,670	15,100	21,377	69	27,851	7,554	21,480	95	21,500	10,900
May 2018	33,120	136	41,550	16,400	25,820	74	20,787	8,205	17,220	86	17,340	17,300
June 2018	34,860	135	37,950	-	27,177	73	18,986	-	15,300	85	7,900	14,600

	kWh	kW	kGal
	Savings	Savings	Savings
Total Savings	191,160	607	265
Guaranteed Savings	89,659	721.0	359
Percent Ahead of Guarantee	113.21%	-15.88%	-26.24%

Table 4: Monthly comparison of baseline, guaranteed, and actual performance.



		Propane Usage	9			
	Baseline	Measured	Saved			
Month	Gallons	Gallons	Gallons			
July 2017	0	0	0			
Aug 2017	3,309	0	3,309			
Sep 2017	0	0	0			
Oct 2017	0	0	0			
Nov 2017	2,811	0	2,811			
Dec 2017	17 <u>1,630</u> 0		1,630			
Jan 2018	2,895	0	2,895			
Feb 2018	1,000	0	1,000			
Mar 2018	0	0	0			
Apr 2018	0	0	0			
May 2018	0	0	0			
June 2018	0	0	0			
	Total	Total Saved				
	Cost S	avings	\$ 23,291			

Table 5: Savings attributed to eliminating propane.



				Financial	Sa	vings			
		Electrical				ater/ Sewer	Propane		
Month		\$ kWh		\$ kW	\$		\$		
July 2017	\$	719.11	\$	400.47	\$	(129.40)		0	
Aug 2017	\$	784.40	\$	1,687.99	\$	35.35	\$	6,618	
Sep 2017	\$	1,099.76	\$	1,524.36	\$	(31.83)	\$	-	
Oct 2017	\$	478.07	\$	1,074.58	\$	28.74	\$	-	
Nov 2017	\$	484.10	\$	722.16	\$	(44.42)	\$	5,622	
Dec 2017	\$	461.00	\$	968.66	\$	430.79	\$	3,260	
Jan 2018	\$	159.69	\$	675.94	\$	168.51	\$	5,790	
Feb 2018	\$	364.58	\$	997.55	\$	177.54	\$	2,000	
Mar 2018	\$	463.00	\$	1,473.21	\$	98.66	\$	-	
Apr 2018	\$	198.86	\$	604.69	\$	150.05	\$	-	
May 2018	\$	532.30	\$	1,072.22	\$	91.16	\$	-	
June 2018	\$	654.83	\$	1,087.29	\$	60.42	\$	-	
Total									
Savings	\$	6,399.70	\$	12,289.13	\$	1,035.56	\$	23,291	
	Cu	mulative Savi		\$			43,015		
		aranteed Savi			\$ 37,797				

Table 6 Cumulative Financial Savings



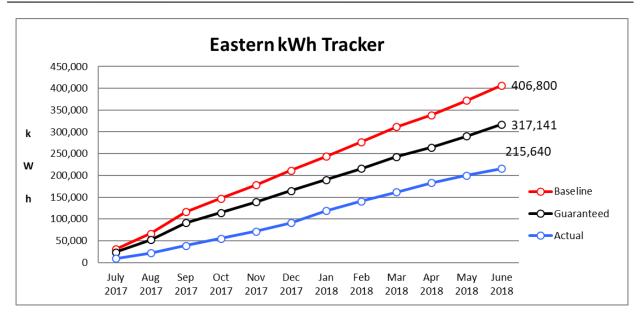


Figure 1 Electrical Consumption Tracker showing the actual performance significantly outperforming the guarantee.

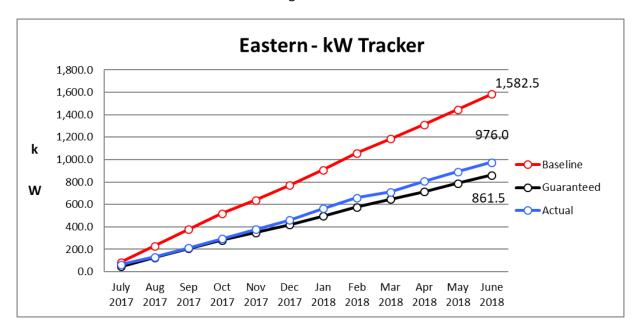


Figure 2 Electrical Demand Tracker showing the actual performance compared to the guarantee.

Henry County Schools
Guaranteed Energy Savings Contract
Annual Reconciliation Report (2017 – 2018)



Henry County Middle School:

Henry County Middle School had an entire HVAC renovation except for an existing roof top unit and four recently replaced heat pumps. The two boilers and two cooling towers were replaced with a geothermal well field, which, as stated before, is more efficient than the original equipment. All existing heat pumps, excluding the four previously mentioned, were replaced with 2-stage high efficiency heat pumps. A dedicated outside air system with energy recovery is now being utilized in the building to limit the amount of energy used. Variable Frequency Drives were installed on the pumps and control valves were installed on the heat pumps so that water only gets pumped to the heat pumps that are in use and to slow the pump motors down. An automation system was installed to provide the school district with setbacks when the building or rooms are unoccupied to save on unneeded energy use. There was also a lighting upgrade included in the project for this school where fixtures were removed and replaced throughout the building. These energy upgrades resulted in a substantial amount of savings as shown in the below table and graphs below. The previous kitchen freezer and refrigerator condensing units at the middle school were cooled with domestic water, this was wasting a lot of water each year. These were replaced with air cooled condensing units to save on water use. The cooling towers were removed with the HVAC renovation at the middle school and Eastern Elementary School, saving a lot of water as well. The graphs, just like before, represent the energy uses compared to their baselines and the tables calculate the energy savings and costs savings. The school saved 325,152 kWh of electric consumption, 510 kW of electric demand, and 16,526 hundred cubic feet (ccf) of natural gas this year as well as 3,183 (kgal) of water. That all adds up to \$58,475 of cost savings for Henry County Middle School for the year. Added to this is the \$225/month in savings that Henry County receives for being on a smaller gas meter as a result of this project, adding another \$2,700 saved this year. Thus the total savings is \$61,175 and it exceeds the guaranteed savings.



		Baselir	ne .		Guaranteed Usage				Actual Usage			
	Electric	al	Natural Gas	Water/ Sewer	Electric	Electrical Natural Water/ Gas Sewer Electrical		Natural Gas	Water/ Sewer			
Month	Consumption kWh	Demand kW	CCF	Kgal	Consumption kWh	Demand kW	CCF	Kgal	Consumption kWh	Demand kW	CCF	Kgal
July 2017	62,288	258	88	407	47,933	225	35	219	31,472	194	15	149
Aug 2017	77,880	205	88	421	59,932	178	35	226	43,344	194	72	287
Sep 2017	92,240	285	112	775	70,982	248	45	417	57,040	221	102	237
Oct 2017	79,400	278	552	650	61,102	242	222	349	54,128	202	96	316
Nov 2017	53,168	204	3,800	712	40,915	178	1,527	383	43,968	221	573	364
Dec 2017	69,776	205	3,687	575	53,695	179	1,481	309	46,160	221	923	299
Jan 2018	83,776	214	4,884	603	64,469	186	1,962	324	52,880	174	1,853	296
Feb 2018	83,024	215	4,058	455	63,890	187	1,630	245	52,736	174	1,060	235
Mar 2018	80,432	221	2,813	492	61,896	192	1,130	264	50,000	161	699	285
Apr 2018	76,168	233	1,093	600	58,614	203	439	323	51,168	162	672	246
May 2018	65,096	222	1,252	521	50,094	193	503	280	42,256	152	150	287
June 2018	82,032	252	352	286	63,127	219	141	154	54,976	205	36	313

	kWh		CCF	kGal
	Savings	kW Savings	Savings	Savings
Total Savings	325,152	510	16,526	3,183
Guaranteed Savings	208,630	360.0	13,626	3,002
Percent Ahead of Guarantee	55.85%	41.59%	21.28%	6.04%

 Table 7: Monthly comparison of baseline, guaranteed, and actual performance

			Financia	l S	avings			
	Elect	tric	al		Natural Gas	Water/ Sewer		
Month	\$ kWh		\$ kW		CCF		\$	
July 2017	\$ 1,020.18	\$	1,371.13	\$	49.58	\$	2,121.51	
Aug 2017	\$ 1,143.33	\$	217.17	\$	10.87	\$	1,102.45	
Sep 2017	\$ 1,165.31	\$	1,358.35	\$	6.79	\$	4,425.46	
Oct 2017	\$ 836.64	\$	1,452.05	\$	309.72	\$	2,748.19	
Nov 2017	\$ 304.57	\$	(327.54)	\$	2,191.80	\$	2,862.54	
Dec 2017	\$ 781.82	\$	(308.50)	\$	1,876.99	\$	2,275.22	
Jan 2018	\$ 1,022.83	\$	771.25	\$	2,058.67	\$	2,528.62	
Feb 2018	\$ 1,002.70	\$	790.29	\$	2,035.92	\$	1,812.94	
Mar 2018	\$ 1,007.47	\$	1,125.46	\$	1,435.84	\$	1,701.23	
Apr 2018	\$ 827.64	\$	1,361.59	\$	285.61	\$	2,915.40	
May 2018	\$ 756.13	\$	1,471.19	\$	748.15	\$	1,930.26	
June 2018	\$ 895.70	\$	996.41	\$	214.63	\$	(216.52)	
Total Savings	\$ 10,764.31	\$	10,278.84	\$	11,224.56	\$	26,207.31	
	Cumulativ	e S	Savings	\$			58,475	
	Guarantee	d S	Savings	\$			60,023	

Table 8: Henry County Middle School savings summary showing \$58,475 in savings.



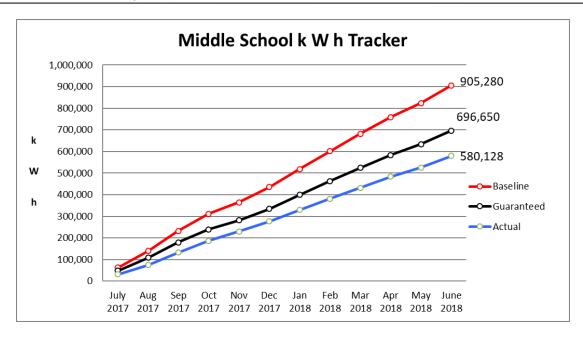


Figure 3 Electrical demand tracker showing the actual performance beating the guarantee.

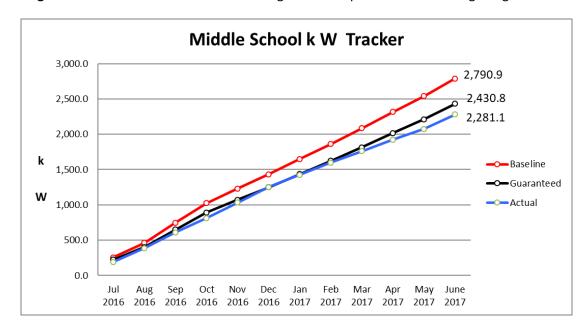


Figure 4 Electrical demand tracker showing actual performance beating the guarantee.



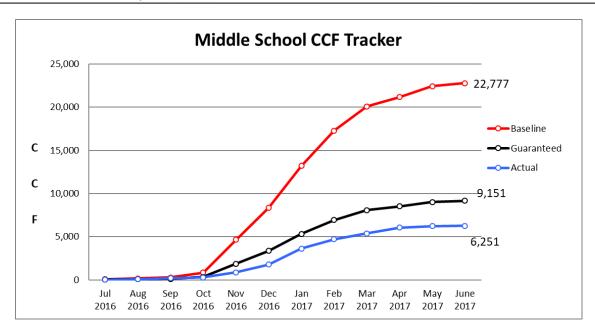


Figure 5 Natural Gas tracker showing the actual performance beating the guarantee by more than 30%.

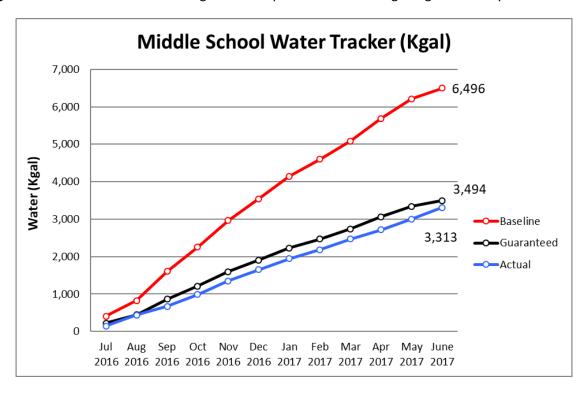


Figure 6 Water tracker showing the actual performance beating the guarantee.



Henry County High School:

Henry County High School didn't have any major renovations done but there were small things done to save energy. 18 ft diameter ceiling fans were installed in the gym to de-stratify the air in the winter and provide cooling relief in the summer. Outdoor lighting scheduling was integrated into the high schools controls system so that the parking lot lights do not run all night long. Automation was added to everything that wasn't already on automation to keep units from running constantly. These small energy conservation measures did save energy at the high school. The difference in electric consumption from before the project to after can be seen in the trend line graph below the table. As the table shows, the high school saved 320,400 kWh of electric consumption, 457 kW of electric demand, and 4,329 ccf of natural gas. These energy savings saved the high school \$22,376.

	Ва	aseline		Guaran	teed Usa	ge	Actual Usage			
	Electric	cal	Natural Gas	Electric	Electrical		Electric	al	Natural Gas	
Month	Consumption kWh	Demand kW	CCF	Consumption kWh	Demand kW	CCF	Consumption kWh	Demand kW	CCF	
July 2017	84,200	329	171	77,036	303	131	66,400	257	140	
Aug 2017	126,200	288	194	115,463	266	148	77,600	247	140	
Sep 2017	144,600	448	270	132,297	413	207	106,800	399	270	
Oct 2017	137,200	441	638	125,527	407	489	110,400	409	304	
Nov 2017	104,000	388	2,266	95,152	357	1,738	94,000	367	1,586	
Dec 2017	121,600	375	4,691	111,254	345	3,598	96,400	312	3,068	
Jan 2018	134,800	395	5,782	123,331	364	4,435	101,200	388	4,940	
Feb 2018	133,400	397	4,464	122,050	366	3,423	120,400	382	3,412	
Mar 2018	132,600	388	3,173	121,318	357	2,433	98,000	343	2,869	
Apr 2018	125,600	397	1,637	114,914	366	1,255	101,200	355	2,407	
May 2018	109,200	381	749	99,909	351	574	85,600	322	617	
June 2018	133,800	405	230	122,416	373	176	108,800	392	180	

		kW	CCF
	kWh Savings	Savings	Savings
Total Savings	320,400	457	4,329
Guaranteed Savings	126,531	360.0	5,654
Percent Ahead of Guarantee	153.22%	26.91%	-23.43%

Table 9: Monthly comparison of baseline, guaranteed, and actual performance.



\$ kWh \$ 713.97 \$ 1,943.34	* kW \$ 1,065.73	Natural Gas CCF
\$ 713.97	<u> </u>	
	\$ 1,065.73	
\$ 1,943.34		\$ 21.06
	\$ 610.88	\$ 36.34
\$ 1,511.23	\$ 708.03	\$ -
\$ 1,070.63	\$ 471.04	\$ 226.52
\$ 400.46	\$ 298.82	\$ 461.52
\$ 1,010.24	\$ 922.94	\$ 1,102.35
\$ 1,348.80	\$ 101.57	\$ 571.89
\$ 521.64	\$ 216.38	\$ 714.19
\$ 1,372.99	\$ 659.46	\$ 206.14
\$ 971.93	\$ 618.24	\$ (523.33)
\$ 936.09	\$ 856.70	\$ 89.66
\$ 908.74	\$ 195.78	\$ 33.96
\$ 12,710.04	\$ 6,725.57	\$ 2,940.28
	\$ 22,376 \$ 14,219	
	1,070.63 400.46 1,010.24 1,348.80 521.64 1,372.99 971.93 936.09 908.74 12,710.04	3 1,070.63 \$ 471.04 4 400.46 \$ 298.82 3 1,010.24 \$ 922.94 4 1,348.80 \$ 101.57 5 521.64 \$ 216.38 6 1,372.99 \$ 659.46 6 971.93 \$ 618.24 6 936.09 \$ 856.70 908.74 \$ 195.78

Table 10: Henry County High School savings summary showing more than \$20,000 in savings.

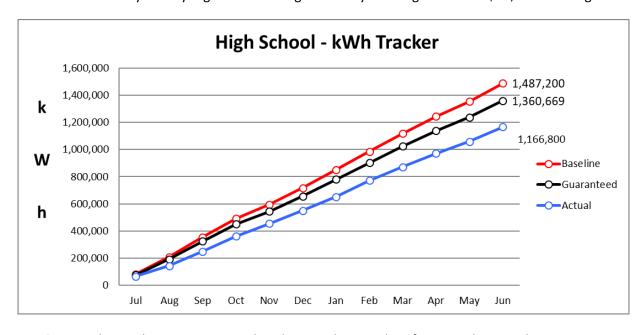


Figure 7 Electrical consumption tracker showing the actual performance beating the guarantee.



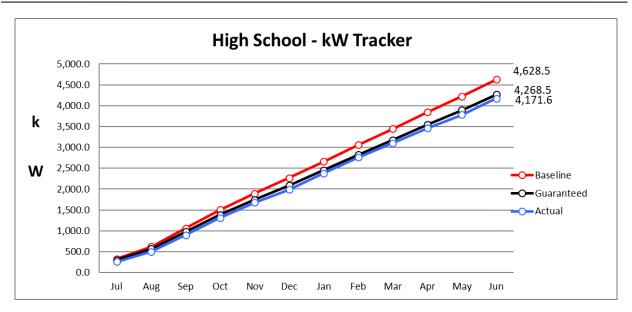


Figure 8: Electrical demand tracker showing the actual performance beating the guarantee.

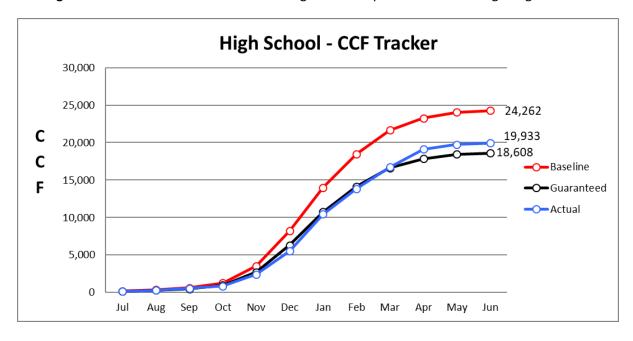


Figure 9: Natural Gas tracker showing the actual performance compared to the guarantee.



New Castle Elementary School:

There were no major renovations done at New Castle Elementary School. The automation system was integrated into the district's new school front end system so that remote setbacks can be put in place. This reduces ventilation to unoccupied areas in the school at certain times. Variable frequency drives were also installed on the two geothermal pumps to reduce motor speed when needed. The trend line graph shows these modifications did save on the electric consumption over the first year. Looking at the table, the school saved 115,800 kWh of electric consumption and consumed an additional 141 kW of electric demand. The energy savings was \$1,384 for this year.

		Baseline		Guara	nteed Usage)	Ad	ctual Usage	
	Elec	ctrical	Natural Gas	Electri	cal	Natural Gas	Electr	ical	Natural Gas
Month	Consumption kWh	Demand kW	CCF	Consumption kWh	Demand kW	CCF	Consumption kWh	Demand kW	CCF
July 2017	51,200	146	23	44,531	141	23	19,000	109	232
Aug 2017	63,600	198	4	55,316	192	4	30,000	132	625
Sep 2017	50,200	192	15	43,661	186	15	67,400	220	62
Oct 2017	41,600	186	370	36,182	180	370	41,000	192	283
Nov 2017	56,200	196	471	48,880	190	471	40,800	189	682
Dec 2017	59,000	212	736	51,315	205	736	45,000	217	912
Jan 2018	70,600	246	1,179	61,404	238	1,179	56,800	268	1,257
Feb 2018	75,200	242	1,027	65,405	234	1,027	62,600	253	499
Mar 2018	59,000	228	647	51,315	221	647	46,600	245	396
Apr 2018	46,400	172	807	40,356	167	807	47,000	232	320
May 2018	49,000	176	296	42,618	171	296	40,600	218	22
June 2018	37,200	112	166	32,355	109	166	46,600	173	25

		MA Consissor	CCF
	kWh Savings	kW Savings	Savings
Total Savings	115,800	-141	426
Guaranteed Savings	85,861	72.0	0
Percent Ahead of Guarantee	34.87%	-296.25%	N/A

Table 11: Monthly comparison of baseline, guaranteed, and actual performance.



		Fin	and	cial Saving	gs	
		Elect	Natural Gas			
Month		\$ kWh		\$ kW		CCF
July 2017	\$	1,094.53	\$	808.85	\$	(141.95)
Aug 2017	\$	1,142.12	\$	1,442.81	\$	(421.79)
Sep 2017	\$	(584.66)	\$	(612.10)	\$	(31.92)
Oct 2017	\$	20.39	\$	(117.32)	\$	59.09
Nov 2017	\$	523.47	\$	144.69	\$	(143.31)
Dec 2017	\$	475.88	\$	(103.63)	\$	(119.54)
Jan 2018	\$	469.08	\$	(472.19)	\$	(52.98)
Feb 2018	\$	428.29	\$	(240.47)	\$	358.62
Mar 2018	\$	421.50	\$	(365.07)	\$	170.48
Apr 2018	\$	(20.39)	\$	(1,311.64)	\$	330.77
May 2018	\$	285.53	\$	(817.32)	\$	186.10
June 2018	\$	(319.52)	\$	(1,198.60)	\$	95.77
Total Savings	\$	3,936.23	\$	(2,841.99)	\$	289.34
		Cumulativ		\$	1,384	
	Gι	uaranteed S	avi	ngs	\$	3,824

Table 12: New Castle savings summary showing a \$2,048 savings.

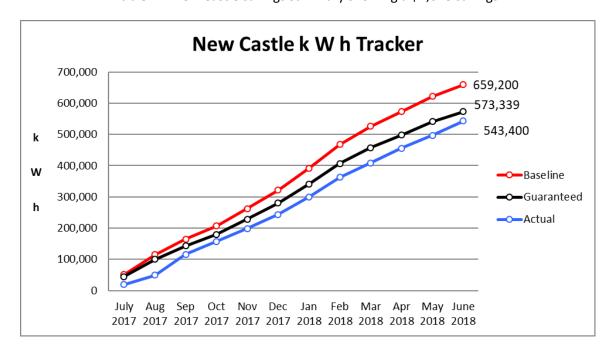


Figure 10: Electrical consumption tracker showing the actual performance beating the guarantee.



Field House:

Controls from the middle school were tied into the field house to allow for ventilation set back when the building is unoccupied. An occupancy sensor was also put in place so that lights only come on when the building is occupied. The energy conservation measures resulted an 21,600 kWh reduction. The total monetary cost saved was \$1,819.63.

Bus Garage:

The bus garage had lighting upgrades that retrofitted metal halide lights with high efficiency florescent fixtures and LED fixtures. Programmable thermostats were installed to reduce heating when the building is unoccupied. The previous garage doors were not insulated and caused a sizable loss in energy so they were replaced with insulated garage doors. The savings for the bus garage were based on stipulated savings. The table below shows how much we agreed the lighting upgrade saved for the bus garage. The total cost savings for the year is \$2,063.67.

Bus Garage Lighting Retrofit										
							Number of			
	Number of	Number	Wattage	Wattage		Totall	Watts in			kWh
	Fixtures	of Lamps	of Lamps	of Fixture	Type Fixture	Watts	Retrofit	Hours	#Days	Saved
Bus Garage Lighting	16	1	400	458	Metal Halide	7,328	3200	10.5	20	16,928
Mezzanine Lighting	12	2	32	74	T12 Flourescent	1,776	576	1	20	391
Wash Bay	16	2	32	74	T12 Flourescent	2,368	768	4	20	2,084
						11,472	4,544			19,403

Table 12: Stipulated savings at the Bus Garage.

Total Savings \$ 2,063.67



Utility Rate Changes:

Two accounts of the Henry County school district were on the wrong Kentucky Utilities rate. Henry County High School was on a Power Service - Secondary Rate and the demand was high enough to be on a Time of Day - Secondary rate. Changing the rate structure saved \$25,989.13 this year. However, New Castle Elementary School was on a more beneficial rate last year, Power Service Secondary. This year, they were put on School Power Service Secondary and the result was a \$2,930.66 additional cost.

In addition, to the rate changes, the natural gas meter at Henry County Middle school was replaced with a smaller unit that has a lower monthly charge due to the lower gas usage from the renovation project. This change saves an additional \$2,700 every year. In total, \$25,758.47 was saved as a result of rate and meter changes. A summary of rate change savings is provided below.

	Summary (July 2016 - June 2017)												
Address/Facility	Account #	Average Demand	Previous Rate	Current Rate	Savings								
Henry County High School	3000-0738-3528	367	Power Service - Secondary	Time of Day - Secondary	\$25,989.13								
New Castle Elementary School	3000-1810-7544	187	General Service 3 - Phase	School Power Service - Secondary	-\$2,930.66								
Henry County Middle School	Natural Gas	-	-	-	\$2,700.00								

Total Savings: \$25,758.47

Table 13: Savings resulting from rate structure changes.

Henry County Schools Guaranteed Energy Savings Contract Annual Reconciliation Report (2017 - 2018)



Henry County High School Contract Capacity: uly 2017-June 2018

	Inputs from Utility Bills														
Month	kWh	Actual KW	Power Factor	Billed KW	ĸw	Base KW	Intermediate KW	Peak KW	Electric DSM	Env. Sur. %	Env. Sur. Deduction		Franchise Fee	School Tax	Sales Tax
Jul	66,400	256.6	88.68%	465.6	228	466	257	254	\$0.00059	5.52%	\$1,920.29	-\$0.00509	0.00%	3.00%	0.00%
Aug	77,600	246.5	92.21%	465.6	227	466	247	244	\$0.00059	4.07%	\$2,244.19	-\$0.00347	0.00%	3.00%	0.00%
Sep	106,800	399.4	92.87%	433.0	371	433	399	360	\$0.00059	3.99%	\$1,492.27	-\$0.00359	0.00%	3.00%	0.00%
Oct	110,400	409.0	92.87%	409.0	380	409	409	379	\$0.00059	3.63%	\$2,880.34	-\$0.00474	0.00%	3.00%	0.00%
Nov	94,000	367.2	94.45%	409.0	347	409	367	367	\$0.00059	4.77%	\$2,452.46	-\$0.00309	0.00%	3.00%	0.00%
Dec	96,400	311.8	95.45%	409.0	298	409	312	312	\$0.00059	5.27%	\$2,515.08	-\$0.00242	0.00%	3.00%	0.00%
Jan	101,200	388.1	94.24%	409.0	366	409	388	388	\$0.00056	5.90%	\$2,640.31	-\$0.00100	0.00%	3.00%	0.00%
Feb	120,400	381.8	94.69%	409.0	362	409	382	382	\$0.00056	5.70%	\$3,141.24	-\$0.00157	0.00%	3.00%	0.00%
Mar	98,000	342.7	92.81%	409.0	318	409	343	343	\$0.00056	-0.51%	\$2,556.82	\$0.00157	0.00%	3.00%	0.00%
Apr	101,200	354.5	94.26%	409.0	334	409	355	355	\$0.00050	-2.28%	\$2,640.31	-\$0.00144	0.00%	3.00%	0.00%
May	85,600	322.3	94.17%	409.0	304	409	322	322	\$0.00050	-0.31%	\$2,233.30	-\$0.00097	0.00%	3.00%	0.00%
Jun	108,800	391.7	92.48%	409.0	362	409	390	359	\$0.00050	-0.25%	\$2,838.59	-\$0.00188	0.00%	3.00%	0.00%

Time of Day Secondary Rate

July, 2016- January, 2017 200 \$/Month \$0.03229 \$/kwh

3.03 6.41 \$/KW \$/KW Cust charge Energy Charge Base Demand Intermediate Demand Peak Demand

Current Rate
Time of Day Secondary Rate

		Customer		Base Demand			Electric DSM	Environmental Surcharge	Fuel Adjustment	Franchise Fee			
	Month	Charge	Energy Charge	Charge	Intermediate Demand Charge	Peak Demand Charge		Surcharge			School Tax	Sales Tax	Total
Г	Jul	\$200	\$2,144.06	\$1,410.77	\$1,007.69	\$1,392.09	\$39.18	\$235.90	-\$337.98	\$0.00	\$182.75	\$0.00	\$6,274.45
	Aug	\$200	\$2,505.70	\$1,410.77	\$1,580.07	\$1,974.77	\$45.78	\$222.75	-\$269.27	\$0.00	\$230.12	\$0.00	\$7,900.68
	Sep	\$200	\$3,448.57	\$1,311.99	\$2,560.15	\$2,912.40	\$63.01	\$359.25	-\$383.41	\$0.00	\$314.16	\$0.00	\$10,786.1
	Oct	\$200	\$3,564.82	\$1,239.27	\$2,621.69	\$3,063.68	\$65.14	\$285.84	-\$523.30	\$0.00	\$315.51	\$0.00	\$10,832.6
	Nov	\$200	\$3,035.26	\$1,239.27	\$2,353.75	\$2,970.65	\$55.46	\$353.07	-\$290.46	\$0.00	\$297.51	\$0.00	\$10,214.5
	Dec	\$200	\$3,112.76	\$1,239.27	\$1,998.64	\$2,522.46	\$56.88	\$348.61	-\$233.29	\$0.00	\$277.36	\$0.00	\$9,522.68
	Jan	\$200	\$3,267.75	\$1,239.27	\$2,487.72	\$3,139.73	\$56.67	\$457.30	-\$101.20	\$0.00	\$322.42	\$0.00	\$11,069.6
	Feb	\$200	\$3,887.72	\$1,239.27	\$2,447.34	\$3,088.76	\$67.42	\$443.99	-\$189.03	\$0.00	\$335.56	\$0.00	\$11,521.0
	Mar	\$200	\$3,164.42	\$1,239.27	\$2,196.71	\$2,772.44	\$54.88	-\$36.06	\$153.86	\$0.00	\$292.37	\$0.00	\$10,037.8
	Apr	\$200	\$3,267.75	\$1,239.27	\$2,272.35	\$2,867.91	\$50.60	-\$165.47	-\$145.73	\$0.00	\$287.60	\$0.00	\$9,874.27
	May	\$200	\$2,764.02	\$1,239.27	\$2,065.94	\$2,607.41	\$42.80	-\$20.73	-\$83.03	\$0.00	\$264.47	\$0.00	\$9,080.16
L	Jun	\$200	\$3,513.15	\$1,239.27	\$2,499.90	\$2,902.69	\$54.40	-\$18.93	-\$204.54	\$0.00	\$305.58	\$0.00	\$10,491.5

Power Service Secondary Rate

July, 2016 - June, 2017 90 Customer Charge / Month \$0.03270 \$/kwh 21.03 Demand \$/KW (May through September) 18.81 Demand \$/KW (October through April)

Previous Rate Service Secondar

	Customer			Electric DSM	Environmental Surcharge	Fuel Adjustment	Franchise Fee			Existing Rate	Savings = Existing Rate Total - Proposed Rate
Month	Charge	Energy Charge	Demand Charge		Juichaige			School Tax	Sales Tax	Total	Total
Jul	\$90	\$2,171.28	\$9,791.57	\$39.18	\$561.48	-\$337.98	\$0.00	\$369.47	\$0.00	\$12,684.99	\$6,410.54
Aug	\$90	\$2,537.52	\$9,791.57	\$45.78	\$415.98	-\$269.27	\$0.00	\$378.35	\$0.00	\$12,989.93	\$5,089.25
Sep	\$90	\$3,492.36	\$9,105.99	\$63.01	\$449.24	-\$383.41	\$0.00	\$384.52	\$0.00	\$13,201.70	\$2,415.57
Oct	\$90	\$3,610.08	\$7,693.29	\$65.14	\$311.39	-\$523.30	\$0.00	\$337.40	\$0.00	\$11,584.00	\$751.35
Nov	\$90	\$3,073.80	\$7,693.29	\$55.46	\$403.55	-\$290.46	\$0.00	\$330.77	\$0.00	\$11,356.41	\$1,141.89
Dec	\$90	\$3,152.28	\$7,693.29	\$56.88	\$446.76	-\$233.29	\$0.00	\$336.18	\$0.00	\$11,542.09	\$2,019.41
Jan	\$90	\$3,309.24	\$7,693.29	\$56.67	\$502.02	-\$101.20	\$0.00	\$346.50	\$0.00	\$11,896.53	\$826.87
Feb	\$90	\$3,937.08	\$7,693.29	\$67.42	\$492.85	-\$189.03	\$0.00	\$362.75	\$0.00	\$12,454.37	\$933.33
Mar	\$90	\$3,204.60	\$7,693.29	\$54.88	-\$43.28	\$153.86	\$0.00	\$334.60	\$0.00	\$11,487.95	\$1,450.07
Apr	\$90	\$3,309.24	\$7,693.29	\$50.60	-\$193.86	-\$145.73	\$0.00	\$324.11	\$0.00	\$11,127.64	\$1,253.38
May	\$90	\$2,799.12	\$7,693.29	\$42.80	-\$26.01	-\$83.03	\$0.00	\$315.48	\$0.00	\$10,831.65	\$1,751.49
Jun	\$90	\$3,557.76	\$8,601.27	\$54.40	-\$23.66	-\$204.54	\$0.00	\$362.26	\$0.00	\$12,437.48	\$1,945.97
									Total	\$143,594.74	
										Total Savings	\$25,989.13

Henry County High School -Rate Analysis Calculations

Henry County Schools Guaranteed Energy Savings Contract Annual Reconciliation Report (2017 - 2018)



Contract Capacity: ly, 2017 - June, 201 176.00

Inputs from Utility Bills

	inputs from other bins														
Month	kWh	Actual KW	Power Factor	Billed KW	ĸw	Base KW	Intermediate KW	Peak KW	Electric DSM	Env. Sur. %	Env. Sur. Deduction		Franchise Fee	School Tax	Sales Ta
Jul	19,000	102.0	100.00%	109	102	109	102	102	\$0.00059	5.52%	\$549.48	-\$0.00590	3.00%	3.00%	0.00%
Aug	30,000	132.0	100.00%	132	132	132	132	132	\$0.00059	4.07%	\$867.60	-\$0.00347	3.00%	3.00%	0.00%
Sep	67,400	220.0	100.00%	220	220	220	220	220	\$0.00059	3.99%	\$537.91	-\$0.00359	3.00%	3.00%	0.00%
Oct	41,000	192.0	100.00%	192	192	192	192	192	\$0.00059	3.63%	\$1,069.69	-\$0.00474	3.00%	3.00%	0.00%
Nov	40,800	188.6	98.80%	188.6	186	189	189	189	\$0.00059	4.77%	\$1,064.47	-\$0.00309	3.00%	3.00%	0.00%
Dec	45,000	217.3	98.40%	217.3	214	217	217	217	\$0.00059	5.27%	\$1,174.05	-\$0.00242	3.00%	3.00%	0.00%
Jan	56,800	267.6	98.60%	267.6	264	268	268	268	\$0.00056	5.90%	\$1,481.91	-\$0.00115	3.00%	3.00%	0.00%
Feb	62,600	253.0	98.30%	253	249	253	253	253	\$0.00056	5.70%	\$1,633.23	-\$0.00157	3.00%	3.00%	0.00%
Mar	46,600	244.7	98.80%	244.7	242	245	245	245	\$0.00056	-0.51%	\$1,215.79	\$0.00157	3.00%	3.00%	0.00%
Apr	47,000	232.0	98.75%	232	229	232	232	232	\$0.00050	-2.28%	\$1,226.23	-\$0.00144	3.00%	3.00%	0.00%
May	40,600	217.8	98.80%	217.8	215	218	218	218	\$0.00050	-0.31%	\$1,059.25	-\$0.00097	3.00%	3.00%	0.00%
Jun	46,600	173.3	98.00%	173.3	170	198	173	173	\$0.00050	-0.25%	\$1,215.79	-\$0.00188	3.00%	3.00%	0.00%

School Power Service Secondary Rate

<u>July,2017 - June, 2018</u> 90 Customer Charge / Month \$0.03289 \$/kwh

18.75 Demand \$/KW (May through September) 16.78 Demand \$/KW (October through April)

Month	Customer Charge	Energy Charge	Demand Charge	Electric DSM	Environmental Surcharge	Fuel Adjustment	Franchise Fee	School Tax	Tax Cuts & Jobs Act Credit	Total
Jul	\$90	\$624.91	\$2,043.75	\$11.21	\$122.57	-\$112.10	\$83.41	\$83.41	-\$35.72	\$2,911.4
Aug	\$90	\$986.70	\$2,475.00	\$17.70	\$109.96	-\$104.10	\$107.26	\$107.26	-\$56.40	\$3,733.3
Sep	\$90	\$2,216.79	\$4,125.00	\$39.77	\$236.75	-\$241.97	\$193.99	\$193.99	-\$126.71	\$6,727.6
Oct	\$90	\$1,348.49	\$3,221.76	\$24.19	\$131.22	-\$194.34	\$138.64	\$138.64	-\$77.08	\$4,821.5
Nov	\$90	\$1,341.91	\$3,164.71	\$24.07	\$169.63	-\$126.07	\$139.93	\$139.93	-\$76.70	\$4,867.4
Dec	\$90	\$1,480.05	\$3,646.29	\$26.55	\$214.43	-\$108.90	\$160.45	\$160.45	-\$84.60	\$5,584.7
Jan	\$90	\$1,868.15	\$4,490.33	\$31.81	\$294.90	-\$65.32	\$201.30	\$201.30	-\$106.78	\$7,005.6
Feb	\$90	\$2,058.91	\$4,245.34	\$35.06	\$273.38	-\$98.28	\$198.13	\$198.13	-\$117.69	\$6,882.9
Mar	\$90	\$1,532.67	\$4,106.07	\$26.10	-\$23.15	\$73.16	\$174.15	\$174.15	-\$87.61	\$6,065.5
Apr	\$90	\$1,545.83	\$3,892.96	\$23.50	-\$98.63	-\$67.68	\$161.58	\$161.58	-\$88.36	\$5,620.7
May	\$90	\$1,335.33	\$3,654.68	\$20.30	-\$12.53	-\$39.38	\$151.45	\$151.45	-\$76.33	\$5,274.9
Jun	\$90	\$1,532.67	\$3,249.38	\$23.30	-\$9.20	-\$87.61	\$143.96	\$143.96	-\$87.61	\$4,998.8

Total: \$64,494.8

General Service 3 Phase Rate

July, 2017 - June, 2018 50.4 \$/Mon \$0.10490 \$/kwh

Cust Charge Energy Charge

F	Previ	ous F	late	
General	Serv	ice 3	Phase	Ra

	Customer			Electric DSM	Environmental	Fuel Adjustment	Franchise Fee			Existing Rate	Savings = Existing Ra
Month	Charge	Energy Charge	Demand Charge	Electric DSIVI	Surcharge	ruei Adjustment	Franchise Fee	School Tax	Sales Tax	Total	Total - Proposed Ra
Jul	\$50	\$1,993.10	\$0.00	\$11.21	\$83.09	-\$112.10	\$60.77	\$60.77	\$0.00	\$2,147.24	-\$764.20
Aug	\$50	\$3,147.00	\$0.00	\$17.70	\$95.54	-\$104.10	\$96.20	\$96.20	\$0.00	\$3,398.94	-\$334.44
Sep	\$50	\$7,070.26	\$0.00	\$39.77	\$264.24	-\$241.97	\$215.48	\$215.48	\$0.00	\$7,613.66	\$886.05
Oct	\$50	\$4,300.90	\$0.00	\$24.19	\$120.00	-\$194.34	\$129.03	\$129.03	\$0.00	\$4,559.22	-\$262.29
Nov	\$50	\$4,279.92	\$0.00	\$24.07	\$156.93	-\$126.07	\$131.56	\$131.56	\$0.00	\$4,648.36	-\$219.04
Dec	\$50	\$4,720.50	\$0.00	\$26.55	\$190.95	-\$108.90	\$146.39	\$146.39	\$0.00	\$5,172.27	-\$412.45
Jan	\$50	\$5,958.32	\$0.00	\$31.81	\$268.96	-\$65.32	\$187.32	\$187.32	\$0.00	\$6,618.82	-\$386.86
Feb	\$50	\$6,566.74	\$0.00	\$35.06	\$286.08	-\$98.28	\$205.20	\$205.20	\$0.00	\$7,250.39	\$367.41
Mar	\$50	\$4,888.34	\$0.00	\$26.10	-\$19.12	\$73.16	\$150.57	\$150.57	\$0.00	\$5,320.01	-\$745.52
Apr	\$50	\$4,930.30	\$0.00	\$23.50	-\$86.14	-\$67.68	\$145.51	\$145.51	\$0.00	\$5,141.41	-\$479.37
May	\$50	\$4,258.94	\$0.00	\$20.30	-\$10.14	-\$39.38	\$128.40	\$128.40	\$0.00	\$4,536.93	-\$738.06
Jun	\$50	\$4,888.34	\$0.00	\$23.30	-\$9.37	-\$87.61	\$145.95	\$145.95	\$0.00	\$5,156.97	\$158.11
									Total	\$61,564.22	
										Total Savings	-\$2,930.66

New Castle Elementary School –Rate Analysis Calculations



Weather Normalization (All Buildings):

In order to compare the energy used from the baseline year to the first guarantee year, we analyzed the effect of weather. This calculation determines the added or reduced kwh expected due to the comparison of the baseline year to guarantee year heating and cooling degree days. Below is a chart of heating and cooling degree days for both periods.

	Baseline (2010-2012			Yea	r 5 (2017-2018)		Yea	r 5 vs Base	line
	HDD	CDD	TDD	HDD	CDD	TDD	HDD	CDD	TDD
July	0	640	640	0	512	512	0	-128	-128
August	0	540	540	0	392	392	0	-148	-148
September	7	258	265	6	246	252	-1	-12	-13
October	145.5	53	198.5	159	108	267	13.5	55	68.5
November	362	7.5	369.5	455	8	463	93	0.5	93.5
December	778.5	0	778.5	842	0	842	63.5	0	63.5
January	851.5	0	851.5	954	0	954	102.5	0	102.5
February	608	0.5	608.5	535	11	546	-73	10.5	-62.5
March	322	48	370	585	0	585	263	-48	215
April	139	60.5	199.5	332	19	351	193	-41.5	151.5
May	39.5	253	292.5	0	358	358	-39.5	105	65.5
June	0.5	412.5	413	0	446	446	-0.5	33.5	33
TOTALS	3,254	2,273	5,527	3,868	2,100	5,968	615	-173	442

Table 14: Comparison of the baseline year versus Year 5 of the M&V period.

The table above shows that there were 442 additional degree days in year 5 (2017 – 2018). With this information we graphed the energy usage (kWh) and gas usage (CCF) versus the degree days. Finding this slope allows us to calculate the additional amount of energy and gas used due to the additional degree days. The result of our calculations is shown below.

Location	HDD kwh	CDD kwh	Total kwh	HDD CCF
Middle School	2,619	2,698	5,317	917.51
New Castle Elem	8,584	5,935	14,519	555.5695
Eastern Elem	6,744	3,232	9,976	N/A
High School	8,199	7,107	15,306	2719.777
Bus Garage	48	164	212	N/A
Field House	10,443	4,490	14,934	N/A
		Total	60,263	4,193

Table 15: Calculations for the amount of additional energy and gas used.

Henry County Schools Guaranteed Energy Savings Contract Annual Reconciliation Report (2017 – 2018)



The table above shows an additional 60, 263 kWh and 4,193 CCF were used during Year 5 due to the additional degree days. Therefore, we can conclude there is another \$5,519.02 that was not included in the total \$152,667. This would bring the total savings to \$158,186 and be 11% higher than the guaranteed savings.



Exhibit F - Annual Reconciliation Statement

The following pages represent an example format for the documentation and reporting of the Annual Reconciliation Statement.



Exhibit G -Support Services Agreement

In coordination with *Exhibit E - Energy Savings Guarantee*, CMTA Energy Solutions will perform the Measurement and Verification (M&V) offerings stated below and outlined in detail in *Exhibit E* each year of the contract.

- 1. CMTA Energy Solutions will review monthly utility bills for all schools affected by the project and will track the performance for the duration of the contract.
- CMTA Energy Solutions will have remote access to building automation systems that are web-based and
 will be granted site access to review building automation systems that are not web-based. An engineer will
 review system operation at least annually and more often as necessitated by the building energy
 performance.
- 3. CMTA Energy Solutions will provide an annual reconciliation report to Fort Thomas Independent Schools Board of Education outlining the performance of the energy conservation measures for the last year.
- 4. The cost of this M&V Service is included in the project cash flow, but not in the bond sale. Therefore, this fee will be billed annually for years 2 through 20. The cost will be escalated 3.0% per year as seen in the below table.

Year	M&V
1	\$0
2	\$6,000
3	\$6,180
4	\$6,365
5	\$6,556
6	\$6,753
7	\$6,956
8	\$7,164
9	\$7,379
10	\$7,601
11	\$7,829
12	\$8,063
13	\$8,305
14	\$8,555
15	\$8,811
16	\$9,076
17	\$9,348
18	\$9,628
19	\$9,917
20	\$10,215



Exhibit H – BG-1 Form, Method, And Cost of Financing

The Guaranteed Energy Savings Project is funded as indicated on the following BG-1 form. The accompanying debt service projection was produced by the Owner's fiscal agent, Ross, Sinclaire & Associates, LLC. The sale of the energy bonds for this project will be administered by the district's fiscal agent. The following illustrates the financing plan.

Table H.1 – Proposed Project Financial Pro-Forma

PROPOSED PROJECT FINANCIAL PRO-FORMA Fort Thomas Independent Schools										
	COST	INPUTS					SAVINGS INPUTS			
	Project Cost		\$	5,362,522		Year 1 Energy 8	Water Savings		\$	185,330
	Additional Funds		Ś			Year 1 O&	M Savings		\$	29,009
	Financed Amount		\$	5,362,522						
	Financing Fee		Ś	167,478		IRA C	Credit		\$	-
т	Total Financed Amour	\+ •	Ś	5,530,000		Annual Energy	Escalation Rate			3.00%
	Interest Rate		-	4.40%			V Escalation Rate			3.00%
	Financing Term (Years	-1	 '	20		Allitual Odivi/ivio	V L3Calation Nate			3.00%
	Savings Term (Years)			20		% of Project Fu	nded by Savings			64%
YEAR	PAYMENT	M&V	тот	TAL COST	ENERGY & WATER SAVINGS	O&M SAVINGS	TOTAL COST SAVINGS	General Funds	Restr	icted Funds
Year 0	\$0	\$0		\$0	\$0	\$0	\$0	\$0		\$0
Year 1	\$304,338	\$0	\$3	304,338	\$185,330	\$29,009	\$214,339	\$170,935	\$	133,402
Year 2	\$302,088	\$6,000	\$3	308,088	\$190,890	\$29,879	\$220,769	\$171,278	\$	130,809
Year 3	\$309,838	\$6,180	\$3	316,018	\$196,616	\$30,776	\$227,392	\$176,417	\$	133,421
Year 4	\$312,288	\$6,365	\$3	318,653	\$202,515	\$31,699	\$234,214	\$181,709	\$	130,578
Year 5	\$319,588	\$6,556	\$3	326,144	\$208,590	\$32,650	\$241,240	\$187,160	\$	132,427
Year 6	\$326,588	\$6,753	\$3	333,341	\$214,848	\$33,629	\$248,477	\$192,775	\$	133,812
Year 7	\$333,068	\$6,956	\$3	340,023	\$221,293	\$34,638	\$255,932	\$198,558	\$	134,509
Year 8	\$339,228	\$7,164	\$3	346,392	\$227,932	\$35,677	\$263,610	\$204,515	\$	134,712
Year 9	\$345,068	\$7,379	\$3	352,447	\$234,770	\$36,748	\$271,518	\$210,651	\$	134,417
Year 10	\$350,448	\$7,601	\$3	358,048	\$241,813	\$37,850	\$279,663	\$216,970	\$	133,477
Year 11	\$535,123	\$7,829	\$5	542,951	\$249,068	\$38,986	\$288,053	\$223,479	\$	311,643
Year 12	\$537,543	\$8,063	\$5	545,606	\$256,540	\$40,155	\$296,695	\$230,184	\$	307,359
Year 13	\$549,230	\$8,305	\$5	557,535	\$264,236	\$41,360	\$305,596	\$237,089	\$	312,141
Year 14	\$554,030	\$8,555	\$5	562,585	\$272,163	\$42,601	\$314,764	\$244,202	\$	309,828
Year 15	\$562,830	\$8,811	\$5	571,641	\$280,328	\$43,879	\$324,207	\$251,528	\$	311,302
Year 16	\$568,705	\$9,076	\$5	577,781	\$288,738	\$45,195	\$333,933	\$259,074	\$	309,631
Year 17	\$578,455	\$9,348	\$5	587,803	\$297,400	\$46,551	\$343,951	\$266,846	\$	311,609
Year 18	\$586,375	\$9,628	\$5	596,003	\$306,322	\$47,947	\$354,269	\$274,851	\$	311,524
Year 19	\$592,405	\$9,917	\$6	502,322	\$315,512	\$49,386	\$364,897	\$283,097	\$	309,308
Year 20	\$602,025	\$10,215	\$6	512,240	\$324,977	\$50,867	\$375,844	\$291,590	\$	310,435
TOTAL	\$8,909,255	\$150,701	\$9,	,059,956	\$4,979,881	\$779,482	\$5,759,363	\$4,472,908	\$4	,436,347

Exhibit H – BG-1 Form, Method, Cost of Financing Guaranteed Energy Savings Contract Fort Thomas Independent Schools



Table H.2 – DFP Items Addressed By ECM

	ECD4				Fac	ility			
	ECM	HMS	HHS	FH	JES	MES	WES	ВОЕ	EF
Elect	rical								
E.1	LED Lighting Upgrades	Not on DFP	Not on DFP	Not on DFP			Not on DFP	Not on DFP	Not on DFP
E.1a	TV Studio LED Lighting Upgrades		Not on DFP						
Cont	rols								
C.1	New DDC System Installation	1c.1							
C.2	Central Plant Controls		Not on DFP						
C.3	Controls Upgrades		Not on DFP				Not on DFP		
C.4	Controls Retro-Cx		Not on DFP						
C.5	Programmable Thermostats							Not on DFP	
HVA	С								
H.1	HVAC Renovation	1c.1							
H.2	Central Plant Upgrades		Not on DFP						
Plum	bing								
P.1	Domestic Water Heater Replacement	1c.1							
P.2	Cooling Tower Deduct Meter	Not on DFP	Not on DFP						
Utilit	ty								
U.1	Duke Utility Rate Changes				Not on DFP	Not on DFP	Not on DFP	Not on DFP	



Exhibit I – Warranty & Title

Warranty:

Design Builder hereby warrants to Owner that all materials furnished by the Design Builder, if any, and all workmanship performed by the Design Builder in connection with the project, shall be in accordance with the general industry standards of the mechanical and electrical construction industry; shall be performed in a competent, good and workmanlike manner and in compliance with the Contract Documents, and all pertinent laws, rules, and regulations; and shall be free from any and all defective materials or workmanship. The Design Builder shall promptly remedy any and all defective materials or workmanship furnished by the Design Builder or any Sub-contractor upon receipt of written notice thereof from Owner. If required by Owner, the Design Builder shall furnish satisfactory evidence as to the kind and quality of materials and equipment used in connection with the Project.

The warranty set forth herein shall continue to be effective for a period of one (1) year following Owner's acceptance or beneficial use of each Energy Conservation Measure, acceptance of a particular Facility, or acceptance of the Project, whichever comes first. Owner shall give the Design Builder written notice of all defective work, specifically detailing the deficiencies to be corrected, and the Design Builder shall repair or otherwise remedy such defective work in an expeditious manner.

To the extent possible, the Design Builder shall assign to the Owner all warranties that the Design Builder receives from its vendors and/or Sub-contractors for any materials or equipment, which are or are to become permanent features of the Project, which shall be in addition to the other warranties provided herein.

Title and Risk of Loss:

Risk of Loss for all equipment and materials provided by Design Builder or and Sub-contractor shall transfer to Owner upon installation and acceptance of such equipment and materials to Owner's Facilities. Title to an Energy Conservation Measure shall vest with the Owner upon installation, acceptance, and approving payment to the Design Builder. It is the intent of all parties that any transfer of title to Owner pursuant to this contract shall occur automatically without necessity of any bill of sale, certificate of title, or other instrument of conveyance beyond the partial certificate of acceptance. The Owner shall be responsible for operating and maintaining all Measures that are installed. The Owner shall also be responsible for any real or personal property taxes related to the Measures.



Exhibit J - Non-Collusion Affidavit

Non-Collusion Affidavit - 2013

The following Non-Collusion Affidavit has been signed and delivered to the Kentucky Department of Education for their records.

KENTUCKY DEPARTMENT OF EDUCATION NON-COLLUSION AFFIDAVIT 702 KAR 4:160	
The undersigned agent, being duly sworn, states that neither he (financial or through kinship) to:	/she nor his/her firm has any relationship
 Any school board member or the superintendent; 	
 Any or all prime contractors or material suppliers when method of construction. 	nen using the construction management
The undersigned further states that he/she has not entered into a relative to the price bid by anyone nor has he/she attempted to in	
Explain below any kinship or financial relationship you may have project. There is no relationship of this sort.	to any parties as mentioned above on this
Jason Volz Partner Name Title CMTA, Inc. Name of Company Subscribed and Sworn to Me this	
31 day of August, 2022. Chanil Leablack	AND TARY OF THE PUBLIC OF THE
Notary Signature	PUBLIC ES KYNP26457
My Commission expires: Narch 26, 20, 25.	Notary Seal

Page 1 of 1

BG#



Exhibit K - Project Plans and Specifications

All scope of work included in this contract is outlined in detail within the project drawings and plan specifications. Reference the provided USB drive to review the scope in detail.

Project Drawings & Plans Index:

1. Mechanical

a. Highlands Middle School

- M000 Mechanical Legend
- M101 Basement Demolition Plan
- M111 First Floor Demolition East
- M112 First Floor Demolition West
- M121 Second Floor Demolition East
- M122 Second Floor Demolition West
- M131 Third Floor Demolition East
- M132 Third Floor Demolition West
- M140 Roof Demolition Plan
- M201 Basement Mechanical Plan
- M211 First Floor Mechanical East
- M212 First Floor Mechanical West
- M221 Second Floor Mechanical East
- M222 Second Floor Mechanical West
- M231 Third Floor Mechanical East
- M232 Third Floor Mechanical West
- M240 Roof Mechanical Plan
- M301 Basement Hydronic Plan
- M311 First Floor Hydronic East
- M312 First Floor Hydronic West
- M321 Second Floor Hydronic East
- M322 Second Floor Hydronic West
- M331 Third Floor Hydronic East
- M332 Third Floor Hydronic West
- M500 Mechanical Schematic
- M600 Mechanical Schedules
- M601 Mechanical Schedules

b. Highlands High School

- M001 Mechanical Legend
- M101 First Floor Mechanical
- M201 First Floor Hydronic
- M600 Mechanical Schedule



2. Plumbing

a. Highlands Middle School

- P000 Plumbing Legend
- P101 Plumbing Plans
- P200 Plumbing Details

3. Controls

a. Highlands Middle School

- C0.0 Controls Cover Sheet
- C1.0 Riser Diagram
- C2.0 Controls Schematic Chilled Water System
- C3.0 Controls Schematic Hot Water System
- C4.0 Controls Schematic AHU-1/ERV-1
- C5.0 Controls Schematic AHU-1/ERV-1
- C6.0 Controls Schematic (Gym) AHU-2
- C7.0 Controls Schematic ERV-2
- C8.0 Controls Schematic AHU-3,4
- C9.0 Controls Schematic ERV-3
- C10.0 Controls Schematic Water-to-Water Heat Pump
- C11.0 Controls Schematic VAV Terminal Unit
- C12.0 Controls Schematic Parallel Fan VAV Terminal Unit
- C13.0 Controls Schematic Miscellaneous
- C14.0 Controls Schematic Miscellaneous
- C15.0 Controls Schematic Miscellaneous
- C16.0 Controls Schematic VRF
- C17.0 Controls Schematic Power Monitoring
- C18.0 Controls Plan Garage Floor West
- C18.1 Controls Plan Garage Floor East
- C19.0 Controls Plan First Floor West
- C19.1 Controls Plan First Floor East
- C20.0 Controls Plan Second Floor West
- C20.1 Controls Plan Second Floor East
- C21.0 Controls Plan Third Floor West
- C21.1 Controls Plan Third Floor East

b. Highlands High School

- C0.0 Controls Cover Sheet
- C1.0 Riser Diagram
- C2.0 Controls Schematic Heat Pump Loop
- C2.1 Controls Schematic Heat Pump Loop
- C3.0 Controls Schematic Power Monitoring



4. Electrical - Power

a. Highlands Middle School

- E001 Electrical Legend
- E101 Basement Electrical Demolition Plan
- E122 Second Floor Electrical Demolition Plan West
- E131 Third Floor Electrical Demolition Plan East
- E140 Roof Electrical Demolition Plan
- E201 Basement Electrical Plan
- E211 First Floor Electrical Plan East
- E212 First Floor Electrical Plan West
- E222 Second Floor Electrical Plan West
- E231 Third Floor Electrical Plan East
- E232 Third Floor Electrical Plan West
- E240 –Roof Electrical Plan
- E501 Electrical Details
- E601 Electrical Panel Schedules
- E602 Electrical Panel Schedules
- E701 Electrical Riser Diagram

b. Highlands High School

- E001 Electrical Legend
- E101 First Floor Electrical
- E700 Electrical Single Line

5. Electrical – Lighting

a. General Lighting Sheets

- GE1.0 Cover
- GE1.1 Lighting Schedule
- GE1.2 Lighting Schedule
- GE1.3 Lighting Schedule
- GE1.4 Lighting Schedule & Wiring Details
- GE1.5 Lighting Symbols & Ballast Removal
- GE1.6 Fixture Mounting Details

b. Highlands Middle School

- EL2.0 Cover
- EL2.1 Basement Area 'A'
- EL2.2 Basement Area 'B'
- EL2.3 First Floor Area 'C'
- EL2.4 First Floor Area 'D'
- EL2.5 Second Floor Area 'E'

Exhibit K – Project Plans & Specifications Guaranteed Energy Savings Contract Fort Thomas Independent Schools



- EL2.6 Second Floor Area 'F'
- EL2.7 Third Floor Area 'G'
- EL2.8 Third Floor Area 'H'

c. Highlands High School

- EL1.0 Cover
- EL1.1 Basement Area 'A'
- EL1.2 Basement Area 'B'
- EL1.3 Basement Area 'C'
- EL1.4 First Floor Area 'D'
- EL1.5 First Floor Area 'E'
- EL1.6 First Floor Area 'F'
- EL1.7 Second Floor Area 'G'
- EL1.8 Second Floor Area 'H'
- EL1.9 Third Floor Area 'J'
- EL1.10 Third Floor Area 'K'
- EL1.11 Third Floor Black Box and TV Room
- X1.1 High School & Middle School Site Plan

d. Highlands Field House

- EL4.0 Cover
- EL4.1 First & Second Floor

e. Woodfill Elementary School

- EL3.0 Cover
- EL3.1 First Floor Area 'A'
- EL3.2 First Floor Area 'B'
- EL3.3 Second Floor Area 'C'
- EL3.4 Second Floor Area 'D'
- EL3.5 Third Floor Area 'E'
- EL3.6 Third Floor Area 'F'
- X3.1 Woodfill Elementary School Site Plan

f. Fort Thomas Board of Education

- EL5.0 Cover
- EL5.1 Basement, First & Second Floor

g. Fort Thomas Education Foundation

- EL6.0 Cover
- EL6.1 Basement, First, Second & Third Floor

6. General Trades

Exhibit K – Project Plans & Specifications Guaranteed Energy Savings Contract Fort Thomas Independent Schools



a. Highlands Middle School

- General Trades Cover Sheet
- GT1.0 First Floor Admin Area

Project Specifications Index:

- 1. Division 20 Mechanical
- 2. Division 25 Building Automation System
- 3. Division 26 Electrical



<u>Exhibit L – Example District Energy Policy</u>

The following District Energy Policy is an example of best practices that can be used to increase energy savings achieved.

Summary:

Fort Thomas Independent Schools is committed to improving district-wide energy performance for the purposes of reducing cost and overall environmental impact. This policy, outlined on the pages that follow, details key strategies and procedures to reduce energy consumption and expense. In addition, this policy will be implemented through designated district personnel.

District Energy Policy:

1. Use of HVAC

The use of building HVAC systems to heat and cool facilities shall be limited to school instructional hours and any properly pre-scheduled events. Otherwise, the building HVAC systems shall be turned to setback temperatures outlined in *Table L.2.1* and *Table L.2.2*. Furthermore, the use of building HVAC systems for non-instructional hours shall be strictly limited to the portion of the building being used (the whole building is not to be turned on, unless the whole building is being used).

2. Temperature Standards

The below tables *L.2.1* and *L.2.2* outline occupancy schedules and occupied/unoccupied temperature setpoints on a space-type basis for elementary schools and high/middle schools, respectively.

Table L.2.1 – Occupancy Schedules and Temperature Setpoints – Elementary Schools

Occupancy Schedules and Temperature Setpoints - Elementary Schools										
Space	Occupancy Schedules	Occupied Setpoint	Unoccupied Cooling Setpoint	Unoccupied Heating Setpoint						
Classrooms	M-F 6AM - 3PM	72°F +/- 2°F	80°F	55°F						
Media Centers	M-F 6AM - 3PM	72°F +/- 2°F	80°F	55°F						
Workrooms	M-F 6AM - 3PM	72°F +/- 2°F	80°F	55°F						
Common Areas	M-F 6AM - 3PM	72°F +/- 2°F	80°F	55°F						
Kitchen	M-F 4AM - 2PM	72°F +/- 2°F	80°F	55°F						
Admin	M-F 5AM - 5PM	72°F +/- 2°F	80°F	55°F						



Occupancy Schedules and Temperature Setpoints - Elementary Schools									
Space	Occupancy Schedules	Occupied Setpoint	Unoccupied Cooling Setpoint	Unoccupied Heating Setpoint					
Cafeteria	M-F 5AM - 9AM 11AM - 1PM	72°F +/- 2°F	80°F	55°F					
Gym	M-F 5AM - 5PM	72°F +/- 2°F	80°F	55°F					

Table L.2.2 – Occupancy Schedules and Temperature Setpoints – Middle & High Schools

	Occupancy Schedules and Temperature Setpoints – Middle/High School									
Space	Occupancy Schedules	Occupied Cooling Setpoint	Unoccupied Cooling Setpoint	Unoccupied Heating Setpoint						
Classrooms	M-F 5AM - 3PM	72°F +/- 2°F	80°F	55°F						
Media Centers	M-F 5AM - 3PM	72°F +/- 2°F	80°F	55°F						
Workrooms	M-F 5AM - 3PM	72°F +/- 2°F	80°F	55°F						
Common Areas	M-F 5AM - 3PM	72°F +/- 2°F	80°F	55°F						
Kitchen	M-F 4AM - 2PM	72°F +/- 2°F	80°F	55°F						
Admin	M-F 5AM - 5PM	72°F +/- 2°F	80°F	55°F						
Cafeteria	M-F 5AM - 9AM 11AM - 1PM	72°F +/- 2°F	80°F	55°F						
Gym	M-F 5AM - 5PM	72°F +/- 2°F	80°F	55°F						

Note: For spaces where thermostat location does not accurately depict space temperature, variations from occupied setpoints may be made. These variations shall be communicated with CMTA and Facilitates Director prior to change.

3. <u>Use of Lights</u>

- A. Classroom lights shall only be on when the classroom is occupied.
- B. Corridor and other general are lights shall be turned on at the beginning of the instructional day and turned off at the end of the instructional day.
- C. Lighting for spaces such as gyms, cafeterias, and auditoriums shall be only turned on as required, and otherwise be OFF during the instructional day.

The overall governing rule is that if a space is not occupied, the lights are to be turned off.

Exhibit L – Example District Energy Policy Guaranteed Energy Savings Contract Fort Thomas Independent Schools



4. Custodial Practices

Custodians play a critical role in the energy management of buildings.

Lights: Custodians shall turn on lights as required to clean a space, then turn them off. If desired to keep a safe "feel" at night, corridor lights may remain on longer, but all other spaces are to be cleaned and then turned off. When the custodial staff leaves the building at night, all lights are to be turned off. Also, where installed, occupancy sensors are not to be overridden.

HVAC: Building systems shall operate to UNOCCUPIED temperature setpoints for all custodial activities. Systems shall not be overridden without approval from the Facilities Director.

Summer cleaning: HVAC systems shall remain in UNOCCCUPIED setpoints. For activities such as floor waxing that require a semi-conditioned space, the activity shall be planned and scheduled in the most efficient manner possible through the Facilities Director.

The goal of the initiative is to **never have more than 10%** of a building turned to occupied setpoints at any given time during summer operation. This will additionally help with building humidity (if the entire building is turned to occupied temperatures, the cooling system will satisfy the load very quickly because it was designed for a fully occupied building with lights on; therefore, the cooling system will typically never run long enough to provide significant dehumidification). Running building systems "as usual" during summer breaks is one frequently cited contributing factor to building mold outbreaks, because it significantly drives up building relative humidity. For this reason, we want to allow fewer units to run much more, which will provide better summer dehumidification and significant energy savings.

5. Scheduling of after-school, weekend, and other off-schedule activities:

All activities occurring outside of the standard instructional day shall be scheduled through the district Facilities Director. Whenever possible, activities are to be consolidated at the most efficient buildings, and to be held in an appropriately sized space (as an example, meetings for 6 people should not be held in a cafeteria which requires a much larger HVAC unit to run compared to a smaller, more suitable space).

Requests shall be submitted in writing via email at least 7 days in advance of event. For reoccurring events such as team practices, one request may be made that includes multiple dates and times. Requests shall state the following:

- A. Building name
- B. Date of request
- C. Type of activity
- D. Time and duration of event
- E. Space requested

Exhibit L – Example District Energy Policy Guaranteed Energy Savings Contract Fort Thomas Independent Schools



HVAC systems shall automatically return to setback temperatures after the event. The event participant is to turn off lights after the event.

6. Summer Usage of Buildings

Summer events shall be scheduled per Item #6 above, and shall be consolidated to the most efficient buildings to the extent possible. Building shall be conditioned to unoccupied temperatures unless an override is granted through the district Facilities Director. Examples of appropriate overrides include the following: floor waxing, open house events, etc.

7. Building Scheduling Through an Energy Manager

In order to maintain appropriate control and monitoring of the usage of district buildings, all building scheduling requests shall be made through the Facilities Director via an email request. The Facilities Director shall adhere to the requirements set forth in this energy policy.

8. Food Service Practices

Plug loads such as mobile freezers, small drink coolers, etc. shall be unplugged during extended breaks such as fall break, Christmas break, spring break, and summer break.

In all school buildings that do not have summer school (and when adequate food service staff exists to move food products), kitchen freezers and coolers are to be emptied at the end of school, cleaned, and turned off until restocked for the following school year. If necessary, to store frozen food over the summer, all food products shall be consolidated to a central location. Note: this portion of the policy is contingent upon availability of district employees to move food products.

Vending machines, appliances, and other similar plug loads shall be unplugged.

9. Overridden HVAC Equipment

HVAC equipment shall not be placed in "manual", "hand", or otherwise overridden from automatic control without notification to the district Energy Manager. In each case, a plan shall be submitted to the Facilities Director that details how and when the equipment can return to normal control.

10. Computers/Monitors/Printers/Copiers/Fax-machines

District computer and monitor power shall be reduced during periods of inactivity and at night by turning off or by utilizing low power consumption "sleep" mode (2 to 5 watts).

For printers, copiers, and other plug loads, these machines shall be unplugged during extended breaks (these machines continue to consume power even when not active). This includes fall break, Christmas break, spring break, and summer break.

Exhibit L – Example District Energy Policy Guaranteed Energy Savings Contract Fort Thomas Independent Schools



11. Future Facilities

When hiring design teams (architects and engineers) for future facilities, energy performance of past buildings shall be one of the criteria considered by the selection committee.

END OF POLICY.