

# **Mercer County Schools Guaranteed Energy Savings Contract**

*Submitted to:*

Mercer County Board of Education  
530 Perryville Street  
Harrodsburg, KY 40330

*Submitted by:*



**CMTA**  
Energy Solutions

*November 1, 2018*

**Mechanical | Electrical | Energy Solutions**  
[www.cmta.com](http://www.cmta.com)

# Kentucky Department of Education Version of AIA<sup>®</sup> Document A141<sup>™</sup> – 2004

## *Standard Form of Agreement Between Owner and Design-Builder*



This version of AIA Document A141<sup>™</sup>–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<sup>™</sup>–2004, Standard Form of Agreement Between Owner and Design-Builder — KDE Version,” or “AIA Document A141<sup>™</sup>–2004 — KDE Version.”

# Kentucky Department of Education Version of AIA<sup>®</sup> Document A141<sup>™</sup> – 2004

## *Standard Form of Agreement Between Owner and Design-Builder*

AGREEMENT made as of the \_\_\_\_\_ day of \_\_\_\_\_  
in the year \_\_\_\_\_  
*(In words, indicate day, month and year.)*

BETWEEN the Owner:  
*(Name, legal status, address and other information)*

and the Qualified Provider:  
*(Name, legal status, address and other information)*

for the following Project:  
*(Name, location and detailed description)*



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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.

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### 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

(\$ \_\_\_\_\_),

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

**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.

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§ 4.2 Stipulated Sum

§ 4.2.1 The Stipulated Sum shall be

(\$ \_\_\_\_\_), 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	\$ _____
Sum of Owner’s direct Purchase Orders	\$ _____
Contract Sum (total construction cost less Owner direct Purchase Orders)	\$ _____

§ 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 \_\_\_\_\_ day of month, the Owner shall make payment to the Qualified Provider not later than the \_\_\_\_\_ day of the \_\_\_\_\_ 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 ( \_\_\_\_\_ ) days after the Owner receives the Application for Payment.

- .1 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

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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:

- .1 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 \_\_\_\_\_ percent ( \_\_\_\_\_ %) 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 \_\_\_\_\_ percent ( \_\_\_\_\_ %);
- .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:

- .1 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:

- .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)

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### § 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 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 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
- 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	Relationship to Qualified Provider	Other Information
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§ 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.)*

Name and Address	License Number	Responsibilities to Owner	Other Information
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§ 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.)*

Name and Address	License Number	Responsibilities to Owner	Other Information
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§ 7.4 The Owner's Designated Representative:  
*(Insert name, address and other information.)*

§ 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.)*

§ 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.)*

*(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	Title	Pages
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	
Exhibit H	BG-1 Form and Method and Cost of Financing	

§ 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
-------	------

§ 8.1.4 The Qualified Provider's Proposal, dated \_\_\_\_\_, consists of the following:  
(Either list applicable documents below or refer to an exhibit attached to this Agreement.)

§ 8.1.5 Amendments to the Qualified Provider's Proposal, if any, are as follows:  
(Either list applicable documents below or refer to an exhibit attached to this Agreement.)

§ 8.1.6 The Addenda, if any, are as follows:  
(Either list applicable documents below or refer to an exhibit attached to this Agreement.)

Number	Date	Pages
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§ 8.1.7 Exhibit A, Terms and Conditions.  
(If the parties agree to substitute terms and conditions other than those contained in AIA Document A141–2004, Exhibit A, Terms and Conditions — KDE Version, then identify such terms and conditions and attach to this Agreement as Exhibit A.)

§ 8.1.8 (Not Used)

§ 8.1.9 Exhibit C, Insurance and Bonds, if applicable.  
(Complete AIA Document A141–2004, Exhibit C, Insurance and Bonds — KDE Version or indicate "not applicable.")

§ 8.1.10 Other documents, if any, forming part of the Guaranteed Energy Savings Contract Documents are as follows:  
(Either list applicable documents below or refer to an exhibit attached to this Agreement. List other Exhibits, including Owner's Direct Purchase Orders utilizing the KDE Purchase Order Summary Form, if any.)

This Agreement entered into as of the day and year first written above.

\_\_\_\_\_  
OWNER (Signature)

\_\_\_\_\_  
QUALIFIED PROVIDER (Signature)

\_\_\_\_\_  
(Printed name and title)

\_\_\_\_\_  
(Printed name and title)

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# Kentucky Department of Education Version of AIA® Document A141™ – 2004 Exhibit A

## *Terms and Conditions*

for the following PROJECT:  
*(Name and location or address)*

THE OWNER:  
*(Name, legal status and address)*

THE QUALIFIED PROVIDER:  
*(Name, legal status and address)*

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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.

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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.

§ 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

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.

§ 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

§ 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;
- .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.3.3.2 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

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.3.3.4 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.3.3.7 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

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

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

§ 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

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

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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

§ 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, 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;
- .6 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

§ 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

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

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.

## 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

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:

- .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

- 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,

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- .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 AIA Document A141™ – 2004 Exhibit C

## *Insurance and Bonds*

for the following PROJECT:  
(Name and location or address)

THE OWNER:  
(Name, legal status and address)

THE QUALIFIED PROVIDER:  
(Name, legal status and address)

### 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 Statutory
  - b. Applicable Federal Statutory
  - c. Employer' Liability \$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) \$1,000,000
  - 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	Penal Sum (\$0.00)
Performance and Payment Bonds written on AIA Document A312–2010, Performance Bond and Payment Bond — KDE Version	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.



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**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                              District Energy Policy

November 1, 2018



Mercer County Schools  
530 Perryville St.  
Harrodsburg, KY, 40330  
Attn: Superintendent Dennis Davis

Re: Guaranteed Energy Savings Contract

Mr. Davis,

CMTA is pleased to provide you with this proposal and contract for a guaranteed energy savings contract for Mercer County Schools. The project highlights include:

1. King Middle School will receive a new VRF HVAC system for classroom and office spaces.
2. Mercer County Intermediate School will receive new water-source heat pumps and outside air equipment.
3. New direct digital HVAC control systems to monitor, diagnose, and troubleshoot HVAC systems at all school buildings in the district.
4. LED lighting replacements and retrofits to over 6,000 fixtures.
5. Various utility service adjustments throughout the district.
6. Utility rebates for all applicable work returned to Mercer County Schools.

Exhibit D provides additional information on the scope of work included in the project. The total cost of these upgrades is \$7,846,289. This includes direct purchase of materials that will be deducted from this total and purchased directly by Mercer County Schools to save on the 6% state sales tax.

These upgrades are offered with a guaranteed utility cost savings of \$236,474. CMTA guarantees the savings over the 20-year term and should the project not achieve the savings identified, CMTA will reimburse Mercer County Schools the shortfall on an annual basis per the terms of the contract. The first year 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 Mercer County Schools. This project will improve the indoor learning environments at these facilities while reducing the energy and operational costs. We are excited about getting started and look forward to working with the administration, board and staff. Please let me know if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Jason Volz", is written in a cursive style.

Jason Volz, PE  
Project Manager  
CMTA Energy Solutions

**Exhibit B  
Guaranteed Energy Savings Contract  
Mercer County Schools**



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**Exhibit B is not used.**

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**Scope of Services and Energy Conservation Measures:**

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

**HVAC Replacements & Upgrades**

- H1 HVAC System Upgrades
- H2 HVAC Control System Upgrades
- H3 HVAC Controls Re-Commissioning

**Electrical Replacements & Upgrades**

- E1 Lighting Retrofits and Replacements

**General Measures**

- G1 Utility Rate Changes
- G2 Meter Combinations
- G3 Kitchen Cooler/Freezer Replacements

**Exhibit D – Scope of Services and Energy Conservation Measures  
Guaranteed Energy Savings Contract  
Mercer County Schools**



The following table details where each ECM will be installed within the Mercer County school district:

Site Name	HVAC			Electrical	General		
	H1	H2	H3	E1	G1	G2	G3
AJ Field					✓		
Athletic Complex				✓			
Bus Garage		✓		✓			
Harlow Early Learning Center		✓		✓			
King Middle School	✓	✓		✓		✓	✓
King Middle School Fieldhouse				✓			
Mercer County Elementary School		✓		✓	✓		✓
Mercer County High School		✓	✓	✓		✓	
Mercer County Intermediate School	✓	✓		✓			
Tech Office				✓			

*Table D.1 – Scope of Work Summary*

**LEGEND**

<b>H1</b>	HVAC System Renovations	<b>H2</b>	HVAC Controls System Upgrades	<b>H3</b>	HVAC Controls Re-Commissioning
<b>E1</b>	Lighting Retrofits and Replacements	<b>G1</b>	Utility Rate Changes	<b>G2</b>	Utility Meter Combinations
<b>G3</b>	Kitchen Cooler/Freezer Replacements				

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**Energy Conservation Measure Narratives**

**H1: HVAC Renovations**

The HVAC renovation design drawings and specifications located in Exhibit L detail the specifics of the scope of services and ECMs at each building. A summary of the work to be performed at each building is outlined on the following pages.

**King Middle School**

The HVAC Renovation at this school will consist of the following scope of work:

1. A new variable refrigerant flow (VRF) system will be installed in place of the existing two-pipe unit ventilator system in classroom.
2. Existing fan coil units in hallway and bathroom spaces will be replaced with new fan coil units and will remain on the existing two-pipe hydronic system.
3. Existing air-handling units (AHUs) serving the band room, vaulted lobby, and media center will be replaced with new vertical fan coil units that will remain on the existing two-pipe hydronic system.
4. A new outside air system consisting of roof-mounted energy recovery units will be installed to serve the spaces being converted to the new VRF system.
5. New make-up air units will be installed in the kitchen with their operation linked to the operation of the kitchen exhaust fans, which will also be replaced.
6. Existing ceiling-mounted circulation fans will be demolished and replaced with new ceiling-mounted circulation fans.
7. Existing boilers will be replaced with new condensing boilers.
8. Existing base-mounted hydronic pumps will be demolished and replaced with new base-mounted hydronic pumps along with variable frequency drives (VFDs).
9. Old existing Trane chiller will be demolished and replaced with a new air-cooled chiller. The chiller replaced in 2015 will remain as-is.
10. Existing AHUs in the gym will be demolished and a single new AHU will be installed in the eastern corner of the gym and attached to both branches of existing ductwork to serve the entire gym space.
11. Bi-polar ionization devices will be installed on each individual unit.
12. A new Direct Digital Control (DDC) system will be installed to control the HVAC system and will be tied into a new, web-based control system (See ECM H2).

**Mercer Intermediate School**

The HVAC Renovation at this school will consist of the following scope of work:

1. Existing water-source heat pumps will be demolished and replaced with new water-source heat pumps.

2. The nine heat pumps serving the gym will be demolished, and a single new heat pump will be installed in the eastern locker room shower space to serve the entirety of the gym. Additionally, an energy recovery unit will be installed in the western locker room shower space to provide outside air to the gym.
3. A new outside air system will be installed in the ceiling space consisting energy recovery units that will pre-condition outside air entering the building.
4. The existing fluid coolers will be demolished and replaced with a new open-loop cooling tower and underground sump basin. The existing heat exchanger in the mechanical room will also be replaced with a new plate-frame heat exchanger.
5. New make-up air units will be installed in the kitchen with their operation linked to the operation of the kitchen exhaust fans, which will also be replaced.
6. Existing boilers will be replaced with new, high efficiency condensing boilers.
7. Existing base-mounted hydronic pumps will be demolished and replaced with new base-mounted hydronic pumps along with variable frequency drives (VFDs).
8. Bi-polar ionization devices will be installed on each individual unit.
9. A new Direct Digital Control (DDC) system will be installed to control the HVAC system and will be tied into a new, web-based control system (See ECM H2).

## **H2: HVAC Control System Replacements**

This ECM involves upgrading the HVAC controls at the facilities listed below. A single web-based front-end control system will be installed that will be accessible from any location with an internet connection. All existing controllers will be tied into the new control system, and units not currently being controlled will be added to the controls system. All equipment on the controls system will be commissioned through the adjustment of setpoints, schedules, and logic for optimal energy savings. This new Direct Digital Control (DDC) system will be installed and implemented at the following locations:

1. Harlow Early Learning Center
2. King Middle School
3. Mercer County Elementary School
4. Mercer County High School
5. Mercer County Intermediate School

## **H3: HVAC Controls Re-Commissioning**

The following identifies the HVAC system or controls issues found throughout the district that will be corrected during construction:

1. Mercer County High School

- a) The ventilation units that were installed to serve the original building are currently on a controls system but are running without properly programmed control procedures. This has led to inefficient operation of the units and a number of air pressure issues within the building. These units will be brought back under control to ensure efficient operation and alleviate the air pressure issues. Additionally, these units have mechanical issues. A \$30,000 contingency item has been included to resolve these mechanical issues. These units will not be warranted after they're accepted by the owner.

### E1: Lighting Retrofits and Replacements

The lighting retrofit and replacement design drawings and specifications located in Exhibit K detail the specifics of the scope of services and ECMs at each of the following buildings:

1. Athletic Complex
2. Bus Garage
3. Harlow Early Learning Center
4. King Middle School
5. King Middle School Fieldhouse
6. Mercer County Elementary School
7. Mercer County High School
8. Mercer County Intermediate School
9. Mercer County Maintenance Office
10. Mercer County Tech Office

An outline of the lighting scope of work that will be implemented across the district is summarized below.

#### Interior Lighting

- **Lamp/Ballast Retrofits:** Interior T-5, T-8 and T-12 fluorescent lamps will be replaced with new high efficiency LED lamps. The existing ballasts will be removed as part of the LED upgrades, the new LED lamps will be directly wired and have internal LED drivers.
- **High-Bay Fixtures:** The existing high bay fixtures located in the gymnasiums and the athletic facility across the district will be replaced with new LED high bay fixtures.
- **Light Fixture Replacements:** LED lighting will replace existing metal halide, high pressure sodium, low pressure sodium, and mercury vapor lights. At King Middle School, where the major HVAC renovation will require the entire ceiling grid and lighting infrastructure to be removed, a new lighting layout will be developed and new LED fixtures installed to minimize costs and increase energy savings.
- **Incandescent and CFLs replaced with LED:** All remaining screw-in or plug-in incandescent or CFL lamps will be replaced with new LED lamps.
- **LED Exit Sign Retrofits:** New LED exit signs will replace existing non-LED exit signs.

- **Lens Replacement:** Damaged or missing lenses will be replaced on existing fixtures, as applicable, in order to improve the aesthetics of the newly installed LED lamps.

#### Exterior Lighting

- **Pole Lighting LED Replacements:** High and low wattage HID fixtures will be replaced with new high efficiency LED fixtures.
- **Wall Pack LED Replacements:** High and low wattage HID wall packs will be replaced with high efficiency LED fixtures.
- **Miscellaneous Exterior Lighting:** Non-LED exterior recessed, surface mount, flood lighting, etc. will be replaced with high efficiency LED lamps.

#### Lighting Control

- **Exterior Lighting Control:** Exterior LED pole fixtures installed as part of this project will contain a photo-cell to control the fixture. This photo-cell will prevent these fixtures from turning on while there is still sufficient daylight outside.

### **G1: Utility Rate Changes**

Currently, there are facilities that are not on the correct electric rate, resulting in extra, unnecessary charges. These electric rates will be corrected with the respective utility provider. Electric rate changes will be sought for the following facilities:

1. AJ Field
2. Mercer County Elementary School
3. Harlow Early Learning Center

### **G2: Utility Meter Combinations**

At present, several facilities have multiple electric meters and accounts associated with their campuses. Some of these meters can be combined to reduce charges for electric service and to help the school district purchase power in a more efficient manner. Electric meters will be combined at the following facilities:

1. King Middle School
2. Mercer County High School

### **G3: Kitchen Cooler/Freezer Replacements**

This ECM involves upgrading existing kitchen walk-in cooler and freezer units at the following facilities:

1. King Middle School
  - a) The existing walk-in cooler and freezer at King Middle School are due for replacement, and as such, they have incurred high maintenance costs to keep online. They will be replaced with new

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units to eliminate the extra maintenance costs incurred by the school district to keep the existing units functioning.

2. Mercer County Elementary School

- a) The existing walk-in cooler and freezer at the Elementary School are water-cooled systems and consume a large amount of water for their cooling needs. This results in higher water and sewage costs than necessary. These units will be replaced with air-cooled systems in order to eliminate the excessive water and sewer costs.

**Energy Savings Guarantee:**

**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.

*Table E.1.1 – 3-Year Average Energy Usage Baselines*

Facility	Floor Area (SF)	Baseline Conditions			EUI (kBtu/sf)	Water (kgal)
		Electric (kWh/yr)	Demand (kW/yr)	Natural Gas (Therms/yr)		
Harlow Early Learning Center	48,855	546,453	2,417	10,674	60.2	613
King Middle School	88,327	1,372,505	3,592	34,476	92.1	449
Mercer Co. Intermediate	78,200	1,076,439	3,928	25,183	79.2	722
Mercer Co. Elementary	97,588	1,321,846	3,722	8,877	55.3	2,143
Mercer Co. HS	140,303	2,100,487	5,751	0	51.1	3,305
Athletic Complex	36,877	262,667	723	2,565	31.3	139
Tech Office	5,225	80,173	347	0	69.6	0
Bus Garage	7,700	202,938	307	5,264	158.3	41
KMS Field House	5,300	62,182	341	770	54.6	382

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. These rates are based on the current tariff or rates identified on the utility invoices for each of the facilities.

Kentucky Utilities – Time of Day Secondary  
 Applies to King Middle School

Basic Service Charge	\$200
Energy Charge	\$0.03229 per kWh
Demand Charge	\$3.03 per kW Base/\$6.41. per kW Inter./\$8.09 per kW Peak
Fees	<u>\$0.00456/kWh</u>
	= Total Electric Charges

Kentucky Utilities – Power Service Secondary  
 Applies to Athletic Complex

**Exhibit E – Energy Savings Guarantee  
Guaranteed Energy Savings Contract  
Mercer County Schools**



Basic Service Charge	\$90.00
Energy Charge	\$0.03270 per kWh
Demand Charge	\$21.03 per kW (summer)/\$18.81 per kW (winter)
Fees	<u>\$0.00580/kWh</u>
	= Total Electric Charges

**Bluegrass Energy – LP-2**

Applies to Mercer County High School, Mercer County Intermediate School

Basic Service Charge	\$111.14
Energy Charge	\$0.04774 per kWh
Demand Charge	\$8.34 per kW
Fees	<u>\$0.00871/kWh</u>
	= Total Electric Charges

The following blended rates were used as the basis of savings for the following facilities where multiple meters on multiple electric rates factor in to the facility’s total electric costs or for facilities with only electric savings expected.

**Bus Garage**

Rates: Kentucky Utilities – All Electric School – 1-Phase, General Service – 3-Phase

Energy Charge	\$0.10500 per kWh
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**Harlow Early Learning Center**

Rates: Kentucky Utilities – All Electric School – 3-Phase, General Service – 1-Phase, Power Service Secondary

Energy Charge	\$0.10090 per kWh
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**King Middle School Field House**

Rate: Kentucky Utilities – All Electric School – 3-Phase

Energy Charge	\$0.12262 per kWh
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**Mercer County Elementary School**

Rates: Kentucky Utilities – All Electric School – 1-Phase, All Electric School – 3-Phase, General Service- 1-Phase

Energy Charge	\$0.08993 per kWh
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**Tech Office**

Rate: Kentucky Utilities – All Electric School – 1-Phase

Energy Charge                      \$0.10067 per kWh

Atmos Energy Natural Gas Service

Based on average cost per therm from 2017 utility data

Facility	Gas \$/therm
Harlow Early Learning Center	0.76
King Middle School	0.68
Mercer Co. Intermediate	0.77
Mercer Co. Elementary	0.75
Mercer Co. HS	NA
Athletic Complex	0.84
Family Resource Ctr	NA
Tech Office	NA
Bus Garage	0.79
KMS Field House	1.71

City of Harrodsburg Water and Sewer Service

Based on average cost per kgal from the last 3 years of utility data

Facility	Water & Sewer \$/kgal
Harlow Early Learning Center	10.27
King Middle School	11.37
Mercer Co. Intermediate	10.40
Mercer Co. Elementary	10.34
Mercer Co. HS	8.25
Athletic Complex	12.70
Family Resource Ctr	NA
Tech Office	NA
Bus Garage	12.71
KMS Field House	4.15

### **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, E.3.2 and E3.3* 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 Savings

Facility	Guaranteed Savings			
	Electric (kWh/yr)	Demand (kW/yr)	Natural Gas (Therms/yr)	Water (kgal)
Harlow Early Learning Center	119,533	388	3,346	0
King Middle School	699,439	663	23,877	0
Mercer Co. Intermediate	503,461	1,108	18,145	0
Mercer Co. Elementary	463,804	787	1,070	460
Mercer Co. HS	579,030	1,231	0	0
Athletic Complex	46,506	100	150	0
Tech Office	5,225	0	0	0
Bus Garage	67,534	79	28	0
KMS Field House	9,687	0	0	0

Table E.3.2 – Calculated Year 1 Utility Cost Savings

Facility	Calculated First Year Utility Cost Savings
Harlow Early Learning Center	\$ 14,531.60
King Middle School	\$ 53,996.60
Mercer Co. Intermediate	\$ 51,389.60
Mercer Co. Elementary	\$ 48,776.02
Mercer Co. HS	\$ 42,609.89
Athletic Complex	\$ 3,923.23
Tech Office	\$ 531.03
Bus Garage	\$ 7,109.32
KMS Field House	\$ 1,186.76

**E.4 Energy Cost Escalation Rate**

The projected annual energy escalation rate used for determining energy cost savings is 2.00%. The Owner and Qualified Provider have reviewed the history of energy escalation and agree that this is an appropriate rate.

**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.

*Table E.5.1 – O&M Savings Determination*

Operational and Maintenance Savings		
Facility	Justification	First Year Avoided Costs
Harlow Early Learning Center	Elimination of lamp and ballast replacements	\$ 1,004.00
King Middle School	Elimination of lamp and ballast replacements	\$ 1,890.00
	Reduction in HVAC system and kitchen cooler/freezer repairs	\$ 3,341.00
Mercer Co. Intermediate	Elimination of lamp and ballast replacements	\$ 1,567.00
	Reduction in HVAC system repairs	\$ 15,000.00
Mercer Co. Elementary	Elimination of lamp and ballast replacements	\$ 2,336.00
	Reduction in kitchen cooler/freezer repairs	\$ 753.00
Mercer Co. HS	Elimination of lamp and ballast replacements	\$ 15,000.00
Athletic Complex	Elimination of lamp and ballast replacements	\$ 502.00
Tech Office	Elimination of lamp and ballast replacements	\$ 78.00
Bus Garage	Elimination of lamp and ballast replacements	\$ 375.00
KMS Field House	Elimination of lamp and ballast replacements	\$ 119.00

**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 1.50%. 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**

Rebates and incentives to perform energy efficiency upgrades may exist. The rebate process will be administered by the Qualified Provider, and the funds will be the Owner’s. The amount of rebates or incentives will be credited towards the first year savings figures on the Year 1 M&V reconciliation.

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

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### **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:

1. Provide the Qualified Provider with online access to utility bills (where applicable), and/or provide utility bills in a timely fashion (within 10 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. To implement an energy policy to establish temperature setpoint guidelines, protocol for scheduling buildings during unoccupied periods, and to prohibit staff from using personal

refrigerators or electric space heaters which would offset the benefits of the upgrades performed in this project.

8. Continue the Measurement and Verification program as outlined in *Exhibit G - Support Services*. Should the M&V program be suspended for any given year, the Owner relieves the Qualified Provider of the guarantee liability for that same year. The Owner has the right to renew, suspend or resume 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 sixty (60) 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.3.2 and E3.3*, 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 future guarantee years.

#### **E.12 Adjustments to the Guarantee**

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

1. Changes in the building construction, such as architectural features, square footage additions, building system changes, etc.
2. Weather variance from baseline years to current years. For purposes of documenting the baseline years (October 2015 – October 2018), the following parameters define the baseline period:
  - a. Heating Degree Days (base 55°F): 2316 (average per year)
  - b. Cooling Degree Days (base 55 °F): 3455 (average per year)
3. Addition of energy consuming equipment at the site.
4. Changes in occupancy

5. 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* below.

Table E.13.1 – Measurement and Verification Plan

ECM	ECM Description	M&V Option	Site Name
H1	HVAC System Renovations	C	King Middle School
			Mercer County Intermediate School
H2	HVAC Controls System Upgrades	C	Harlow Early Learning Center
			King Middle School
			Mercer County Elementary School
			Mercer County High School
H3	HVAC Controls Re-Commissioning	C	Mercer County Intermediate School
E1	Lighting Retrofits and Replacements	A	Athletic Complex
			Tech Office
			Bus Garage
		C	Harlow Early Learning Center
			King Middle School
			King Middle School Fieldhouse
			Mercer County Elementary School
G1	Utility Rate Changes	C	Mercer County High School
		C	AJ Field
G2	Utility Meter Combinations	C	Mercer County Elementary School
			King Middle School
G3	Kitchen Cooler/Freezer Replacements	A	Mercer County High School
			King Middle School
			Mercer County Elementary School

The measurement and verification plan for each energy conservation measure is detailed by the applicable IPMVP option on the following pages.

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**H1 HVAC System Renovations, H2 HVAC Controls System Upgrades, H3 HVAC Controls Re-Commissioning, E1 Lighting Retrofits and Replacements, G1 Utility Rate Changes, G2 Utility Meter Combinations,**

*Savings Calculations:*

*CMTA used Microsoft Excel to accurately model the pre- and post-construction energy consumption of the building HVAC Components. Data Logger data was used to define existing operating conditions. Energy savings from the baseline (old) to post-project (new) conditions were based upon industry standard engineering calculations, reference section A.1 of the appendix for more information.*

*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.*
- 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 in order 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. Additionally, CMTA will access the utility bills remotely at a minimum frequency of once every 6 months to verify consumption.*

**G3 Kitchen Cooler/Freezer Replacements**

*Savings Calculations:*

*CMTA measured the water flow for the water cooled freezer and coolers for Mercer Elementary. Since this unit will be replaced with an air cooled device, this water consumption will be fully eliminated.*

*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: Necessary energy inputs were measured. These include but are not limited to, water consumption of freezer and cooler, freezer/cooler horsepower. Actual freezer/cooler runtimes were verified to run all year long . Post-Construction freezer/cooler*

*runtimes and schedules will be verified. Additionally, the following points will be verified for proper control sequences when available:*

- *Water consumption by freezer/coolers*
3. *Sample size (or population) measured: A sample of 100% of freezer/coolers water consumption will be measured.*
  4. *How measurements are performed: CMTA will use a water meter prior to the installation of the freezer/coolers to identify total water consumption due to freezer/cooler and will leave the same water meter in place after the new freezer/coolers are in place.*
  5. *How measurements are used to determine the actual savings: Verification that the equipment was installed per the contract scope of work and operating at the specified operating conditions in the calculation.*
  6. *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.*

## **E1 Lighting Retrofits and Replacements**

*Savings Calculations:*

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

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

$$kWh \text{ Savings} = kW \text{ Savings} \times \text{Annual Operating Hours}$$

*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*

*Energy Savings for lighting controls:*

$$kWh \text{ Savings} = kW \text{ of Controlled Lighting} \times (\text{Existing Hours} - \text{New Hours})$$

*The existing hours and new hours for each facility will vary according to the use of the space, reference section A.2 of the appendix for more information.*

### *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 5% of each type of fixture will be measured if manufacturer's data is unavailable. For cases where 5% 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 post-measurements (watts) will be inserted in the calculation spreadsheet to determine the actual savings.*
6. *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 8am – 3pm.

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

Ventilation systems are designed to ventilate an 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.

#### *Table E.14.1 – Occupancy Schedules and Temperature Setpoints*

Elementary Schools and Intermediate School					
Space	Occupancy Schedules	Occupied Cooling Setpoint	Occupied Heating Setpoint	Unoccupied Cooling Setpoints	Unoccupied Heating Setpoints
Classrooms Media Centers Workrooms Common Areas	M-F 7am - 3:30pm	73°F +/- 2°F	69°F +/- 3°F	80°F	55°F
Kitchen	M-F 6am - 2pm	75°F +/- 2°F	69°F +/- 3°F	80°F	55°F
Cafeteria	M-F 7am - 9am M-F 11am - 1pm	73°F +/- 2°F	69°F +/- 3°F	80°F	55°F
Administration	M-F 7am - 5pm	73°F +/- 2°F	69°F +/- 3°F	80°F	55°F
Gym	M-F 7am - 5pm	75°F +/- 2°F	69°F +/- 3°F	80°F	55°F

High and Middle Schools					
Space	Occupancy Schedules	Occupied Cooling Setpoint	Occupied Heating Setpoint	Unoccupied Cooling Setpoints	Unoccupied Heating Setpoints
Classrooms Media Centers Workrooms Common Areas	M-F 7am - 4pm	73°F +/- 2°F	69°F +/- 3°F	80°F	55°F
Kitchen	M-F 6am - 2pm	73°F +/- 2°F	69°F +/- 3°F	80°F	55°F
Cafeteria	M-F 7am - 9am M-F 11am - 1pm	73°F +/- 2°F	69°F +/- 3°F	80°F	55°F
Administration	M-F 7am - 5pm	73°F +/- 2°F	69°F +/- 3°F	80°F	55°F
Gym	M-F 7am - 5pm	73°F +/- 2°F	69°F +/- 3°F	80°F	55°F



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**Annual Reconciliation Statement:**

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



**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,

A handwritten signature in blue ink, appearing to read "Jeremy Kelly".

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 and Resources 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%
			<b>Total Cost Savings</b>	<b>\$142,180</b>	<b>\$152,667</b>	<b>107%</b>

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

Building	kWh Saved	kW Saved	CCF Saved	Propane Saved	Water Saved	\$ Saved
Eastern Elementary	191,160	607	0	11,645	265	\$ 43,015
Henry County Middle School	325,152	510	16,526	0	3,183	\$ 58,475
Henry County High School	320,400	457	4,329	0	0	\$ 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	\$ 24,738
					<b>Total</b>	<b>\$ 152,667</b>

**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
<b>Total</b>		<b>\$ 124,288</b>

**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.

Month	Baseline				Guaranteed Usage				Actual Usage			
	Electrical		Water/ Sewer		Electrical		Water/ Sewer		Electrical		Water/ Sewer	
	Consumption kWh	Demand kW	Kgal	Kgal	Consumption 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 Savings	kW Savings	kGal Savings
<b>Total Savings</b>	<b>191,160</b>	<b>607</b>	<b>265</b>
<b>Guaranteed Savings</b>	<b>89,659</b>	<b>721.0</b>	<b>359</b>
<b>Percent Ahead of Guarantee</b>	<b>113.21%</b>	<b>-15.88%</b>	<b>-26.24%</b>

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

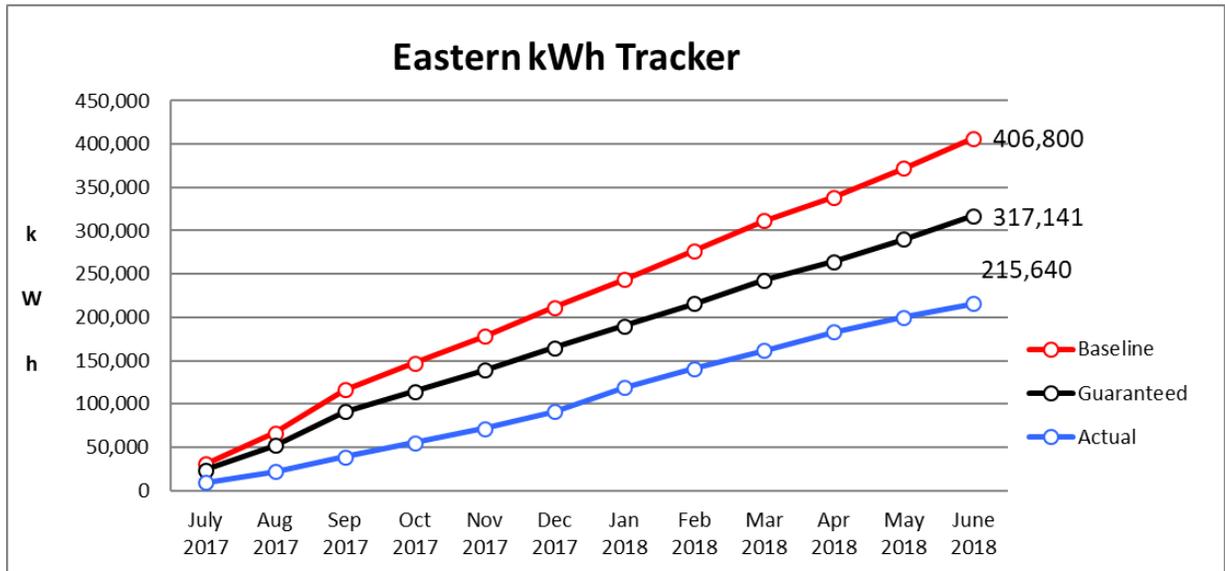
Month	Propane Usage		
	Baseline	Measured	Saved
	Gallons	Gallons	Gallons
July 2017	0	0	0
Aug 2017	3,309	0	3,309
Sep 2017	0	0	0
Oct 2017	0	0	0
Nov 2017	2,811	0	2,811
Dec 2017	1,630	0	1,630
Jan 2018	2,895	0	2,895
Feb 2018	1,000	0	1,000
Mar 2018	0	0	0
Apr 2018	0	0	0
May 2018	0	0	0
June 2018	0	0	0
<b>Total Saved</b>			<b>11,645</b>
<b>Cost Savings</b>			<b>\$ 23,291</b>

**Table 5:** Savings attributed to eliminating propane.

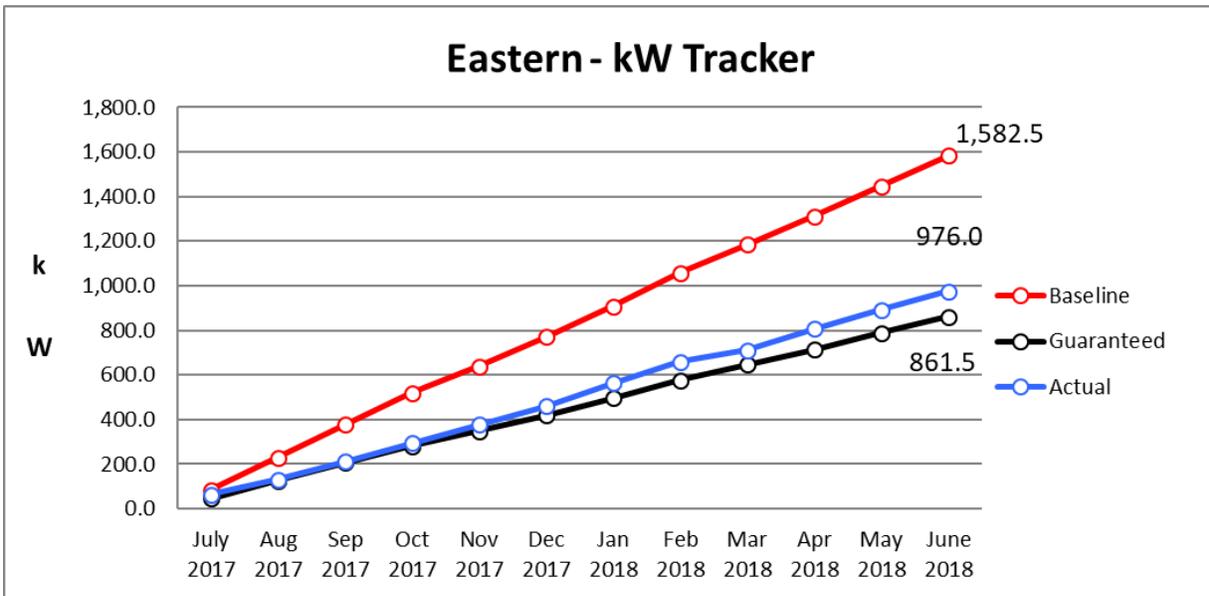


Month	Financial Savings			
	Electrical		Water/ Sewer	Propane
	\$ kWh	\$ kW	\$	\$
July 2017	\$ 719.11	\$ 400.47	\$ (129.40)	\$ 0
Aug 2017	\$ 784.40	\$ 1,687.99	\$ 35.35	\$ 6,618
Sep 2017	\$ 1,099.76	\$ 1,524.36	\$ (31.83)	\$ -
Oct 2017	\$ 478.07	\$ 1,074.58	\$ 28.74	\$ -
Nov 2017	\$ 484.10	\$ 722.16	\$ (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	\$ -
<b>Total Savings</b>	<b>\$ 6,399.70</b>	<b>\$ 12,289.13</b>	<b>\$ 1,035.56</b>	<b>\$ 23,291</b>
	<b>Cumulative Savings</b>		\$	43,015
	<b>Guaranteed Savings</b>		\$	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 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.

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



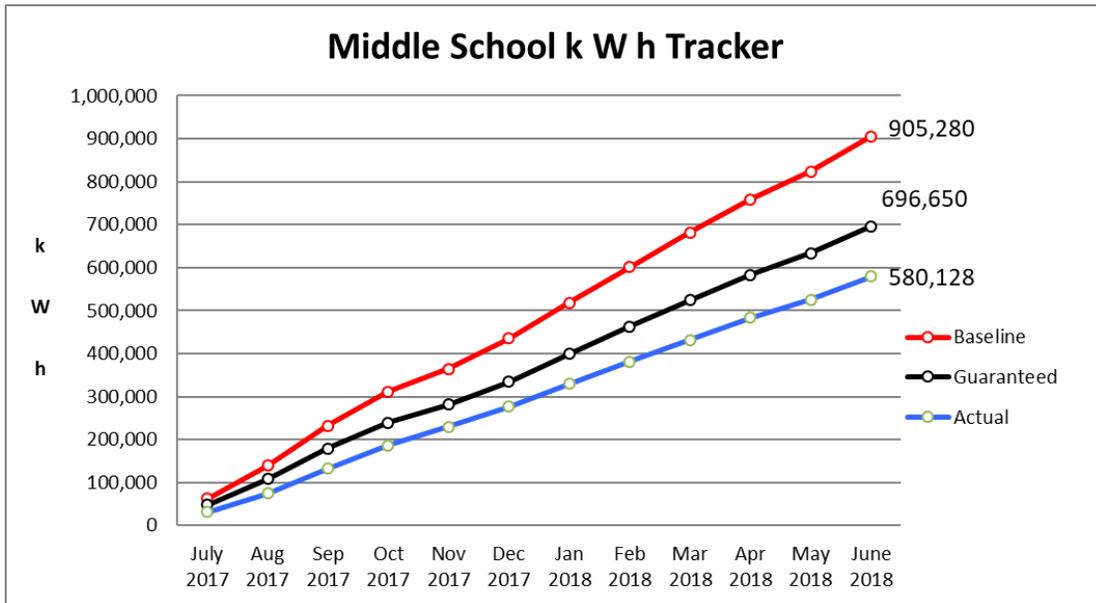
Month	Baseline				Guaranteed Usage				Actual Usage			
	Electrical		Natural Gas	Water/ Sewer	Electrical		Natural Gas	Water/ Sewer	Electrical		Natural Gas	Water/ Sewer
	Consumption kWh	Demand kW	CCF	Kgal	Consumption kWh	Demand kW	CCF	Kgal	Consumption kWh	Demand kW	CCF	Kgal
July 2017	62,288	258	88	407	47,933	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 Savings	kW Savings	CCF Savings	kGal 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%

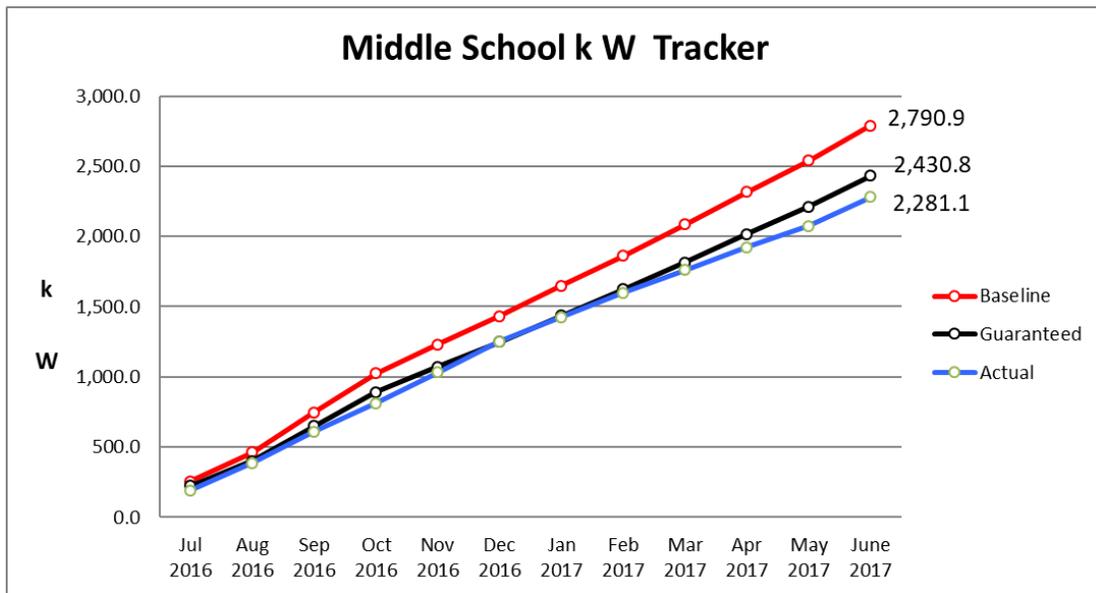
Table 7: Monthly comparison of baseline, guaranteed, and actual performance

Month	Financial Savings			
	Electrical		Natural Gas	Water/ Sewer
	\$ 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)
<b>Total Savings</b>	<b>\$ 10,764.31</b>	<b>\$ 10,278.84</b>	<b>\$ 11,224.56</b>	<b>\$ 26,207.31</b>
	<b>Cumulative Savings</b>		<b>\$</b>	<b>58,475</b>
	<b>Guaranteed Savings</b>		<b>\$</b>	<b>60,023</b>

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.

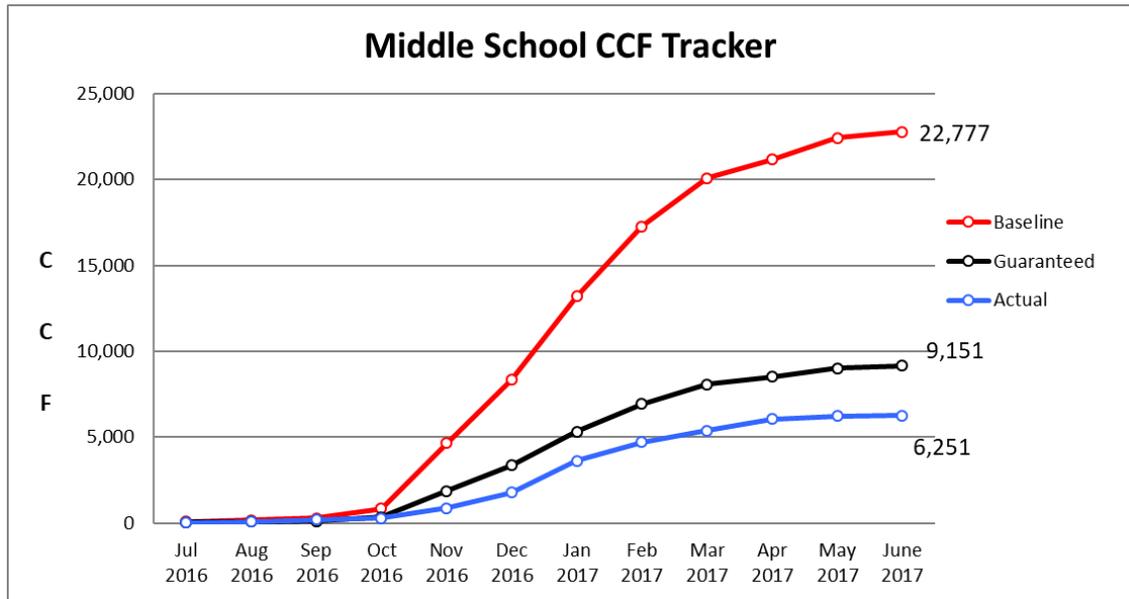


Figure 5 Natural Gas tracker showing the actual performance beating the guarantee by more than 30%.

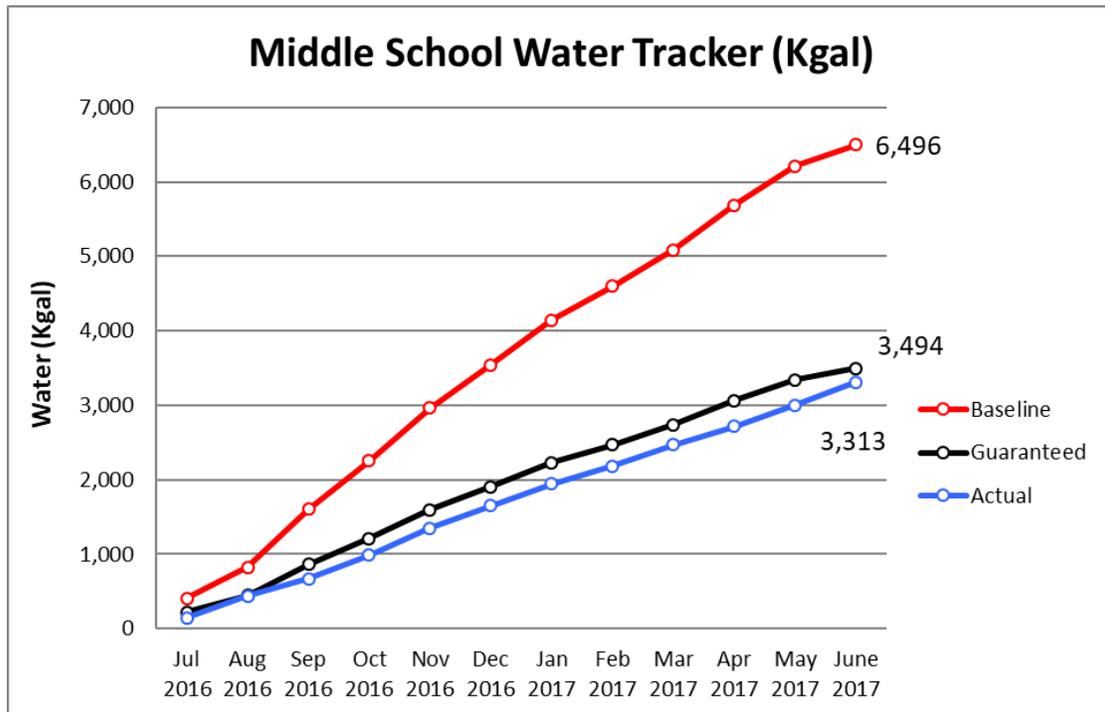


Figure 6 Water tracker showing the actual performance beating the guarantee.

**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.

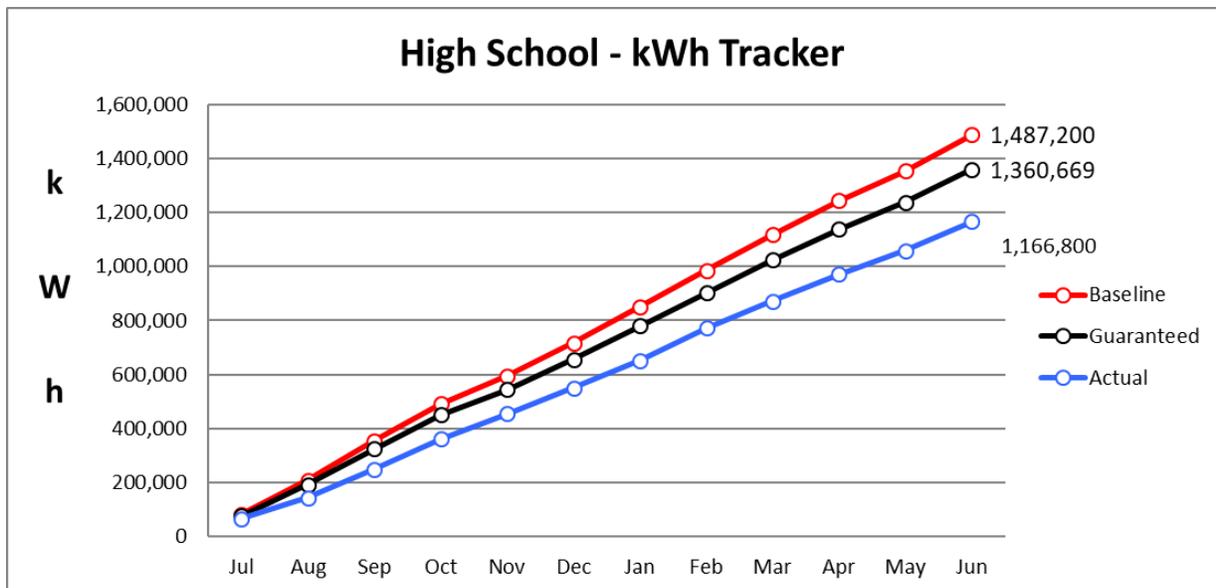
Month	Baseline			Guaranteed Usage			Actual Usage		
	Electrical		Natural Gas	Electrical		Natural Gas	Electrical		Natural Gas
	Consumption kWh	Demand kW	CCF	Consumption kWh	Demand kW	CCF	Consumption kWh	Demand kW	CCF
July 2017	84,200	329	171	77,036	303	131	66,400	257	140
Aug 2017	126,200	288	194	115,463	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

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

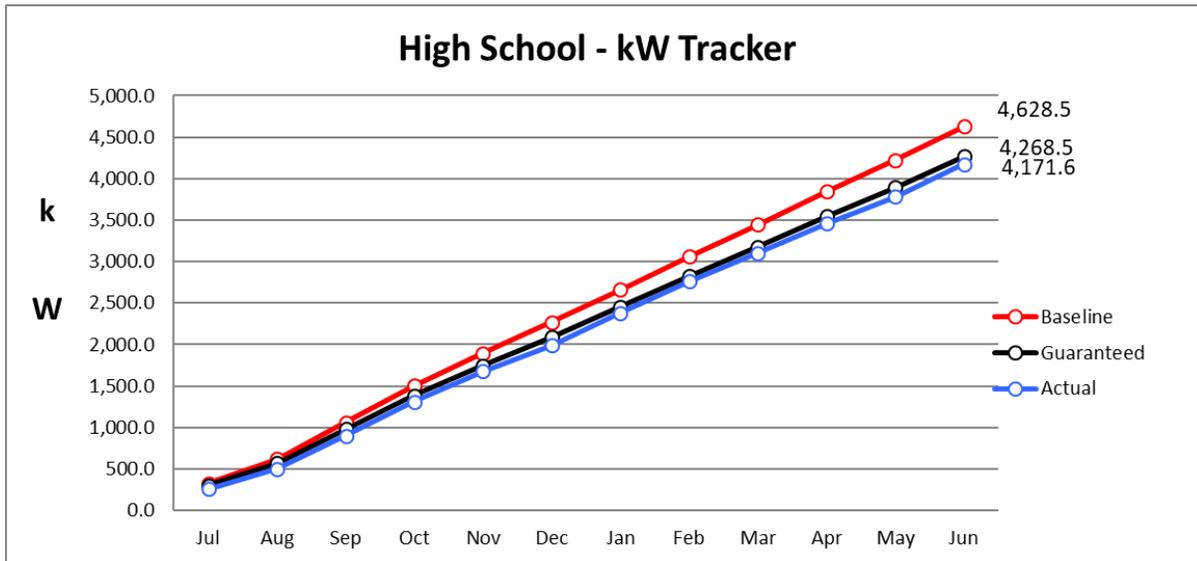
**Table 9:** Monthly comparison of baseline, guaranteed, and actual performance.

Financial Savings			
Month	Electrical		Natural Gas
	\$ kWh	\$ kW	CCF
July 2017	\$ 713.97	\$ 1,065.73	\$ 21.06
Aug 2017	\$ 1,943.34	\$ 610.88	\$ 36.34
Sep 2017	\$ 1,511.23	\$ 708.03	\$ -
Oct 2017	\$ 1,070.63	\$ 471.04	\$ 226.52
Nov 2017	\$ 400.46	\$ 298.82	\$ 461.52
Dec 2017	\$ 1,010.24	\$ 922.94	\$ 1,102.35
Jan 2018	\$ 1,348.80	\$ 101.57	\$ 571.89
Feb 2018	\$ 521.64	\$ 216.38	\$ 714.19
Mar 2018	\$ 1,372.99	\$ 659.46	\$ 206.14
Apr 2018	\$ 971.93	\$ 618.24	\$ (523.33)
May 2018	\$ 936.09	\$ 856.70	\$ 89.66
June 2018	\$ 908.74	\$ 195.78	\$ 33.96
<b>Total Savings</b>	<b>\$ 12,710.04</b>	<b>\$ 6,725.57</b>	<b>\$ 2,940.28</b>
<b>Cumulative Savings</b>			<b>\$ 22,376</b>
<b>Guaranteed Savings</b>			<b>\$ 14,219</b>

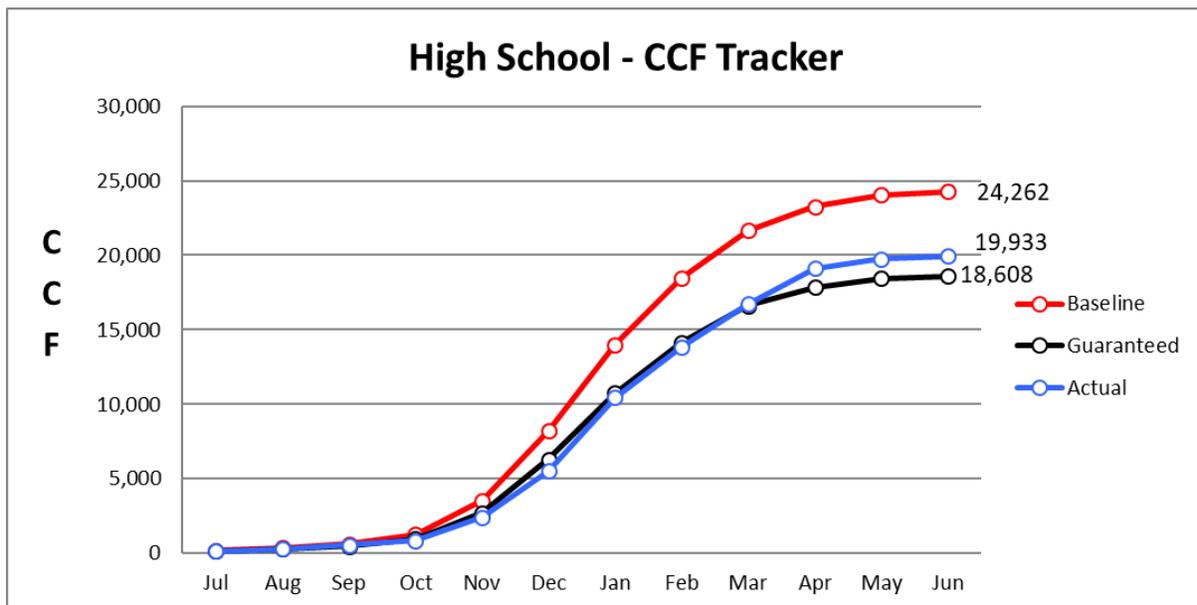
**Table 10:** Henry County High School savings summary showing more than \$20,000 in savings.



**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.

Month	Baseline			Guaranteed Usage			Actual Usage		
	Electrical		Natural Gas	Electrical		Natural Gas	Electrical		Natural Gas
	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

	kWh Savings	kW Savings	CCF 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.

Month	Financial Savings		
	Electrical		Natural Gas
	\$ 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
<b>Total Savings</b>	<b>\$ 3,936.23</b>	<b>\$ (2,841.99)</b>	<b>\$ 289.34</b>
	<b>Cumulative Savings</b>		<b>\$ 1,384</b>
	<b>Guaranteed Savings</b>		<b>\$ 3,824</b>

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

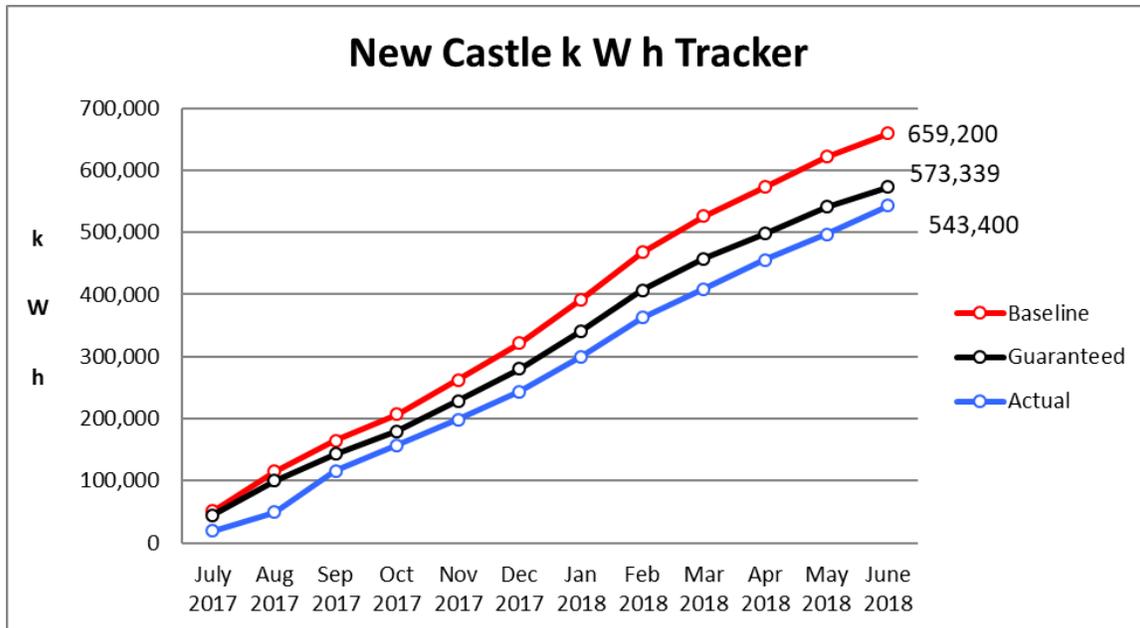


Figure 10: Electrical consumption tracker showing the actual performance beating the guarantee.



**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 Fixtures	Number of Lamps	Wattage of Lamps	Wattage of Fixture	Type Fixture	Total Watts	Number of Watts in Retrofit	Hours	#Days	kWh 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 Fluorescent	1,776	576	1	20	391
Wash Bay	16	2	32	74	T12 Fluorescent	2,368	768	4	20	2,084
						11,472	4,544			19,403
<b>Total Savings</b>						<b>\$ 2,063.67</b>				

**Table 12:** Stipulated savings at the Bus Garage.



**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
<b>Total Savings:</b>					<b>\$25,758.47</b>

**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:		347.00													
July 2017-June 2018															
Inputs from Utility Bills															
Month	kWh	Actual KW	Power Factor	Billed KW	KW	Base KW	Intermediate KW	Peak KW	Electric DSM	Env. Sur. %	Env. Sur. Deduction	Fuel Adjustment	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 Cust charge															
\$0.03229 \$/kwh Energy Charge															
3.03 \$/KW Base Demand															
6.41 \$/KW Intermediate Demand															
8.09 \$/KW Peak Demand															
Current Rate															
Time of Day Secondary Rate															
Month	Customer Charge	Energy Charge	Base Demand Charge	Intermediate Demand Charge	Peak Demand Charge	Electric DSM	Environmental Surcharge	Fuel Adjustment	Franchise Fee	School Tax	Sales Tax	Total			
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			
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			
												Total	\$117,605.6		
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															
Power Service Secondary Rate															
Month	Customer Charge	Energy Charge	Demand Charge	Electric DSM	Environmental Surcharge	Fuel Adjustment	Franchise Fee	School Tax	Sales Tax	Existing Rate Total	Savings = Existing Rate Total - Proposed Rate 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)**



**New Castle Elementary School**

Contract Capacity: 176.00  
kWh, 2017 - June, 2018

**Inputs from Utility Bills**

Month	kWh	Actual KW	Power Factor	Billed KW	KW	Base KW	Intermediate KW	Peak KW	Electric DSM	Env. Sur. %	Env. Sur. Deduction	Fuel Adjustment	Franchise Fee	School Tax	Sales Tax
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**

July 2017 - June 2018  
90 Customer Charge / Month  
\$0.03289 \$/kwh  
18.75 Demand \$/KW (May through September)  
16.78 Demand \$/KW (October through April)

**Current Rate  
Power Service Secondary Rate**

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: \$64,494.4

**General Service 3 Phase Rate**

July 2017 - June 2018  
50.4 \$/Month Cust Charge  
\$0.10490 \$/kwh Energy Charge

**Previous Rate  
General Service 3 Phase Rate**

Month	Customer Charge	Energy Charge	Demand Charge	Electric DSM	Environmental Surcharge	Fuel Adjustment	Franchise Fee	School Tax	Sales Tax	Existing Rate Total	Savings = Existing Rate Total - Proposed Rate
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	\$286.96	-\$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 \$-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)			Year 5 (2017-2018)			Year 5 vs Baseline		
	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
<b>TOTALS</b>	<b>3,254</b>	<b>2,273</b>	<b>5,527</b>	<b>3,868</b>	<b>2,100</b>	<b>5,968</b>	<b>615</b>	<b>-173</b>	<b>442</b>

**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
<b>Total</b>			<b>60,263</b>	<b>4,193</b>

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

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.



**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.
2. CMTA Energy Solutions will have access to the building automation system for all schools to continually review system operation. An engineer will review system operation at least monthly and more often as necessitated by the building energy performance.
3. CMTA Energy Solutions will provide an annual reconciliation report to Mercer County 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% per year as seen in the below table.
5. Mercer County Board of Education can discontinue the M&V Service at any moment. If cancelled, energy savings will no longer be guaranteed.

Year	M&V
2019	\$0
2020	\$6,500
2021	\$6,598
2022	\$6,696
2023	\$6,797
2024	\$6,899
2025	\$7,002
2026	\$7,107
2027	\$7,214
2028	\$7,322
2029	\$7,432
2030	\$7,544
2031	\$7,657
2032	\$7,772
2033	\$7,888
2034	\$8,006
2035	\$8,127
2036	\$8,248
2037	\$8,372
2038	\$8,498
<b>Total</b>	<b>\$141,679</b>



**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 Sinclair and Associates. 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

Mercer County Schools								
Proposed Project Financial Pro-Forma								
Cost Inputs				Savings Inputs				
Project Cost		\$ 7,846,289		Year 1 Guarantee Energy Savings (GES)			\$ 236,474	
Cost to Financing		\$ 223,711		Year 1 O&M Savings			\$ 40,244	
Bond Issue		\$ 8,070,000		Annual Energy Escalation Rate			2.00%	
Interest Rate		3.79%		Annual O&M Rate Escalation			1.50%	
Financing Term (Years)		20		Restricted Funds Required			\$ 3,570,000	
Year 2 Additional Maintenance/M&V		\$ 7,000		% of Project Funded from Savings			69%	
Year	Bond Payment	M&V	Total Cost	Energy Savings	O&M Savings	Total Cost Savings	Cash Flow	Cumulative Cashflow
2019	\$498,317	\$0	\$498,317	\$236,474	\$108,244	\$344,718	-\$153,599	\$ (153,599)
2020	\$425,535	\$7,000	\$432,535	\$241,204	\$40,848	\$282,051	-\$150,484	\$ (304,082)
2021	\$432,035	\$7,105	\$439,140	\$246,028	\$41,460	\$287,488	-\$151,652	\$ (455,734)
2022	\$438,285	\$7,212	\$445,497	\$250,949	\$42,082	\$293,031	-\$152,466	\$ (608,200)
2023	\$444,285	\$7,320	\$451,605	\$255,968	\$42,713	\$298,681	-\$152,924	\$ (761,124)
2024	\$450,035	\$7,430	\$457,465	\$261,087	\$43,354	\$304,441	-\$153,024	\$ (914,147)
2025	\$455,535	\$7,541	\$463,076	\$266,309	\$44,004	\$310,313	-\$152,763	\$ (1,066,910)
2026	\$459,835	\$7,654	\$467,489	\$271,635	\$44,664	\$316,299	-\$151,190	\$ (1,218,100)
2027	\$678,835	\$7,769	\$686,604	\$277,068	\$45,334	\$322,402	-\$364,202	\$ (1,582,302)
2028	\$680,023	\$7,885	\$687,908	\$282,609	\$46,014	\$328,623	-\$359,285	\$ (1,941,586)
2029	\$690,723	\$8,004	\$698,726	\$288,261	\$46,705	\$334,966	-\$363,761	\$ (2,305,347)
2030	\$694,448	\$8,124	\$702,571	\$294,026	\$47,405	\$341,432	-\$361,140	\$ (2,666,487)
2031	\$702,473	\$8,246	\$710,718	\$299,907	\$48,116	\$348,023	-\$362,695	\$ (3,029,182)
2032	\$708,348	\$8,369	\$716,717	\$305,905	\$48,838	\$354,743	-\$361,974	\$ (3,391,156)
2033	\$713,285	\$8,495	\$721,780	\$312,023	\$49,571	\$361,594	-\$360,186	\$ (3,751,342)
2034	\$722,005	\$8,622	\$730,627	\$318,263	\$50,314	\$368,578	-\$362,050	\$ (4,113,391)
2035	\$728,405	\$8,752	\$737,157	\$324,629	\$51,069	\$375,698	-\$361,459	\$ (4,474,850)
2036	\$733,605	\$8,883	\$742,488	\$331,121	\$51,835	\$382,956	-\$359,532	\$ (4,834,382)
2037	\$742,605	\$9,016	\$751,621	\$337,744	\$52,612	\$390,356	-\$361,265	\$ (5,195,647)
2038	\$749,520	\$9,151	\$758,671	\$344,499	\$53,402	\$397,900	-\$360,771	\$ (5,556,418)
<b>Totals</b>	<b>\$12,148,135</b>	<b>\$152,577</b>	<b>\$12,300,712</b>	<b>\$5,745,708</b>	<b>\$998,586</b>	<b>\$6,744,294</b>	<b>-\$5,556,418</b>	

\*Anticipated utility rebate funds to be included in Year 1 O&M savings upon completion of Year 1 M&V Report.

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**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  
Guaranteed Energy Savings Contract  
Mercer County Schools**



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**Non-Collusion Affidavit:**

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

The undersigned agent, being duly sworn, states that neither he/she nor his/her firm has any relationship (financial or through kinship) to:

- Any school board member or the superintendent;
- Any or all prime contractors or material suppliers when using the construction management method of construction.

The undersigned further states that he/she has not entered into any agreement or collusion with any person relative to the price bid by anyone nor has he/she attempted to induce anyone to refrain from bidding.

Explain below any kinship or financial relationship you may have to any parties as mentioned above on this project.

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This affidavit is subject to KRS 45A.455 prohibition against conflict of interest, and gratuities and kickbacks.

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Name	Title
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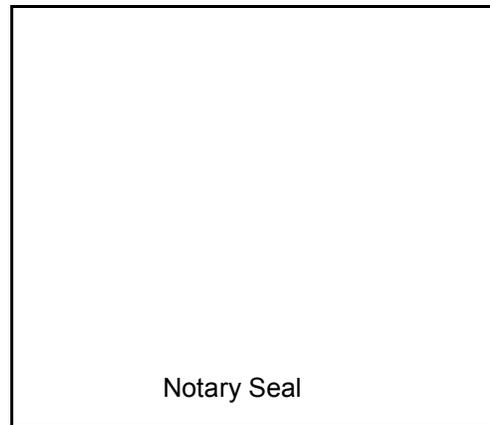
Name of Company

Subscribed and Sworn to Me this  
\_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_\_.

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Notary Signature

My Commission expires:  
\_\_\_\_\_, 20\_\_\_\_\_.





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**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 attached CD to review the scope in detail.

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**Summary:**

Mercer County Schools are 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.

**District Energy Policy:**

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**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. Furthermore, HVAC 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**

During occupied hours or pre-scheduled events, the thermostats on the wall shall provide the users the ability to change the temperature. However, the setpoints shall be limited per the below:

- Heating maximum setpoint: 72
- Cooling minimum setpoint: 72

During unoccupied hours, the systems shall be allowed to drift so that the setpoints are as follows:

- Unoccupied heating setpoint: 55
- Unoccupied cooling setpoint: 80

Note: For buildings that are known to have extraordinary leaky conditions that could cause freezing pipes, the heating unoccupied setpoint may be overridden to 65 during times when the outdoor air is less than 20 degrees, otherwise, the regular unoccupied setpoints shall be enforced.

**3. Use of Space Heaters:**

Space heaters are an energy issue and a fire hazard issue and therefore are NOT to be used unless permission is specifically granted for each instance. A lack of heating warmth may mean that the central heating system is in need of repair. The first contact in the event of adequate heat shall be to facilities maintenance department. In the event the issue cannot be fixed, an electric space

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heater will be allowed to be used upon notification of, and subsequent approval by, the Energy Manager. Liquid or gas fueled heaters are NOT to be used in any case.

All space heaters must meet 4 requirements:

- A. UL approved
- B. Heating elements protected from contact
- C. Automatic shut off if heater is turned over
- D. Thermostat controlled

For additional safety, electric heaters are to be unplugged at the end of each day and removed at the end of each heating season.

#### **4. Use of Lights**

- Classroom lights shall only be on when the classroom is occupied.
- Corridor and other general area lights shall be turned on at the beginning of the instructional day and turned off at the end of the instructional day.
- 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.*

#### **5. Custodial Practices**

Custodians are a critical component of building energy management.

**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 Energy Manager.

**Summer cleaning:** HVAC systems shall remain in UNOCCUPIED 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 Energy Manager.

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**6. 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 Energy Manager. 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 more suitable smaller 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

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

**7. 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 Energy Manager. Examples of appropriate overrides include the following: floor waxing, open house events, etc.

**8. 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 an Energy Manager via an email request. The Energy Manager may be an internal Mercer County Schools employee, or a hired third party vendor. The Energy Manager shall adhere to the requirements set forth in this energy policy.

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**9. Food Service Practices**

Over time, the food service program shall move to cooking practices and equipment that eliminate grease laden vapor. This will allow the use of Type 2 kitchen hoods, which are much more efficient and require less service than Type 1 hoods.

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.

**10. Energy Awareness, Tracking, and Competition**

In order to create an awareness and sense of responsibility among teachers, administrators, custodians, and students, the energy usage of each facility shall be tracked and made available to each facility on a monthly basis.

Where possible to create groups of like buildings in terms of age and systems, energy competitions shall be administered by the district Energy Manager.

**11. Overridden HVAC Equipment**

HVAC equipment shall be 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 Energy Manager that details how and when the equipment can return to normal control.

**12. Computers/Monitors/Printers/Copiers/Fax-machines**

Currently the district has approximately 12,000 computers in use which have a substantial energy impact. Through centralized software, 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.

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**13. Other Plug Loads**

Vending machines, appliances, and other similar plug loads shall be unplugged for extended breaks (fall, spring, Christmas, summer).

Refrigerators in each school are to be limited to large centralized refrigerators. Small personal refrigerators are not permitted as these types of refrigerators are much less efficient than full size refrigerators.

**14. 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.