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

# Standard Form of Agreement Between Owner and Design-Builder



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

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

# Kentucky Department of Education Version of $\underline{\mbox{$\mathbb{A}$} \mbox{$A$} \mbox{$IA$}}$ Document A141 $^{\mbox{$\mathbb{M}$}}$ – 2004

# Standard Form of Agreement Between Owner and Design-Builder

AGREEMENT made as of the 26th day of May in the year 2022 (In words, indicate day, month and year.)

**BETWEEN** the Owner:

(Name, legal status, address and other information)
Covington Independent Board of Education
25 East Seventh Street
Covington, KY 41011

and the Qualified Provider: (Name, legal status, address and other information)
Performance Services, Inc., an Indiana corporation
4670 Haven Point Blvd
Indianapolis, IN 46280

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

Covington Ind. Schools District-wide GESC Phase II

Multiple sites



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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.)

N/A

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.)

N/A

§ 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 N/A (\$ N/A

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

See below ( ) 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.)

December 31, 2023

N/A

**Portion of Work** 

**Substantial Completion Date** 

N/A

# 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 ten million, seven hundred eighty-eight thousand, six hundred eight dollars, zero cent (\$10,788,608.00), 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.)

	Amo	ount
Total Construction Cost	\$	10,788,608.00
Sum of Owner's direct Purchase Orders	\$	985,869.00
Contract Sum (total construction cost less Owner direct Purchase Orders)	\$	9,802,739.00

§ 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:

Owner acknowledges that design, pricing and energy savings, as previously identified, are preliminary and subject to change following complete review and analysis of the associated site and structures and final system design and engineering. Final design, pricing and energy savings shall be subject to Open Book Pricing requirements and mutual approval of Owner and Qualified Provider. Owner and Qualified Provider agree that the Project scope may need to be modified and such modifications will be made via Open Book Pricing.

### **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:

N/A

§ 5.1.3 Provided that an Application for Payment is received not later than the Owner shall make payment to the Qualified Provider not later than the 15th day of the following 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 thirty (30) days after the Owner receives the Application for Payment.

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

§ 5.1.4 (Not Used)

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

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

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

#### § 5.2 Progress Payments—Stipulated Sum

- § 5.2.1 Applications for Payment where the Contract Sum is based upon a Stipulated Sum shall indicate the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.
- § 5.2.2 Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:
  - 11 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Contract Sum allocated to that portion of the Work in the schedule of values, less retainage of five percent (5.00%) 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 five percent (5.00%);
  - .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:
  - 4.1 When Owner direct Purchase Orders are used, retainage that would otherwise be held on materials and equipment shall transfer to the Qualified Provider, and the material suppliers will be paid the full amount of their invoices. Except for payment of services by design professionals and other consultants retained directly by the Qualified Provider, the Owner shall retain ten percent (10%) from each Application for Payment, and an amount equal to ten percent (10%) of approved Purchase Order payments, up to fifty percent (50%) completion of the Work, then, provided the Work is on schedule and satisfactory, and upon written request of the Qualified Provider together with consent of surety, the Owner shall approve a reduction in retainage to five percent (5%) of the Contract Sum plus Purchase Orders, if any. No part of the five percent (5%) retainage shall be paid until after Substantial Completion of the Work, as defined in Section A.9.8 of Exhibit A, Terms and Conditions. After Substantial Completion of the Work or designated portion thereof, and with consent of Surety, the Owner shall release applicable retainage except for Work that is incomplete or deficient. The minimum lump sum retainage shall be twice the estimated cost to correct deficient or incomplete Work.

§ 5.3 (Not Used)

§ 5.4 (Not Used)

# § 5.5 Final Payment

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

#### ARTICLE 6 DISPUTE RESOLUTION

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

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

N/A

Conditions, the (If the parties	rties do not resolve their dispute through mediation pursuant to Section A.4.3 of Exhibit A, Terms and ne method of binding dispute resolution shall be the following:  do not select a method of binding dispute resolution, then the method of binding dispute resolution shall on in a court of competent jurisdiction. Check one.)
	Arbitration pursuant to Section A.4.4 of Exhibit A, Terms and Conditions
$\boxtimes$	Litigation in a court of competent jurisdiction where the Project is located
	Other: (Specify)

# § 6.3 Arbitration

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

### ARTICLE 7 MISCELLANEOUS PROVISIONS

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

Name and Address	License Number	Relationship to Qualified Provider	Other Information
Bartholomew Sturm, P.E.	KY #31862	Employee	Performance Services, Inc.
Gregory G. Carter, P.E.	KY #14715	Design Consultant	Staggs & Fisher Consulting
Emma Adkisson	KY Reg. #7610	Design Consultant	PCA Architecture, PSC
Charles C. Hitter, P.E.	KY #33497	Design Consultant	Advantage Group Engineers
Frances Lockwood	KY #27054	Design Consultant	Solar Energy Solutions, LLC

§ 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 to Owner Other Information

Mike Strine Pinnacle Environmental

§ 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.)

N/A

Responsibilities
Name and Address License Number to Owner Other Information

§ 7.4 The Owner's Designated Representative: (Insert name, address and other information.)
Mr. Eric Neff, School Administrative Manager
25 East Seventh Street
Covington, KY 41011
Phone: (859) 392-1000

Email: eric.neff@covington.kyschools.us

§ 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.)
Matt DeMeuse, Vice President of Operations
Performance Services, Inc.
4670 Haven Point Blvd.
Indianapolis, IN 46280

Phone: (317) 713-1750 Email: mdemeuse@performanceservices.com

§ 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.)
N/A

§ 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.)

N/A

(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	(Not Used)
Exhibit H	BG-1 Form and Method and Cost of Financing	(Not Used)
Exhibit J	Energy Savings Program	
Exhibit K	KDE Non-Collusion Affidavit	
Exhibit L	KEDC Contract for GESCs - PSI - 2018	
Exhibit M	KDE Affidavit - PSI - 2018	
Exhibit N	KDE PO Summary Form	
Addendum		

**§ 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.)

Any Project Criteria are set forth in the information and records produced pursuant to Paragraph 1.4 and as set forth in the Qualified Provider's Proposal, Exhibit D Scope of Work attached hereto and Exhibit J Energy Savings Program attached hereto.

Title Date

<b>§ 8.1.4</b> The Qualified Provider consists of the following: (Either list applicable docume N/A	's Proposal, dated nts below or refer to an exhibit attached	, to this Agreement.)
	alified Provider's Proposal, if any, are as nts below or refer to an exhibit attached	
<b>§ 8.1.6</b> The Addenda, if any, as (Either list applicable docume N/A	re as follows: nts below or refer to an exhibit attached	to this Agreement.)
Number	Date	Pages
	e terms and conditions other than those con	ntained in AIA Document A141–2004, Exhibit A, litions 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.")

above.  QUALIFIED PROVIDER (Signature)
above.

Init.

# Kentucky Department of Education Version of **№** AIA Document A141<sup>™</sup> – 2004 Exhibit A

# Terms and Conditions

# for the following PROJECT:

(Name and location or address)

Covington Ind. Schools District-wide GESC Phase II

Multiple sites

#### THE OWNER:

(Name, legal status and address)
Covington Independent Board of Education
25 East Seventh Street
Covington, KY 41011

### THE QUALIFIED PROVIDER:

(Name, legal status and address)
Performance Services, Inc., an Indiana corporation
4670 Haven Point Blvd
Indianapolis, IN 46280

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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.

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

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

# **ARTICLE A.1 GENERAL PROVISIONS**

#### § A.1.1 Basic Definitions

# § A.1.1.1 The GUARANTEED ENERGY SAVINGS CONTRACT Documents

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

#### § A.1.1.2 Project Criteria

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

#### § A.1.1.3 Architect

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

# § A.1.1.4 Contractor

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

### § A.1.1.5 Subcontractor

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

# § A.1.1.6 The Work

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

§ A.1.1.7 The Project
The Project is the total design and construction of which the Work performed under the Contract Documents may be the whole or a part, and which may include design and construction by the Owner or by separate contractors.

#### § A.1.1.8 Neutral

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

# § A.1.2 Compliance with Applicable Laws

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

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

# § A.1.3 Capitalization

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

# § A.1.4 Interpretation

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

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

# § A.1.5 Execution of the Design-Build Documents

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

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

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

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

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

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

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

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

### ARTICLE A.2 OWNER

#### § A.2.1 General

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

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

# § A.2.2 Information and Services Required of the Owner

- § A.2.2.1 Information or services required of the Owner by the Design-Build Documents shall be furnished by the Owner with reasonable promptness. Any other information or services relevant to the Qualified Provider's performance of the Work under the Owner's control shall be furnished by the Owner after receipt from the Qualified Provider of a written request for such information or services.
- § A.2.2.2 If requested by Qualified Provider as necessary for the Project, The Owner shall provide surveys describing physical characteristics, legal limitations, and utility locations for the site of this Project, and a written legal description of the site. The surveys and legal information shall include, as applicable, grades and lines of streets, alleys, pavements, and adjoining property and structures; adjacent drainage; rights-of-way, restrictions, easements, encroachments, zoning, deed restriction, boundaries, and contours of the site; locations, dimensions, and necessary data pertaining to existing buildings, other improvements and trees; and information concerning available utility services and lines, both public and private, above and below grade, including inverts and depths. All the information on the survey shall be referenced to a Project benchmark.
- § A.2.2.3 The Owner shall provide, to the extent available to the Owner and if not required by the Contract Documents to be provided by the Qualified Provider, the results and reports of prior tests, inspections or investigations conducted for the Project involving structural or mechanical systems, chemical, air and water pollution, hazardous materials or environmental and subsurface conditions and information regarding the presence of pollutants at the Project site.
- § A.2.2.4 The Owner may obtain independent review of the Qualified Provider 's design, construction and other documents by a separate architect, engineer, and contractor or cost estimator under contract to or employed by the Owner. Such independent review shall be undertaken at the Owner's expense in a timely manner and shall not delay the orderly progress of the Work.
- § A.2.2.5 The Owner shall cooperate with the Qualified Provider in securing building and other permits, licenses and inspections. The Owner shall not be required to pay the fees for such permits, licenses and inspections unless the cost of such fees is excluded from the responsibility of the Qualified Provider under the Contract Documents.
- § A.2.2.6 The services, information, surveys and reports required to be provided by the Owner under Section A.2.2, shall be furnished at the Owner's expense, and the Qualified Provider shall be entitled to rely upon the accuracy and completeness thereof, except as otherwise specifically provided in the Contract Documents or to the extent the Owner advises the Qualified Provider to the contrary in writing.
- **§ A.2.2.7** If the Owner observes or otherwise becomes aware of a fault or defect in the Work or non-conformity with the Contract Documents, the Owner shall give prompt written notice thereof to the Qualified Provider Qualified Provider.
- § A.2.2.8 The Owner shall, at the request of the Qualified Provider, prior to execution of the Guaranteed Energy Savings Contract and promptly upon request thereafter, furnish to the Qualified Provider reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Design-Build Documents.
- **§ A.2.2.9** The Owner shall communicate through the Qualified Provider with persons or entities employed or retained by the Qualified Provider, unless otherwise directed by the Qualified Provider.
- § A.2.2.10 The Owner shall furnish the services of geotechnical engineers or other consultants, if not required by the Contract Documents to be provided by the Qualified Provider, for subsoil, air and water conditions when such services

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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.

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§ 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;

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- .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

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

- § A.3.3.3 The Qualified Provider shall direct specific attention, in writing or on resubmitted design and construction documents or other submittals such as Shop Drawings, Product Data, Samples or similar submittals, to revisions other than those requested by the Owner on previous submittals. In the absence of such written notice, the Owner's approval of a resubmission shall not apply to such revisions.
- § A.3.4 When the Contract Documents require that a Contractor provide professional design services or certifications related to systems, materials or equipment, or when the Qualified Provider in its discretion provides such design services or certifications through a Contractor, the Qualified Provider shall cause professional design services or certifications to be provided by a properly licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professionals, if prepared by others, shall bear such design professional's written approval. The Owner shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals.
- **§ A.3.3.5** The Qualified Provider shall be solely responsible for and have control over all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Design-Build Documents.
- § A.3.3.6 The Qualified Provider shall keep the Owner informed of the progress and quality of the Work.
- **§ A.3.3.7** 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

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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

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- **§ 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

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- § 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

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

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

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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

- 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

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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;

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- .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,

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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

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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,

- .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) Covington Ind. Schools District-wide GESC Phase II Multiple sites

#### THE OWNER:

(Name, legal status and address) Covington Independent Board of Education 25 East Seventh Street Covington, KY 41011

#### THE QUALIFIED PROVIDER:

(Name, legal status and address) Performance Services, Inc., an Indiana corporation 4670 Haven Point Blvd Indianapolis, IN 46280

#### 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.) N/A

**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

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

.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.)

The Qualified Provider shall provide the surety bonds as set forth in Paragraph 11.5 of the A141-2004 Exhibit A, as modified.

#### 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.

Energy Savings Performance Bond as set forth in Paragraph 11.5

The Energy Savings Performance Bond shall assure the faithful performance of the annual Guaranteed Savings Amount (GSA) as provided in Exhibit E.

The Energy Savings Performance Bond shall only be required to provided, however, the Qualified Provider shall be responsible to in place throughout the Guarantee, subject to the terms and

cover a two year portion of the GSA, have an Energy Savings Performance Bond conditions of the Guarantee.

**§ 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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5/18/2022

# **Guaranteed Energy Savings Contract - Phase II IMPROVEMENT LIST**

## **Covington Independent Schools**

May 26, 2022

Scope	
of	Improvements
Work	
IFI DHOUSE SCIENCE B	BUILDING, AND CHAPMAN VOCATIONAL EDUCATION CENTER
<u> </u>	Building Envelope Weatherization Improvements
	<ul> <li>This measure will save energy by reducing the amount of outside air that leaks in (infiltration), the conditioned air that leaks out (exfiltration), the heat that is transferred into and out of the building by improving the insulation level, and providing a moisture barrier to minimize the transfer of humidity.</li> <li>The concrete masonry unit (CMU) which were used to construct the exterior of the Fieldhouse and the "bridge" between the two sides of the Holmes campus do not have any insulation. This measure will facilitate the drilling of holes in the CMU blocks and injected foam in the blocks to increase the insulation value</li> </ul>
	significantly.  * Also, the joint between the exterior wall on the top floor and the roof is not insulated. Spray polyurethane foam (SPF) insulation will be used to seal and insulate that join of the third floor of the Fieldhouse.  * This will also include the installation of new gaskets for exterior doors, which will reduce air and humidity leakage.
HC-2	<ul> <li>* Transformers convert power from one voltage to another for specific equipment in the facility. Older, existing transformers do so with significant losses, and this electricity cost can add up as the transformers operate 24/7. New, ultra-efficient transformers will save cost by minimizing those electricity losses</li> <li>* This includes one (1) transformer in the Science Building and one (1) transformer in the Chapman Vocational building.</li> </ul>
IXTH DISTRICT ELEMEN	
SDES-1	New Mechanical Room Equipment
	<ul> <li>* Boilers: Replace two (2) 24 year old hot water boilers with new two (2) new 1.5 MMBtu/hr high efficiency condensing boilers.         Install new boiler flue stacks and route outside the boiler room per the drawings. Install new security fence around the outside area where the flue is being run. Replace emergency gas shutoff switches.         Two (2) variable speed boiler circulation pumps will also be added to circulate water through the boilers.         Replace the existing hot water pumps with two (2) new 7.5 HP high efficiency hot water pumps with suction diffusers in the same location.         Reconnect electrical power to the new equipment and reconnect to the piping as required.     </li> <li>* Chiller: Replace the existing 24 year old Trane remote barrel chiller with a new nominal 130 ton scroll chiller packaged chiller.</li> </ul>
	The existing unit is a "remote barrel" chiller which means the evaporator is located in the mechanical room. This means that refrigerant lines run between the outside section of the unit and the inside section. The new unit will be a packaged unit with all components of the chiller on the exterior of the building. This will require that new hydronic piping be run from the mechanical room to the packaged chiller outside.  Reconnect electrical power to the new unit and reconnect to the piping as required. Install new heat trace tape on the new hydronic piping. Remove and reinstall fence as needed.  New chiller to come with start-up, two (2) years parts and labor warranty, and a five (5) year parts warranty.  Replace the existing chilled water pump with (1) 7.5 HP high efficiency chilled water pump with suction diffuser in the same location.
	Reconnect electrical power to the new equipment and reconnect to the piping as required.  * Also, new chemical shot feeder, new expansion tanks, and new air-dirt separator will be installed as indicated on drawings. Clean and flush water piping to remove debris resulting from piping changes.
	* Change the four (4) existing manual changeover valves to new, automatic changeover valves in the mechanical room. This will allow for the HVAC system to be switched between heating and cooling automatically and much more efficiently than the existing manual switchover.
	<ul> <li>Utilize existing controls for new equipment. Add new control points as needed to accommodate the new mechanical room equipment. Existing Tridium JACE to be reprogramed for new equipment.</li> <li>Test and balance water flow as necessary to ensure that original flow is maintained.</li> </ul>
CDEC 3	No Office Cults Content
SDES-2	New Office Split System  * Replace the existing split system with a new, high-efficiency system in the same location.
	<ul> <li>* This includes the natural gas-fired furnace / air handler, the condensing unit mounted on-grade on the exterior of the building, and the refrigerant line set rule between the indoor evaporator and the outside unit.</li> <li>* Reconnect the furnace combustion air and exhaust air venting to the new unit.</li> <li>* Reconnect electrical power to the new unit and reconnect to the existing ductwork.</li> </ul>
	<ul> <li>* Test and balance air flow as necessary to ensure that original air flow is maintained.</li> <li>* A new thermostat will be installed on the unit and connected to the existing Building Automation System (BAS).</li> </ul>
0050	Duilding Favelone Weeth winsting Improvements
SDES-3	<ul> <li>* This measure will save energy by reducing the amount of outside air that leaks in (infiltration), the conditioned air that leaks out (exfiltration), the heat that is transferred into and out of the building by improving the insulation level, and providing a moisture barrier to minimize the transfer of humidity.</li> <li>* Specifically at Sixth District Elementary School, the third floor of the original building will be receiving spray polyurethane foam (SPF) insulation over the librar (under the roof), under the roof in the mechanical rooms, and on the sidewalls of the attic.</li> </ul>
SDES-4	<ul> <li>Solar Photovoltaic - 136.1 kW - Roof-mount</li> <li>* Install a roof-mounted, 136.1 kW solar photovoltaic array for generation of electrical power that will be used by the building.</li> <li>* Provide approximately one hundred and ninety-eight (198) 435W panels and one hundred and two (102) 490W panels. The panels are to be monocrystalline panels mounted to a roof-mount rack system and weighted down with ballasts so as to maintain the roof warranty and seal. The panels to be mounted over the gym roof will use a racking system that will allow the weight to be distributed to the roof joists.</li> <li>* Two (2) 50W inverters will be used to convert the direct current power (DC) to alternating current (AC).</li> <li>* Provide grid tie inverters with breakers and fuse systems as necessary electrical connection hardware.</li> <li>* Wire PV panels with meter and route to the building's distribution panel and provide meter per utility instructions.</li> <li>* Provide a web interface for remote monitoring of system performance, output and alarms. Web connection by the school district.</li> <li>* Note: Implementation is contingent upon receiving the necessary approval from the utility. Site analysis of the areas proposed must be completed before the</li> </ul>
	solar panel installation can be finalized. Final design and pricing for Solar PV shall be subject to Open Book Pricing requirements and mutual approval of Owner and Qualified Provider.

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5/18/2022

Scope	
of	Improvements
Work	ANTARY SCHOOL
NINTH DISTRICT ELEME  NDES-1	NTARY SCHOOL ALTERNATE: New Exterior Doors
NDES-1	* A number of the exterior doors at Ninth District have been identified by the district to be replaced. This includes seven (7) doors as identified in the drawings.  * The new doors to are to be aluminum storefront doors with insulated glass panels or hollow metal doors per the drawings.  * The is set up to be an allowance, as whether or not the doors can be replaced as part of the project is dependent upon the costs and savings of the other measures, as well as the district's final choice on priorities.
IOUNIC CARLISTETICA	AFNITARY SCHOOL
JOHN G. CARLISLE ELEM JGCES-1	Building Envelope Weatherization Improvements
70020 1	<ul> <li>* This measure will save energy by reducing the amount of outside air that leaks in (infiltration), the conditioned air that leaks out (exfiltration), the heat that is transferred into and out of the building by improving the insulation level, and providing a moisture barrier to minimize the transfer of humidity.</li> <li>* The joint between the exterior wall and the roof is not insulated. This applies to the cafeteria exterior wall and all of the second floor. It excludes the gym. Spray polyurethane foam (SPF) insulation will be used to seal and insulate that junction.</li> <li>* This will also include the installation of new gaskets for exterior doors, which will reduce air and humidity leakage.</li> </ul>
JGCES-2	New Energy Efficient Transformers
	<ul> <li>Transformers convert power from one voltage to another for specific equipment in the facility. Older, existing transformers do so with significant losses, and this electricity cost can add up as the transformers operate 24/7. New, ultra-efficient transformers will save cost by minimizing those electricity losses</li> <li>This includes two (2) transformer at John G. Carlisle Elementary School; one (1) on the main floor and one (1) on the second floor.</li> </ul>
JGCES-3	<ul> <li>New Mechanical Room Equipment</li> <li>Replace two (2) 29 year old hot water boilers with new two (2) new 1.25 MMBtu/hr high efficiency condensing boilers.</li> <li>Install new boiler flue stacks and route outside the boiler room per the drawings. Replace emergency gas shutoff switches at both entrances.</li> <li>Two (2) variable speed boiler circulation pumps will also be added to circulate water through the boilers.</li> <li>Reconnect electrical power to the new equipment and reconnect to the piping as required.</li> <li>Also, replace the following hydronic specialties with new of like-kind: chemical shot feeder, expansion tank, and air-dirt separator as indicated on drawings. Clean and flush hot water piping to remove debris resulting from piping changes.</li> <li>Utilize existing controls for new equipment. Add new control points as needed to accommodate the new equipment. Existing Tridium JACE to be reprogramed for new equipment.</li> <li>Test and balance water flow as necessary to ensure that original flow is maintained.</li> </ul>
LATONIA ELEMENTARY	SCHOOL
LES-1	Twelve (12) New Rooftop Units
113-1	* Replace six (6) existing Carrier RTUs (RTU 1-6) that serve the classroom, office, kitchen, and cafeteria. The new RTUs will provide the occupied space with the
	<ul> <li>conditioned air needed more efficiently than the existing units.</li> <li>* The RTUs will efficiently heat &amp; cool the air to each zone and supply the needed outside air. The new fans will be variable speed based upon need.</li> <li>* The new RTUs are to be located in the same location as the existing units; they are to be disconnected and reconnected to the gas piping and electrical conduit. New curb adaptors will be installed if needed.</li> <li>* Test and balance air flow as necessary to ensure that original air flow is maintained.</li> <li>* The new RTUs are to have a five (5) year parts warranty and a two (2) year parts and labor warranty. Start-up is also included.</li> <li>* New controls will be installed on the RTUs and connected to the existing Building Automation System (BAS).</li> </ul>
LES-2	Solar Photovoltaic - 202.7 kW - Roof-mount
	* Install a roof-mounted, 202.7 kW solar photovoltaic array for generation of electrical power that will be used by the building.
	<ul> <li>* Provide approximately four hundred and sixty-six (466) 435W monocrystalline panels will be mounted to a roof-mount rack system and weighted down with ballasts so as to maintain the roof warranty and seal.</li> <li>* One (1) 50W inverter and two (2) 62.5 kW inverters will be used to convert the direct current power (DC) to alternating current (AC).</li> <li>* Provide grid tie inverters with breakers and fuse systems as necessary electrical connection hardware.</li> <li>* Wire PV panels with meter and route to the building's distribution panel and provide meter per utility instructions.</li> <li>* Provide a web interface for remote monitoring of system performance, output and alarms. Web connection by the school district.</li> <li>* Note: Implementation is contingent upon receiving the necessary approval from the utility. Site analysis of the areas proposed must be completed before the solar panel installation can be finalized. Final design and pricing for Solar PV shall be subject to Open Book Pricing requirements and mutual approval of Owner and Qualified Provider.</li> </ul>
GLENN O. SWING ELEM	
GOSES-1	<ul> <li>Twelve (12) New Rooftop Units</li> <li>* The twelve (12) existing rooftop units have been causing lots of maintenance problems for the staff, and replacement parts are near impossible to acquire. The new RTUs will provide the occupied space with the conditioned air needed more efficiently than the existing units.</li> <li>* The RTUs will efficiently heat, and cool the air to deliver to each zone. They will also supply the needed fresh, outside air. The fans will be able to provide variable air speed based up on the need.</li> <li>* The new RTUs are to be located in the same location as the existing; they are to be disconnected and reconnected to the gas piping and electrical conduit.</li> <li>* The new RTUs are to have a five (5) year parts warranty and a two (2) year parts and labor warranty. Start-up is also included.</li> <li>* New controls will be installed on the RTUs and connected to the existing Building Automation System (BAS).</li> </ul>
GOSES-2	ALTERNATE: Improved Zone Control
	<ul> <li>* This alternate is the modification of the ductwork of eight (8) RTUs to facilitate a "variable volume and temperature" (VVT) system.</li> <li>* The ductwork will have to be modified in order for each zone to be able to be served directly by the RTU. Also, new dampers and actuators will be added for each zone to be able to adjust the amount of air that goes to each individual zone, which should improve comfort for the occupants.</li> <li>* Also, a bypass duct will be added directly under these eight (8) units.</li> <li>* New controls will be installed on the damper actuators and connected to the existing Building Automation System (BAS).</li> </ul>
GOSES-3	<ul> <li>New Windows - Allowance</li> <li>* A number of the original windows at Glenn O. Swing have been identified by the district to be replaced. This includes the windows in the Dining Hall, Multipurpose Room, Library, and all Classroom windows which weren't replaced in the 2011 renovation.</li> <li>* The new windows are to have prefinished aluminum frames with 1" insulated low-e glass.</li> <li>* The is set up to be an allowance, as the quantity of windows that will be replaced is dependent upon the costs and savings of the other measures, as well as the district's final choice on priorities.</li> </ul>

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Scope	
of	Improvements
Work	
GOSES-4	ALTERNATE: New Exterior Doors
	* A number of the exterior doors at Glenn O. Swing have been identified by the district to be replaced. This includes four (4) doors as identified in the drawing
	* The new doors to are to be aluminum storefront doors with insulated glass panels or hollow metal doors per the drawings.
	* The is set up to be an allowance, as whether or not the doors can be replaced as part of the project is dependent upon the costs and savings of the other
	measures, as well as the district's final choice on priorities.
GOSES-5	Building Envelope Weatherization Improvements
	* This measure will save energy by reducing the amount of outside air that leaks in (infiltration), the conditioned air that leaks out (exfiltration), the heat the
	transferred into and out of the building by improving the insulation level, and providing a moisture barrier to minimize the transfer of humidity.
	* The joint between the exterior wall and the roof is not insulated. This applies to almost all of the classroom exterior wall as well as the perimeter of the Dia
	Room. Spray polyurethane foam (SPF) insulation will be used to seal and insulate that junction.
GOSES-6	
GOSES-6	* Install a roof-mounted, 273.2 kW solar photovoltaic array for generation of electrical power that will be used by the building.
	* Provide approximately six hundred and twenty-eight (628) 435W monocrystalline panels will be mounted to a roof-mount rack system and weighted down
	with ballasts so as to maintain the roof warranty and seal.
	* Four (4) 50W inverters will be used to convert the direct current power (DC) to alternating current (AC).
	* Provide grid tie inverters with breakers and fuse systems as necessary electrical connection hardware.
	* Wire PV panels with meter and route to the building's distribution panel and provide meter per utility instructions.
	* Provide a web interface for remote monitoring of system performance, output and alarms. Web connection by the school district.
	* Note: Implementation is contingent upon receiving the necessary approval from the utility. Site analysis of the areas proposed must be completed before
	solar panel installation can be finalized. Final design and pricing for Solar PV shall be subject to Open Book Pricing requirements and mutual approval of
	Owner and Qualified Provider.
S E. BIGGS EARLY	/ CHILDHOOD EDUCATION CENTER
JEBEC-1	Complete HVAC Renovation
	* Boilers: Replace (1) existing 64 year-old, ~80% efficient atmospheric natural gas-fired boiler with (2) new high-efficiency, condensing hot water boilers
	Install new boiler flue stacks. Flue stacks to be routed up through existing chimney. New combustion air duct to be routed to serve the new boilers.
	Two (2) boiler pumps will also be added to circulate water through the boilers.
	* Chiller: Replace (1) existing 9 year-old Carrier air-cooled chiller with (1) new high-efficiency, air-cooled packaged scroll chiller in the same location.
	A new chilled water buffer tank will also be installed. The tank increases the water volume capacity in the chilled water system, which, reduces excessiv
	chiller cycling and increases chilled water temperature control.
	New chiller to have a five (5) year parts warranty on compressors and a two (2) year parts and labor warranty. Start-up is also included.
	* Piping & Pumps : Replace the existing hydronic four-pipe network.
	- The only piping that is to be retained is the hot water piping serving the 2nd floor stair landing terminal unit, where the hot water piping is routed above
	plaster ceiling.
	Replace the two (2) existing hot water pumps with (2) high efficiency pumps with suction diffusers. These pumps will deliver hot water to the building H
	units.
	Replace the two (2) existing chilled water pumps with (2) high efficiency pumps with suction diffusers. These pumps will circulate water through the chi
	and will supply chilled water to the building HVAC units.
	Four (4) Variable Frequency Drives (VFDs) will be added; one each for each water loop pump to vary the water flow with respect to the load.
	Also, new chemical shot feeders, new expansion tanks, and new air-dirt separators will be installed as indicated on drawings.
	The existing domestic hot water heater and circulation pumps will also be replaced with a new natural gas-fired tank water heater and pumps.
	* <b>Terminal Units</b> : Replace the existing unit ventilators in each classroom with thirteen (13) new four-pipe unit ventilators in the same location. The new ur
	ventilators are to have the capacity for full economizer, control valves to facilitate variable speed water flow, variable speed fans, and face and bypass da
	ventilators are to have the capacity for full economizer, control valves to facilitate variable speed water flow, variable speed fulls, and face and bypass and
	control to maximize efficiency. The existing outside air louver is to be retained and reused for the new unit vents.
	control to maximize efficiency. The existing outside air louver is to be retained and reused for the new unit vents.  The existing fan cell units in the hallways and stainways will be replaced with tan (10) new four nine fan cell units in the same location. The new fan cell
	The existing fan coil units in the hallways and stairways will be replaced with ten (10) new four-pipe fan coil units in the same location. The new fan coil
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	The existing fan coil units in the hallways and stairways will be replaced with ten (10) new four-pipe fan coil units in the same location. The new fan coil units are to have control valves to facilitate variable speed water flow and variable speed fans.  The existing fin tube radiant heaters will be demoed and replaced with twelve (12) new heaters.  The basement air handling units are to be replaced with four (4) ducted fan coil units and (3) ducted fan coil units specifically sized for treating outside of
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Scope



Scope					
of	Improvements				
Work					
	RT & DISTRICT ENROLLMENT CEN				
IS-1	Building Envelope Weatherization				
	* This measure will save energy by reducing the amount of outside air that leaks in (infiltration), the conditioned air that leaks out (exfiltration), the heat that is transferred into and out of the building by improving the insulation level, and providing a moisture barrier to minimize the transfer of humidity.				
	* The concrete masonry unit (CMU) which were used to construct the exterior of Levassor facility do not have any insulation. This measure will facilitate the drilling of holes in the CMU blocks and injected foam in the blocks to increase the insulation value significantly.				
	* Also, the joint between the exterior wall and the roof is not insulated. Spray polyurethane foam (SPF) insulation will be used to seal and insulate that junction.				
	* This will also include the instal	lation of new gaskets for exterior	doors, which will reduce air and	humidity leakage.	
DISTRICT WIRE MEASUR					
DISTRICT WIDE MEASUR					
DW-1	Owner Directed Allowance			thouse consequent display the street	
		measure will address unforeseen			piementation of the project
	-	se scope of work. Any unused fun			at Owner and Ownified
	* Final design and pricing for Owner Directed Allowance shall be subject to Open Book Pricing requirements and mutual approval of Owner and Qualified Provider.				
	The state of the s				
DW-2	Interior LED Lighting Improvements				
	* Interior: Retrofit existing lay-in ceiling LED lighting fixtures with new, lower-wattage LED tube retrofits.				
DW-3	DW-3 Telecommunications Upgrade				
	* A thorough investigation of Covington Independent Schools existing telecom contracts and suppliers was made to evaluate the district's telecommunications			district's telecommunications	
	services, hardware, software,	and the costs for those services.	This includes the district's agreen	nents for internet, landline phor	ne, and mobile phone accounts.
	* Based upon conversations with	h CIPS IT staff, it was determined	that CIPS is aware that their out	dated old phone system has a h	igh cost and does not provide
	_	ble with a modern phone system			
	-	egacy Avaya phone system with a			
		chnology to include mobility appl	-	ew headsets, call reporting, e-fa	xing, overhead paging, remote
	1	rup wireless Disaster Recovery Op	tion for each school.		
	* On-site installation and training for CIPS staff will be included.				
	First Year	First Year	Installation	Simple	
	Utility	O&M	Costs	Payback	
	Savings (\$)	Savings (\$)	(\$)	(years)	
	\$264,776	\$11,690	\$10,788,608	39.0	

#### **Notes:**

- 1. Costs above do not include repair of existing equipment at any of the schools not replaced. This includes equipment upon which controls are being added.
- 2. PSI assumes existing life safety / fire alarm devices are adequate and can be repurposed and reorganized with the new equipment. If new devices are required, PSI's project costs are subject to change.
- 3. The utility savings are based upon the utility cost rates (electricity, natural gas, and water/sewer) given to PSI by the school district.
- 4. The savings associated with the controls systems are based upon the assumption that the existing mechanical equipment is in adequate operating condition.
- 5. There are utility rebates/incentives available from the district's utility companies. At this time, they have not been quantified. The incentives themselves and/or the viability of the program are not guaranteed by PSI.
- 6. Currently, the annual Operation and Maintenance (O&M) Savings is estimated to be certain percentage of the annual utility savings. The annual O&M savings amount has been discussed and determined based upon conversations between the owner and PSI.
- 7. Utility savings are estimated based upon site visit and standard energy calculations.
- 8. Pricing does not include any costs for asbestos abatement, mold abatement, or other hazardous material.
- 9. PSI is not responsible for the condition of existing piping or sheet metal ductwork not being replaced under this project.
- 10. Major equipment to be purchased by the owner to save on sales tax. For the material not to be purchased by the owner, pricing includes KY state sales tax of 6%.
- 11. Equipment/material delivery lead times and pricing commitments are very volatile right now. PSI recommends that the district secure purchase agreements as soon as possible and order material for storage if necessary to reduce cost and schedule risk. If significant delays occur, PSI reserves the right to make pricing changes.
- 12. Installation will be per KY building code. Control wiring will be installed in the same fashion as existing installations including EMT in mechanical spaces and open plenum rated cable above ceilings.
- 13. Pricing presented in this proposal is based on the district's feedback on preferred contractors/vendors and PSI's recommendation from the invited contractors/vendors. If the district desires to select an alternative contractor/vendor or change the scope of work, PSI reserve the right to make pricing changes.
- 14. Utility savings include adjustments to account for delivering the correct amount of fresh air into the buildings, see energy calculations for details.
- 15. The baseline utility data between buildings and between utilities (electricity, natural gas, and water/sewer) may be from different time frames dependent on availability.
- 16. Utility operational savings associated with the Telecommunications Upgrade measure are contingent upon future communication and agreement with the district's service providers. These are still to be reviewed and agreed upon between the owner and the qualified provider.
- 17. Utility savings are estimated to escalate 3.00% per year. O&M savings are estimated to escalate 3.00% per year for the project term.
- 18. Implementation of the aforementioned solar photovoltaic systems is contingent upon receiving the necessary approval/permitting from the electrical utility company and a structural review of the roof areas where solar is to be installed. If the roof requires significant structural reinforcement, the solar solution may not be as financially beneficial. These reviews and approvals/permitting will have to be completed prior to final design and installation. Final design and pricing for this measure shall be subject to Open Book Pricing requirements and mutual approval of the Owner and the Qualified Provider.

## Performance Services

#### PERFORMANCE GUARANTEE AGREEMENT

Contract: Guaranteed Energy Savings Contract Phase II

Owner: Covington Independent Board of Education

Project: Covington Ind. Schools District-wide GESC Phase II

Holmes High School, Holmes Middle School, and Administration Building, Fieldhouse, Science Building, and Chapman Vocational Education Center, Sixth District Elementary School, Ninth District Elementary School, John G. Carlisle Elementary School, Latonia Elementary School, Glenn O. Swing Elementary School, James E Biggs Early Childhood, Instructional Support & District Enrollment Center (Levassor), Central Office, Bus Garage / Transportation (Dist. Services), T.I. Pike St. Bldg. (District Support Services), Adult High School, & Maintenance Building

25 East Seventh Street Covington, KY

#### **Qualified Provider:**

Company Name: Performance Services, Inc.

Address: 1051 Floyd Drive, Suite 170

City, State, Zip: Lexington, KY 40515

Representative: Tim Thoman, President

#### **Performance Guarantee Information:**

Annual Guaranteed Operational Savings Amount =	\$ \$11,690
Annual Guaranteed Energy Savings Amount =	\$ \$125,102
Annual Guaranteed Telecommunications Utility Savings =	\$ \$129,690
Annual Guaranteed Solar Renewable Energy Credit (RECs) Savings =	\$ \$9,984
Total Annual Guaranteed Amount =	\$ \$276,466

Program Term = **20** Years

#### Guarantee

Pursuant to the terms of this Performance Guarantee Agreement (the "Guarantee"), Qualified Provider guarantees that Owner will annually save the Total Annual Guaranteed Amount during the Program Term.

The Guarantee shall commence once the Energy Conservation Measures ("ECMs") specified in the Contract are installed by the Qualified Provider and accepted by Owner, the Owner's staff has been trained to operate the ECMs, the ECMs have been optimized by the Qualified Provider and the Qualified Provider has received final payment from the Owner.

The date of commencement of the Guarantee (the "Guarantee Commencement Date") shall be established by the Owner and Qualified Provider by their signatures on a Guarantee Commencement Letter.

The Guarantee shall be fulfilled and fully satisfied once the Calculated Savings, as defined below, equal or exceed the Annual Guaranteed Energy Savings Amount multiplied by the Program Term.

#### **Utility Rate**

The utility information that is used in this Guarantee shall be for the one-year period from February 2021 through February 2022. During the Program Term, the actual twelve (12) month period then occuring and being evaluated shall be referred to as the "Current Year" and the savings calculated during that Current Year shall be referred to as the Current Year Savings. Current Year utility rate data shall be used in calculating the Current Year Savings, provided the Current Year utility rates are not less than Base Year utility rates.

If Current Year utility rates drop below Base Year rates, Base Year rates shall be used to calculate Current Year Savings. Any energy savings generated during the installation phase of this Project shall be added to the Current Year Savings achieved during the first Current Year of the Program Term.

#### **Measurement & Verification**

Energy savings will be measured and verified ("M&V") by various methods depending on the ECM (the "Calculated Savings"). Calculated Savings are referred to by the U.S. Department of Energy as "Actual Savings" and shall have the same meaning when referred to herein. The M&V methods are based upon the U.S. Department of Energy (DOE) M&V Guidelines: Measurement and Verification for Performance-Based Contracts Version 4.0 . The M&V methods to be used in calculating energy savings are defined below and identified for each ECM within this Guarantee and associated Schedules.

#### DOE Methods of M&V:

Option A – Retrofit Isolation with Key Parameter Measurement (Based on a combination of measured and calculated factors)

Option B – Retrofit Isolation with All Parameter Measurement (Measured and verified with runtimes and utility data)

Option C – Whole Facility Measurement (Analysis of whole facility utility meter or sub-meter data using techniques from simple comparison to regression analysis)

Option D – Calibrated Simulation (Energy use simulation calibrated with hourly or monthly utility billing data and/or end-use metering)

Number of Facilities: 14

Holmes High School, Holmes Middle School, and Administration Building		
ECM Description	M&V Method	
Interior LED Lighting Improvements	Option A - Measured/Calculated	
Telecommunications Upgrade	Stipulated	

Fieldhouse, Science Building, and Chapman Vocational Education Center		
ECM Description	M&V Method	
Interior LED Lighting Improvements	Option A - Measured/Calculated	
Telecommunications Upgrade	Stipulated	
Building Envelope Weatherization Improvements	Stipulated	
New Energy Efficient Transformers	Option A - Measured/Calculated	

Sixth District Elementary School		
ECM Description	M&V Method	
Interior LED Lighting Improvements	Option A - Measured/Calculated	
Telecommunications Upgrade	Stipulated	
Building Envelope Weatherization Improvements	Stipulated	
Solar Photovoltaic System	Option A - Measured/Calculated	
Mechanical Room Equipment Upgrade	Option A - Measured/Calculated	
New Office Split System	Option A - Measured/Calculated	

Ninth District Elementary School		
ECM Description	M&V Method	
Interior LED Lighting Improvements	Option A - Measured/Calculated	
Telecommunications Upgrade	Stipulated	

John G. Carlisle Elementary School		
ECM Description	M&V Method	
Interior LED Lighting Improvements	Option A - Measured/Calculated	
Telecommunications Upgrade	Stipulated	
Building Envelope Weatherization Improvements	Stipulated	
New Energy Efficient Transformers	Option A - Measured/Calculated	
New Boilers	Option A - Measured/Calculated	

Latonia Elementary School		
ECM Description	M&V Method	
Interior LED Lighting Improvements	Option A - Measured/Calculated	
Telecommunications Upgrade	Stipulated	
Solar Photovoltaic System	Option A - Measured/Calculated	
New Rooftop HVAC Units	Option A - Measured/Calculated	

Glenn O. Swing Elementary School	
ECM Description	M&V Method
Interior LED Lighting Improvements	Option A - Measured/Calculated
Telecommunications Upgrade	Stipulated
Building Envelope Weatherization Improvements	Stipulated
Solar Photovoltaic System	Option A - Measured/Calculated
New Rooftop HVAC Units	Option A - Measured/Calculated
New Windows	Stipulated

James E. Biggs Early Childhood Education Center	
ECM Description	M&V Method
Interior LED Lighting Improvements	Option A - Measured/Calculated
Telecommunications Upgrade Stipulated	
New HVAC System	Option A - Measured/Calculated
New Building Automation System Option B - M&V with runtimes and utility data	

Instructional Support & District Enrollment Center (Levassor)	
ECM Description	M&V Method
Interior LED Lighting Improvements	Option A - Measured/Calculated
Telecommunications Upgrade	Stipulated
Building Envelope Weatherization Improvements	Stipulated

Central Office	
ECM Description	M&V Method
Interior LED Lighting Improvements	Option A - Measured/Calculated
Telecommunications Upgrade	Stipulated

Bus Garage / Transportation (District Services)	
ECM Description	M&V Method
Interior LED Lighting Improvements	Option A - Measured/Calculated
Telecommunications Upgrade	Stipulated

Title 1 Pike Street Building (District Support Services)	
ECM Description	M&V Method
Interior LED Lighting Improvements	Option A - Measured/Calculated
Telecommunications Upgrade Stipulated	

Adult Hi	gh School
ECM Description	M&V Method
Telecommunications Upgrade	Stipulated

Maintenance Building	
ECM Description	M&V Method
Interior LED Lighting Improvements	Option A - Measured/Calculated
Telecommunications Upgrade	Stipulated

The Owner shall pay the Qualified Provider the annual Energy Monitoring fees identified below. For these fees, the Provider shall provide an annual report containing Calculated Savings, equipment runtime data (if applicable) and utility data each year within 120 days following the conclusion of each year during the Program Term. Provider will also prepare and deliver to Owner the appropriate annual state reports as required by statute on annual basis.

At the end of every Current Year, the Current Year Savings will be compared to the Annual Guaranteed Energy Savings Amount to determine if the Annual Guaranteed Energy Savings Amount was achieved. If the Current Year Savings, plus any previously accrued Excess Savings (as defined below), are less than the Annual Guaranteed Energy Savings Amount, the Qualified Provider shall pay the Owner a cash refund for the difference between these amounts (the "Shortfall"). If the Qualified Provider pays the Owner for a shortfall but, in future years, achieves Calculated Savings in excess of the Annual Guaranteed Energy Savings Amount ("Excess Savings"), the Owner shall pay a cash refund to the Qualified Provider. This refund shall be equal to the Excess Savings as long as it does not exceed the amount previously paid to the Owner by the Qualified Provider for previous Shortfalls. Once all previous shortfalls paid by the Qualified Provider have been refunded, future Excess Savings shall be retained by the Owner. The maximum Shortfall in any one year period is limited to the Annual Guaranteed Energy Savings Amount identified on the first page of this Guarantee.

#### **Electric Savings**

<b>✓</b>	Option A- Calculated Electric Savings are based on the formulas contained in Schedule A and are
	considered stipulated for the term of the Guarantee.
<b>✓</b>	Option B- Calculated Electric Savings are based on a combination of formulas contained in
	Schedule A and motor runtimes (if applicable). These are considered Variable Savings for the
	term of the Guarantee.
	Option C – Whole Facility Measurement (Analysis of whole facility utility meter or sub-meter data
	using techniques from simple comparison to regression analysis)
	Option D – Calibrated Simulation (Energy use simulation calibrated with hourly or monthly utility
	billing data and/or end-use metering)

#### **Motor Savings**

Calculated Motor Savings resulting from motor efficiencies are calculated by comparing baseline motor horsepower and equipment runtimes to post-project motor horsepower and actual monthly runtime hours as recorded by the energy management system. These actual equipment runtime hours are compared to the guaranteed runtime schedules contained in Schedule A to determine energy savings/loss. These Calculated Savings are considered variable as they will vary monthly based on Owner's chosen operation schedules.

The following calculations shall be used in determining the amount of Calculated Motor Savings.

 $Savings_{kWh} = Motor_{HP} x (.746kW / HP) x (Baseline Hours - Trended Hours)$ 

**Motor Efficiency** 

 $Savings_{\$} = Savings_{kWh} x Rate_{Trailing}$ 

Where:

Motor horsepower identified on motor nameplate

Savings<sub>kWh</sub> = Actual annual electric consumption savings in kWh

Savings<sub>s</sub> = Actual annual electric savings in dollars

Rate<sub>Trailing</sub> = Trailing electrical consumption rate in dollars per kWh

Baseline Hours = Runtime hours shown on Schedule A

#### **Lighting Savings**

Option A- Calculated Electric Savings generated by the lighting ECMs included in the Project shall be based on the American National Standards Institute (ANSI) input kW values for the existing and future conditions. Refer to any M&V plan which may be incorporated in the contract for additional details which may be applicable. These Calculated Savings are considered stipulated savings and the following calculations determine the amount of Calculated Lighting Savings for the entire period of the Guarantee:

#### **Consumption Savings:**

```
kWh_{tc} = \sum [(FIXT)(kW_p - kW_a)(specified operating hours)]
```

 $Savings_{kWh} = kWh_{tc} x Rate_{kWh}$ 

#### **Demand Savings:**

Savings<sub>kW</sub> =  $\sum [(FIXT) x (kW_p - kW_a)]$ 

 $Savings_{Demand} = Savings_{kW} x Rate_{Demand} x 12 (months)$ 

#### **Total Savings:**

 $Savings_{Total} = Savings_{Demand} + Savings_{kWh}$ 

#### Where:

FIXT = Number of fixtures for each retrofit kWh<sub>tc</sub> = Total consumption reduction in kWh

kW<sub>p</sub> = Respective ANSI input kW for each fixture type prior to retrofit project kW<sub>a</sub> = Respective ANSI input kW for each fixture type after retrofit project

sp. operating hours = Respective operating hours as listed in Schedule A

Savings<sub>kWh</sub> = Actual annual consumption savings in \$
Savings<sub>kW</sub> = Actual annual demand savings in \$

 $Rate_{kWh}$  = Electrical consumption rate in dollars per kWh

Rate<sub>Demand</sub> = Electrical demand rate in dollars per kW

#### **Gas Savings**

$\overline{}$	Option A- Calculated Gas Savings are based on the formulas contained in Schedule A and are
	considered stipulated for the term of the Guarantee.
	Option B- Calculated Gas Savings generated by ECMs included in the Contract shall be based on the
	difference in gas usage in the Base Year to the usage in each future year. Raw gas usage data shall
	be adjusted based on actual weather bin data and utility rate. These weather-adjusted gas usage
	values shall be used to determine Calculated Gas Savings. These Calculated Gas Savings are
	considered variable savings such that they shall be measured and reported annually throughout
	the term of the Guarantee.
	Option C – Whole Facility Measurement (Analysis of whole facility utility meter or sub-meter data
	using techniques from simple comparison to regression analysis)
	Option D – Calibrated Simulation (Energy use simulation calibrated with hourly or monthly utility
	hilling data and/or end-use metering)

#### **Solar PV Savings**

A one-time measurement of the AC output of each system shall be combined for the entire Project and compared to the following formula. If the measured AC output for all the Solar PV systems combined does not equal or exceed the guaranteed AC output from the following formula, the Provider will make all modifications required to meet the guaranteed AC output.

$$GO_{AC} = (SI_M / (1000 W/m^2)) \times NO_{SUM} \times TC \times PT \times IE \times DC$$

Where:

GO<sub>AC</sub> = Guaranteed AC output for all Solar PV systems combined (kW)

 $SI_M = Measured solar irradiance (W/m<sup>2</sup>)$ 

NO<sub>SUM</sub> = Sum of all Solar Panels DC nameplate output (kW)

TC = Solar panel temperature coefficient based upon the panel temperature at the time of

test and solar panel manufacturer data (%)

PT = Power tolerance coefficient based upon the lowest value of the range published by

the solar panel manufacturer (%)

IE = Inverter efficiency as published by the inverter manufacturer (%)

DC = Sum of the derating coefficients shown on Schedule B for system losses, including:

AC system, wiring, clipping, mismatch, shading, reflection, and soiling losses

Solar PV Savings and Renewable Energy Credits (RECs) shall be based on the formulas contained in Schedule A. These Solar PV Savings and RECs are considered stipulated savings such that they shall be applied annually to the Annual Guaranteed Energy Savings Amount throughout the Term of the Guarantee. If the solar designs change before the Guarantee Commencement Date, the Provider shall adjust the guaranteed solar savings and RECs to match the installed design, per formulas in Schedule A.

#### **Telecommunications Audit and Procurement Savings**

Option A - Calculated Savings are based on formulas contained in Schedule A and are considered stipulated for the term of the Guarantee.

#### **Other Savings & Adjustments**

Energy savings resulting from the improvements or recommendations provided as part of the Contract (including physical improvements, operational recommendations, utility rate change recommendations or any other recommendation that reduce energy costs) during the life of the Guarantee that are not accounted for with the calculations identified herein shall be included in total of Calculated Savings. Such energy savings shall be calculated based on industry standard methods.

Increased energy usage resulting from increasing outside air amounts to meet current building codes, additional square footage being added to the building, air-conditioning of areas that were previously not air-conditioned and other identified energy adjustments shall be added to Base Year energy costs in the amounts shown on Schedule A.

Energy savings or losses resulting from Owner modifications and overrides outside the scope of the Guarantee during the Program Term are considered Owner override adjustments and will be reflected in an adjustment to the Base Year. Examples of Owner overrides include unscheduled (undisclosed) physical improvements, plug load changes, changes to occupied schedules, etc.

#### **Operational Savings**

Operational Savings exist when an improvement implemented under the Contract reduces future repair or replacement labor and/or material monies that would have otherwise been expended if the improvement was not implemented.

The agreed-upon Operational Savings included in Schedule A shall be combined with Energy Savings to arrive at the Total Annual Guaranteed Amount. These are considered stipulated savings and will be included in the Total Annual Guaranteed Amount for the Program Term.

#### **Energy Monitoring**

Energy Monitoring services shall be performed by the Qualified Provider as described in this Guarantee.

The fees for the Energy Monitoring services for the Phase II GESC, Years 1 through 14, will be covered by the Energy Monitoring fees as identified in the Phase I GESC Energy Guarantee. When the Phase I GESC Energy Monitoring agreement ends in June 2038, the Phase II GESC Energy Monitoring services will continue with associated fees as indicated below.

The Guarantee is void if the Owner ceases paying the Energy Monitoring fees identified in the Phase I GESC Energy Guarantee or the fees indicated below.

Monitoring Fees shall be paid semi-annually in advance.

Year	Price
1	Included
2	\$0
3	\$0
4	\$0
5	\$0
6	\$0
7	\$0
8	\$0
9	\$0
10	\$0
11	\$0
12	\$0
13	\$0
14	\$0
15	\$8,000
16	\$8,000
17	\$8,000
18	\$8,000
19	\$8,000
20	\$8,000

The Owner has the right to request that the Qualified Provider change the scope of this Guarantee at the end of each Current Year to reduce monitoring/reporting labor and its associated costs.

#### **Other Requirements**

Owner agrees to maintain the physical plant and all existing equipment/systems affecting energy efficiency such that the condition of the existing equipment/systems during the Program Term of Guarantee is at least equal to the condition at the completion of the Contract. Owner also agrees to properly maintain all new and existing equipment and operate all of the new and existing systems as described in the Qualified Provider's Proposal, Contract and Guarantee.

If the Owner fails to operate the equipment/systems as described herein and such failure results in reduced energy savings, then Calculated Savings shall be adjusted to the benefit of the Qualified Provider to offset lost energy savings caused by such failures by the Owner as described above.

A guarantee bond to insure the faithful performance of the Guarantee is only required for portions of the Annual Guaranteed Energy Savings Amount that are not stipulated savings.

The calculations contained within this Guarantee and any M&V Plan which may be incorporated in the Contract shall be used exclusively in calculating savings over the Program Term. No additional M&V methods shall be used in determining the performance of this Guarantee related to energy or operational savings, unless agreed to in writing by both the Owner and Qualified Provider. By signing below, the Owner and Qualified Provider are fully accepting this Guarantee and all of its provisions, requirements, calculations, amounts and conditions.

Printed Name
Title
Signature
Date
Performance Services, Inc.
Tim Thoman
Printed Name
Duraidant
President
Title
Title

**Covington Independent Board of Education** 

#### Exhibit F - Sample - Annual Reconciliation Statement - Issued to KDE

## **Guaranteed Energy Savings Contract Annual Savings Report**

Guarantee Period Covered by this Re	port (M/D/Yr):		_ through		Report Year:	1 of 10
Institution:				Contractor:		
XYZ School Corporation				Performance Services	, Inc.	
Contact:				Contact:		
Phone:				Corey Haggard Phone:		
Priorie.				(317) 713-1750		
Address:				Address:		
				4670 Haven Point Blvd	•	
				Indianapolis, IN 46280	<u> </u>	
Contract Dates: Signed:	January 1, 2011		Expires:	December 31, 2021		
Project Dates: Initiated:	January 1, 2010	-	Completed:	December 31, 2010		
Total Project Cost (with Financing):	\$1,844,634		Tota	Il Guaranteed Savings:	\$2,505,780	
	(A) Baseline Constant (from contract)	(B) Actual Post-Project	(C)* Adjustment	(D) ** Savings (A-B+C)	(E) Guaranteed Savings (From Contract)	(F) Difference + or - (D minus E)
1. Energy Saved (MMBTU):	9,842			487	348	139
2. Energy Costs Saved:	\$170,303			\$9,652	\$5,983	3,669
3. Operating Costs Saved:				\$213,755	\$213,755	0
4. Total Costs Saved:	\$170,303			\$223,407	\$219,738	3,669
5. Total Thru Previous Years:				\$0	\$0	0
6. Accumulated Totals Thru This Perio	od (4 + 5)			\$223,407	\$219,738	3,669
* Note: Provide attachment showi  ** Note: If column A, B, or C are b reporter	lank or the listed sa	determine ad	justments. t been calculate	·		
Total Square Footage of Buildings in C	GESC:	167,963	<u>-</u>	Pre-proje	ct Energy Cost:	\$170,303
Buildings Included in Contract:			Savings Meas	ures Included in Contra	ct:	
XYZ School Building		HVAC Renova	ition			
Name and Organization of Person Fili	ng this Report:		Α	pproved by and Title of	Authorized Inst	itution Official:



# **Attica Consolidated School Corporation**

Phase 2 Report
Attica Elementary School

Year 8 – Quarter 4 Review

Jul 1, 2013 - Jun 30, 2014

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### **Executive Summary**

This Year 8 – Annual Guarantee Report contains the savings results for the period of time between July 1, 2013 and June 30, 2014. This report is intended to provide an update on the savings performance to date and to help uncover potential operating problems.

#### **ENERGY SAVINGS:**

Actual Measured Energy Savings: \$ 6,373 (electric)

\$11,135 (gas)

\$ 326 (water)

\$17,834

Guarantee Savings (12 months)

\$12,084

Actual energy savings for the eighth guarantee year exceeded guaranteed energy savings by \$5,750 after adjusting for utility rate changes, operating schedule variations, and Owner overrides. The Guarantee is based on a combination of measured, verified, and calculated savings that are the most accurate methods of determining actual savings.

#### **OPERATIONAL SAVINGS:**

Operational savings were estimated and agreed to up-front as part of the Guarantee. Therefore, the operational savings estimated as part of the Guarantee have been used in this Guarantee Report and will be used in each of the following Annual Guaranteed Reports. Annual operational savings is \$477,115.

#### **LEARNING ENVIRONMENT:**

Performance Services works hard to ensure that our customers receive optimal learning environments for their students. We have optimized the HVAC systems to provide consistent and appropriate comfort, humidity and indoor air quality levels.

#### **NEXT REPORT:**

We will provide the Year 9 – Quarter 4 in July 2015. Please feel free to contact us at 888-390-2700 with any questions or comments.

#### **CONTACTS:**

- Shana Lopez, Performance Assurance Analyst
- Chris Rainey, Engineering Manager
- Scott Morris, Operations Vice President
- Scott Zigmond, Sales and Marketing Vice President
- Tim Thoman, President
- Office: 888-390-2700

## **Annual Guaranteed Savings Report Summary**

Year 8 - Quarter 4 (July 1, 2013 - June 30, 2014)

	Guaranteed	Actual	Net
Description	Savings	Savings	Difference
ENERGY SAVINGS			
Attica Elementary School			
* Electric	2,904	6,373	3,469
Gas	8,886	11,135	2,249
* Water / Sewer	293	326	33
Energy Savings	12,084	17,834	5,750
OPERATIONAL SAVINGS			
Attica Elementary School			
* HVAC Renovation	477,115	477,115	-
Operational Savings	477,115	477,115	-
TOTAL SAVINGS	489,199	494,949	5,750

#### NOTE:

1 The operational savings are expenditures that the School Corporation would have incurred had they not addressed their repair and replacement needs under this contract. Operational savings are impossible to accurately track after the equipment is replaced because it is impossible to know when the equipment would have failed or required repairs. Therefore, the operational savings were agreed to as part of the contract and have been averaged over the ten year term. This is why the actual and guaranteed operational savings are the same value.

#### Detailed Energy Savings Summary Year 8 - Quarter 4 (July 1, 2013 - June 30, 2013)

		~ 311 001	- (- 01.7	<del>-,</del>		<del>,, ====,</del>						
		<b>Electric Savings</b>	i		<b>Gas Savings</b>		Wat	er & Sewer Sa	vings		<b>Total Savings</b>	
Improvements	Guaranteed	Actual	Difference	Guaranteed	Actual	Difference	Guaranteed	Actual	Difference	Guaranteed	Actual	Difference
	Ytd	Ytd	Ytd	Ytd	Ytd	Ytd	Ytd	Ytd	Ytd	Ytd	Ytd	Ytd
ATTICA ELEMENTARY SCHOOL												
HVAC Renovation												
* Reduce electric usage by improving AC efficiency - Chiller	15		188	-	-	-	-	-	-	157	345	
* AHU supply fan variable speed drive savings (Gym, Admin., Media & Cafeteria)	1,18	2,595	1,414	-	-	-	-	-	-	1,181	2,595	1,414
* Reduce electric usage by pump speed savings (Hot Water)	972		1,165	-	-	-	-	-	-	972	2,137	1,165
* Reduce electric usage by installing smaller pump motors (Chilled Water)	144	317	173	-	-	-	-	-	-	144	317	173
* Reduce electric usage by installing smaller fan motor (Primary Air Unit)	409	898	490	-	-	-	-	-	-	409	898	490
* Reduce electric usage by installing more efficient lighting (Gymnasium)	10	13	3	-	-	-	-	-	-	10	13	3
* Reduce gas usage by installing more efficient windows		-	-	2,407	3,009	602	-	-	-	2,407	3,009	602
* Reduce gas usage by installing an efficient boiler plant		-	-	6,070	7,615	1,545	-	-	-	6,070	7,615	1,545
* Reduce heating & air conditioning of outside air due to CO2 control	3:	68	37	358	447	89	-	-	-	389	515	127
* Domestic Hot Water Tank Thermal Loss Savings		-	-	51	64	13	-	-	-	51	64	13
* Plumbing Systems Replacement Water and Sewer Savings		-	-	-	-	-	183	204	20	183	204	20
* ADA Replacement Water and Sewer Savings		-	-	-	-	-	110	122	12	110	122	12
TOTAL	\$ 2,904	\$ 6,373	\$ 3,469	\$ 8,886	\$ 11,135	\$ 2,249	\$ 293	\$ 326	\$ 33	\$ 12,084	\$ 17,834	\$ 5,750
ATTICA ELEMENTARY SCHOOL ADJUSTMENTS												
* Adjustment for larger fan systems and fan runtime	(1,639	(2,882)	(1,243)	-	-	-	-	-	-	(1,639)	(2,882)	(1,243)
* Adjustment for introducing more outdoor air in the heating season		-	-	(6,069)	(6,069)	-	-	-	-	(6,069)	(6,069)	-
* Adjustment for increased light levels (Gymnasium)	(443	(443)	-	-	-	-	-	-	-	(443)	(443)	-
ATTICA ELEMENTARY SCHOOL ADJUSTMENTS TOTAL	\$ (2,082	) \$ (3,325)	\$ (1,243)	\$ (6,069)	\$ (6,069)	\$ -	\$ -	\$ -	\$ -	\$ (8,151)	\$ (9,394)	\$ (1,243)
										200000000		
TOTAL ATTICA ELEM. SCHOOL UTILITY SAVINGS WITH ADJUSTMENTS	\$ 822	\$ 3,048	\$ 2,226	\$ 2,817	\$ 5,067	\$ 2,249	\$ 293	\$ 326	\$ 33	\$ 3,933	\$ 8,441	\$ 4,508

No. of winter months into guarantee	7
No. of summer months into guarantee $$	5

Utility Bill \	VS. Actual Sa Year 8	avings Compar	ison	
Description	Utility Bill Savings	Increased Fresh Air & Air-conditioning Adjustments	Owner Override Impact	Anticipated Utility Bill Change
UTILITY SAVINGS				
Attica Elementary School  * Electric (not weather adjusted)	20.262	2 225		22 507
Liectife (flot weather adjusted)	20,262	3,325	-	23,587
Gas (weather adjusted)  * Water / Sewer (not weather adjusted)	30,446 -	6,069 -	-	36,515
SAVINGS	50,708	9,394	-	60,102

#### NOTE:

1

Actual savings are calculated as defined in the Performance Guarantee Agreement, not based on raw utility data. Raw utility data is not used to measure actual energy savings because it is inaccurate and very time consuming. However, we feel it is important to compare raw utility data to the actual savings in the first year as a cross check. Therefore, we have provided raw utility data with this report. After adjusting for utility rate changes, weather, increased fresh air, air-conditioning additional areas and owner overrides the raw utility data corresponds to within 237% or \$42,268 of the actual savings. The \$42,268 in increased utility savings is due to extra efforts of the staff which is dedicated to running the systems as efficiently as possible.

## Weather Adjusted Utility Bill Savings

**Buildings:** 

**Attica Elementary School** 

		,,	3011001											
							E	ELECTRI	C					
7	Timeframe	•	Utility:	Duke Ene	gy									
			Meter#	10419546	4									
Base	Current	Month		Current Y	ear			Base Year				:	Savings	
Year	Year		Usage	Rate		Raw Costs	Raw Usage	Rate	Ra	w Costs	Usage		Rate	Savings
			(kWh)	(\$ / kWl	)	(\$)	(kWh)	(\$ / kWh)		(\$)	(kWh)	(\$	5 / kWh)	(\$)
2003	2013	Jul	37,600	\$ 0.096	2 \$	3,616	73,600	\$ 0.0559	\$	4,117	36,000	\$	0.0962	\$ 3,463
2003	2013	Aug	60,000	\$ 0.094	8 \$	5,689	73,600	\$ 0.0574	\$	4,223	13,600	\$	0.0948	\$ 1,290
2003	2013	Sept	48,400	\$ 0.098	5 \$	4,769	62,800	\$ 0.0567	\$	3,559	14,400	\$	0.0985	\$ 1,419
2003	2013	Oct	34,800	\$ 0.099	5 \$	3,464	55,600	\$ 0.0544	\$	3,023	20,800	\$	0.0995	\$ 2,070
2003	2013	Nov	40,800	\$ 0.096	8 \$	3,951	50,400	\$ 0.0585	\$	2,947	9,600	\$	0.0968	\$ 930
2003	2013	Dec	36,400	\$ 0.098	7 \$	3,594	52,000	\$ 0.0533	\$	2,772	15,600	\$	0.0987	\$ 1,540
2003	2014	Jan	33,600	\$ 0.100	6 \$	3,381	55,200	\$ 0.0558	\$	3,078	21,600	\$	0.1006	\$ 2,174
2003	2014	Feb	48,000	\$ 0.097	5 \$	4,681	53,600	\$ 0.0549	\$	2,942	5,600	\$	0.0975	\$ 546
2003	2014	Mar	31,600	\$ 0.100	6 \$	3,178	46,400	\$ 0.0557	\$	2,583	14,800	\$	0.1006	\$ 1,488
2003	2014	Apr	39,200	\$ 0.100	2 \$	3,930	63,200	\$ 0.0568	\$	3,588	24,000	\$	0.1002	\$ 2,406
2003	2014	May	46,400	\$ 0.100	2 \$	4,647	48,000	\$ 0.0582	\$	2,794	1,600	\$	0.1002	\$ 160
2003	2014	Jun	35,600	\$ 0.105	2 \$	3,744	62,000	\$ 0.0565	\$	3,505	26,400	\$	0.1052	\$ 2,777
	Total		492,400			696,400	\$ 0.0562	\$	39,131	204,000	\$	0.0988	\$ 20,262	

0.0988

7	imeframe		Utility: Meter #	Vectren N0844613								GA	S							
Base	Current	Month		Curre	nt \	⁄ear			Base Year										Savings	
Year	Year		Weather	Usage		Rate	Ra	w Costs	osts Weather Raw Usage Rate Raw Costs Weather Weather Ad					Weather Adj.	Usage		Rate	Savings		
			(HDD)	(Therms)	(\$,	/ Therms)		(\$)	(HDD)	(Therms)	(\$	/ Therms)		(\$)	Adjustment	Usage (therms)	(Therms)	(\$,	/ Therms)	(\$)
2003	2013	Jul	3	82	\$	0.8129	\$	958	-	100	\$	1.1281	\$	113	1.00	100	18	\$	1.1281	\$ 20
2003	2013	Aug	5	112	\$	1.3994	\$	157	-	161	\$	0.9996	\$	161	1.00	161	49	\$	1.3994	\$ 69
2003	2013	Sept	26	175	\$	0.9700	\$	169	88	749	\$	0.8652	\$	648	1.00	749	574	\$	0.9700	\$ 557
2003	2013	Oct	346	246	\$	1.8984	\$	467	328	1,844	\$	0.7886	\$	1,454	1.05	1,945	1,699	\$	1.8984	\$ 3,226
2003	2013	Nov	764	1,344	\$	0.8763	\$	1,178	528	3,618	\$	0.7849	\$	2,840	1.45	5,235	3,891	\$	0.8763	\$ 3,410
2003	2013	Dec	1,079	5,100	\$	0.4110	\$	2,096	942	7,543	\$	0.8001	\$	6,036	1.15	8,640	3,540	\$	0.8001	\$ 2,832
2003	2014	Jan	1,387	1,708	\$	1.5700	\$	2,682	1,335	7,757	\$	0.7618	\$	5,909	1.04	8,059	6,351	\$	1.5700	\$ 9,971
2003	2014	Feb	1,187	4,099	\$	1.0135	\$	4,154	1,105	8,004	\$	0.7753	\$	6,205	1.07	8,598	4,499	\$	1.0135	\$ 4,560
2003	2014	Mar	899	2,398	\$	0.6873	\$	1,648	666	3,328	\$	0.9284	\$	3,089	1.35	4,492	2,094	\$	0.9284	\$ 1,944
2003	2014	Apr	357	826	\$	1.1963	\$	988	320	3,327	\$	0.9284	\$	3,089	1.12	3,712	2,886	\$	1.1963	\$ 3,453
2003	2014	May	153	373	\$	0.5397	\$	201	144	554	\$	0.8799	\$	487	1.00	554	181	\$	0.8799	\$ 160
2003	2014	Jun	2	24	\$	2.4865	\$	61	45	123	\$	1.1003	\$	135	1.00	123	99	\$	2.4865	\$ 245
	Total				14,758	5,501	37,108	\$	0.8129	\$	30,166	1.13	42,368	25,882	\$	0.8129	\$ 30,446			

Year 8 - Quarter 1 (July 1, 2013 - September 30, 2014)

Building	System			July					August				Se	ptember	1					1st Quar	ter Saving	s		
	ID	Base Yr.	Guar.	Actual	Adjusted	Saved	Base Yr.	Guar.	Actual	Adjusted	Saved	Base Yr.	Guar.	Actual	Adjusted	Saved	Base Yr.	Guar.	Actual	Adjusted	Saved	Power	kWh Rate	Savings
		(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(kW)	(kWh / Hr)	(\$)
		31	31				31	31				30	30				92	92						<u> </u>
																	0	0						
Attica Elementary	Classrooms	-	-	125	125	-	70	44	228	184	26	290	182	196	14	108	360	226	550	324	134	2.2	\$ 0.099	\$ -
Attica Elementary	Cafeteria-Kitchen	-	-	61	61		75	46	195	149	29	315	193	190	(3)	123	390	239	446	207	152	0.6	\$ 0.099	\$ -
Attica Elementary	Computer Rooms	-		141	141		70	44	231	187	26	290	182	191	9	108	360	226	563	337	134	0.4	\$ 0.099	\$ -
Attica Elementary	Library	-	-	150	150		70	44	196	152	26	290	182	186	3	108	360	226	531	305	134	0.6	\$ 0.099	\$ -
Attica Elementary	Gyms	-	-	256	256	-	83	44	202	158	39	350	182	170	(12)	168	433	226	628	402	207	-	\$ 0.099	\$ -
Attica Elementary	Office / Administration		-	68	68	-	49	49	204	155	-	210	210	200	(10)	,	259	259	472	213		0.4	\$ 0.099	\$ -
Attica Elementary	Dual Temp Pumps - Lo (Heating)	-		0	0		-	346	0	(346)	(346)	-	546	0	(546)	(546)	-	892	0	(892)	(892)	2.0	\$ 0.099	\$ -
Attica Elementary	Dual Temp Pumps - High (Cooling)		189	207	18	-	,	189	207	18	(189)		183	179	(3)	(183)	189	560	593	33	(371)	14.8	\$ 0.099	\$ -
Attica Elementary	Chilled Water Pumps	189	-	212	212		189	-	266	266	189	183	-	395	395	183	371	-	873	873	371	18.2	\$ 0.099	\$ -
	100000000000000000000000000000000000000	0000000								20000000		900000								2000	***			\$ -

Building	System					1st Qu	arter Cos	t of Adjustme	nts						
	ID						Jul-A	ug-Sep							
		Mo					<b>Notor</b>	Motor	Hea	t	He	eat			
		Base Yr.	Guar.	Actual	Adjusted	Saved	Power	kWh Rate		Unit	Total	Uni	t	To	otal
		(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(kW)	(kWh / Hr)			(\$ / Period)	(\$ / Ho	ur)	(\$ / P	eriod)
Attica Elementary	Classrooms	360	226	550	324	134	2.2	\$ 0.099	\$	0.21	\$ 69	\$ 4	.76	\$	-
Attica Elementary	Cafeteria-Kitchen	390	239	446	207	152	0.6	\$ 0.099	\$	0.06	\$ 12	\$ 1	13	\$	-
Attica Elementary	Computer Rooms	360	226	563	337	134	0.4	\$ 0.099	\$	0.04	\$ 13	\$	-	\$	-
Attica Elementary	Library	360	226	531	305	134	0.6	\$ 0.099	\$	0.06	\$ 18	\$	-	\$	-
Attica Elementary	Gyms	433	226	628	402	207	-	\$ 0.099	\$	-	\$ -	\$ 0	0.50	\$	-
Attica Elementary	Office / Administration	259	259	472	213	-	0.4	\$ 0.099	\$	0.04	\$ 9	\$	-	\$	-
Attica Elementary	Dual Temp Pumps - Lo (Heating)	-	892	0	(892)	(892)	2.0	\$ 0.099	\$	0.20	\$ (181)	\$	-	\$	-
Attica Elementary	Hot Water Pumps			-		-	6.3	\$ 0.099	\$	0.62	\$ -	\$	-	\$	-
Attica Elementary	Dual Temp Pumps - High (Cooling)	189	560	593	33	(371)	14.8	\$ 0.099	\$	1.46	\$ 48	\$	-	\$	-
Attica Elementary	Chilled Water Pumps	371	-	873	873	371	18.2	\$ 0.099	\$	1.80	\$ 1,569	\$	-	\$	-
											\$ 1,558			\$	-

Year 8 - Quarter 2 (Oct 1, 2013 - December 31, 2013)

Building	System			October					Novem	oer			De	cember						2nd Qua	rter Saving	ζS		
	ID	Base Yr. (Hours)	Guar. (Hours)	Actual (Hours)	Adjusted (Hours)	Saved (Hours)	Base Yr.	Guar. (Hours)	Actual (Hours)	Adjusted (Hours)	Saved (Hours)	Base Yr. (Hours)	Guar.		Adjusted	Saved	Base Yr.	Guar.	Actual	Adjusted (Hours)	Saved (Hours)	Power (kW)	kWh Rate (kWh / Hr)	Savings
		(nours)	(nours)	(nours)	(nours)	(nours)	(Hours)	(nours)	(nours)	(nours)	(nours)	(110015)	(nours) 31	(nours)	(Hours)	(nours)	92	(Hours)	(nours)	(nours)	(nours)	(KVV)	(KVVII / HI)	(5)
																	0	0						
Attica Elementary	Classrooms	299	188	194	5	111	290	182	198	16	108	299	188	196	8	111	888	559	587	29	330	2.2	\$ 0.099	\$ -
Attica Elementary	Cafeteria-Kitchen	326	199	171	(28)	127	315	193	161	(32)	123	326	199	119	(81)	127	967	591	451	(140)	376	0.6	\$ 0.099	\$ -
Attica Elementary	Computer Rooms	299	188	196	8	111	290	182	185	2	108	299	188	152	(36)	111	888	559	533	(26)	330	0.4	\$ 0.099	\$ -
Attica Elementary	Library	299	188	69	(119)	111	290	182	273	91	108	299	188	274	86	111	888	559	617	58	330	0.6	\$ 0.099	\$ -
Attica Elementary	Gyms	361	188	154	(34)	173	350	182	152	(30)	168	361	188	130	(59)	173	1,072	559	435	(123)	514		\$ 0.099	\$ -
Attica Elementary	Office / Administration	217	217	181	(36)	-	210	210	189	(21)	-	217	217	169	(48)	-	644	644	539	(105)	-	0.4	\$ 0.099	\$ -
Attica Elementary	Dual Temp Pumps - Lo (Heating)		564	173	(391)	(564)		546	281	(265)	(546)	-	564	355	(209)	(564)		1,674	809	(865)	(1,674)	2.0	\$ 0.099	\$ -
Attica Elementary	Dual Temp Pumps - High (Cooling)	-	-	0	0	-	-	-	0	0	-	-	-	0	0	-	-	-	0	0	-	14.8	\$ 0.099	\$ -
Attica Elementary	Chilled Water Pumps			185	185	-			0	0	-			0	0	-	-	-	185	185	-	18.2	\$ 0.099	\$ -
Total	900000000000000000000000000000000000000												300							***		3 3 3		\$ -

Building	System					2nd Quar	rter Cost	of Adjustn	nents						
	ID						Oct-No	v-Dec							
									M	otor	Motor		Heat		Heat
		Base Yr.	Guar.	Actual	Adjusted	Saved	Power	kWh Rate	U	Jnit	Total		Unit		Total
		(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(kW)	(kWh / Hr)	(\$/	Hour)	(\$ / Period)	(\$	/ Hour)	(\$/	Period)
Attica Elementary	Classrooms	888	559	587	29	330	2.2	\$ 0.099	\$	0.21	\$ 6	\$	4.76	\$	137
Attica Elementary	Cafeteria-Kitchen	967	591	451	(140)	376	0.6	\$ 0.099	\$	0.06	\$ (8)	\$	1.13	\$	(158
Attica Elementary	Computer Rooms	888	559	533	(26)	330	0.4	\$ 0.099	\$	0.04	\$ (1)	\$	-	\$	-
Attica Elementary	Library	888	559	617	58	330	0.6	\$ 0.099	\$	0.06	\$ 3	\$	-	\$	-
Attica Elementary	Gyms	1,072	559	435	(123)	514	-	\$ 0.099	\$	-	\$ -	\$	0.50	\$	(62
Attica Elementary	Office / Administration	644	644	539	(105)	-	0.4	\$ 0.099	\$	0.04	\$ (5)	\$	-	\$	-
Attica Elementary	Dual Temp Pumps - Lo (Heating)	-	1,674	809	(865)	(1,674)	2.0	\$ 0.099	\$	0.20	\$ (175)	\$	-	\$	-
Attica Elementary	Hot Water Pumps		-	-	-	-	6.3	\$ 0.099	\$	0.62	\$ -	\$	-	\$	-
Attica Elementary	Dual Temp Pumps - High (Cooling)	-	-	0	0	-	14.8	\$ 0.099	\$	1.46	\$ 0	\$	-	\$	-
Attica Elementary	Chilled Water Pumps			185	185	-	18.2	\$ 0.099	\$	1.80	\$ 333	\$	-	\$	-
Total	096009660006660006600	*******	100000	******			****			****	\$ 154			Ś	(220

Year 8 - Quarter 3 (Jan 1, 2014 - March 31, 2014)

Building	System			January					Februa	ry				March						3rd Quar	ter Saving	s		
	ID	Base Yr.	Guar.	Actual	Adjusted	Saved	Base Yr.	Guar.	Actual	Adjusted	Saved	Base Yr.	Guar.	Actual	Adjusted	Saved	Base Yr.	Guar.	Actual	Adjusted	Saved	Power	kWh Rate	Savings
		(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(kW)	(\$ / kWh)	(\$)
		31	31				28	28				31	31				90	90						
																	0	0						
Attica Elementary	Classrooms	299	188	246	58	111	270	170	210	40	100	299	188	133	(55)	111	869	546	589	43	323	2.2	\$ 0.099	\$ -
Attica Elementary	Cafeteria-Kitchen	326	199	113	(87)	127	294	180	0	(180)	114	326	199	0	(199)	127	946	579	113	(466)	368	0.6	\$ 0.099	\$ -
Attica Elementary	Computer Rooms	299	188	220	31	111	270	170	200	30	100	299	188	120	(68)	111	869	546	540	(7)	323	0.4	\$ 0.099	\$ -
Attica Elementary	Library	299	188	354	166	111	270	170	320	150	100	299	188	279	90	111	869	546	953	407	323	0.6	\$ 0.099	\$ -
Attica Elementary	Gyms	361	188	186	(2)	173	326	170	170	0	156	361	188	103	(85)	173	1,049	546	459	(87)	503	-	\$ 0.099	\$ -
Attica Elementary	Office / Administration	217	217	205	(12)	-	196	196	190	(6)	-	217	217	108	(109)	-	630	630	503	(127)	-	0.4	\$ 0.099	\$ -
Attica Elementary	Dual Temp Pumps - Lo (Heating)	-	564	371	(193)	(564)	-	510	313	(197)	(510)	-	564	320	(244)	(564)	-	1,638	1,004	(634)	(1,638)	2.0	\$ 0.099	\$ -
Attica Elementary	Dual Temp Pumps - High (Cooling)		-	0	0	-	,	-	0	0	-	-	-	0	0	-	-	-	0	0	-	14.8	\$ 0.099	\$ -
Attica Elementary	Chilled Water Pumps	-	-	0	0	-	-	-	-	-	-	-	-	0	0	-	-	-	0	0	-	18.2	\$ 0.099	\$ -
Total					*** ***				S S									35. 3					** **	\$ -

Building	System					3rd Quai	ter Cost	of Adjustn	nents						
	ID						Jan-Fe	b-Mar							
									Mo	otor	Motor	F	Heat		Heat
		Base Yr.	Guar.	Actual	Adjusted	Saved	Power	kWh Rate	U	Init	Total		Unit		Total
		(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(kW)	(\$ / kWh)	(\$/	Hour)	(\$ / Period)	(\$ /	/ Hour)	(\$/	/ Period)
Attica Elementary	Classrooms	869	546	589	43	323	2.2	\$ 0.099	\$	0.21	\$ 9	\$	4.76	\$	204
Attica Elementary	Cafeteria-Kitchen	946	579	113	(466)	368	0.6	\$ 0.099	\$	0.06	\$ (28)	) \$	1.13	\$	(525)
Attica Elementary	Computer Rooms	869	546	540	(7)	323	0.4	\$ 0.099	\$	0.04	\$ (0)	) \$		\$	-
Attica Elementary	Library	869	546	953	407	323	0.6	\$ 0.099	\$	0.06	\$ 24	\$	-	\$	-
Attica Elementary	Gyms	1,049	546	459	(87)	503	-	\$ 0.099	\$	-	\$ -	\$	0.50	\$	(44)
Attica Elementary	Office / Administration	630	630	503	(127)	-	0.4	\$ 0.099	\$	0.04	\$ (6)	) \$	-	\$	-
Attica Elementary	Dual Temp Pumps - Lo (Heating)	-	1,638	1,004	(634)	(1,638)	2.0	\$ 0.099	\$	0.20	\$ (128)	) \$	-	\$	-
Attica Elementary	Hot Water Pumps						6.3	\$ 0.099	\$	0.62	\$ -	\$	-	\$	-
Attica Elementary	Dual Temp Pumps - High (Cooling)	-	-	0	0	-	14.8	\$ 0.099	\$	1.46	\$ 0	\$	-	\$	-
Attica Elementary	Chilled Water Pumps		-	0	0	-	18.2	\$ 0.099	\$	1.80	\$ 0	\$	-	\$	-
Total					14.						\$ (128)			Ś	(364)

Year 8 - Quarter 4 (April 1, 2014 - June 30, 2014)

Building	System			April					May					June						4th Quar	rter Saving	s		
	ID	Base Yr.	Guar.	Actual	Adjusted	Saved	Base Yr.	Guar.	Actual	Adjusted	Saved	Base Yr.	Guar.	Actual	Adjusted	Saved	Base Yr.	Guar.	Actual	Adjusted	Saved	Power	kWh Rate	Savings
		(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(kW)	(kWh / Hr)	(\$)
		30	30				31	31				30	30				91	91						
																	0	0						
Attica Elementary	Classrooms	290	182	207	25	108	299	188	159	(29)	111	-	-	124	124	-	589	370	490	120	219	2.2	\$ 0.099	\$ -
Attica Elementary	Cafeteria-Kitchen	315	193	0	(193)	123	326	199	139	(60)	127	-	-	243	243	-	641	392	382	(10)	249	0.6	\$ 0.099	\$ -
Attica Elementary	Computer Rooms	290	182	219	37	108	299	188	237	48	111	-	-	164	164	-	589	370	620	250	219	0.4	\$ 0.099	\$ -
Attica Elementary	Library	290	182	256	74	108	299	188	0	(188)	111	-	-	0	0	-	589	370	256	(114)	219	0.6	\$ 0.099	\$ -
Attica Elementary	Gyms	350	182	200	17	168	361	188	200	11	173	-	-	243	243	-	711	370	642	272	341	-	\$ 0.099	\$ -
Attica Elementary	Office / Administration	210	210	210	0	-	217	217	210	(7)	-	-	-	148	148	-	427	427	568	141	-	0.4	\$ 0.099	\$ -
Attica Elementary	Dual Temp Pumps - Lo (Heating)	-	546	165	(381)	(546)	-	346	0	(346)	(346)	-	-	0	0	-	-	892	165	(727)	(892)	2.0	\$ 0.099	\$ -
Attica Elementary	Dual Temp Pumps - High (Cooling)	-	-	0	0	-		189	139	(50)	(189)	-	183	141	141	-	-	189	280	91	(189)	14.8	\$ 0.099	\$ -
Attica Elementary	Chilled Water Pumps	-	-	41	41		189	-	434	434	189	183	-	404	404	183	371	-	879	879	371	18.2	\$ 0.099	\$ -
Total			*** ***			***		** **																\$ -

Building	System					4th Quarter	Cost of	Adjustmen	its				
	ID					A	pr-May-J	un					
									Motor	Motor	Heat	Н	Heat
		Base Yr.	Guar.	Actual	Adjusted	Saved	Power	kWh Rate	Unit	Total	Unit		Total
		(Hours)	(Hours)	(Hours)	(Hours)	(Hours)	(kW)	(kWh / Hr)	(\$ / Hour)	(\$ / Period)	(\$ / Hour)	(\$/	Period)
Attica Elementary	Classrooms	589	370	490	120	219	2.2	\$ 0.099	\$ 0.21	\$ 26	\$ 4.76	\$	121
Attica Elementary	Cafeteria-Kitchen	641	392	382	(10)	249	0.6	\$ 0.099	\$ 0.06	\$ (1)	\$ 1.13	\$	(217)
Attica Elementary	Computer Rooms	589	370	620	250	219	0.4	\$ 0.099	\$ 0.04	\$ 9	\$ -	\$	-
Attica Elementary	Library	589	370	256	(114)	219	0.6	\$ 0.099	\$ 0.06	\$ (7)	\$ -	\$	-
Attica Elementary	Gyms	711	370	642	272	341		\$ 0.099	\$ -	\$ -	\$ 0.50	\$	9
Attica Elementary	Office / Administration	427	427	568	141	-	0.4	\$ 0.099	\$ 0.04	\$ 6	\$ -	\$	-
Attica Elementary	Dual Temp Pumps - Lo (Heating)	-	892	165	(727)	(892)	2.0	\$ 0.099	\$ 0.20	\$ (147)	\$ -	\$	-
Attica Elementary	Hot Water Pumps	-	-	-	-	-	6.3	\$ 0.099	\$ 0.62	\$ -	\$ -	\$	-
Attica Elementary	Dual Temp Pumps - High (Cooling)	-	189	280	91	(189)	14.8	\$ 0.099	\$ 1.46	\$ 133	\$ -	\$	-
Attica Elementary	Chilled Water Pumps	371		879	879	371	18.2	\$ 0.099	\$ 1.80	\$ 1,579	\$ -	\$	-
Total	85008500850085008500850									\$ 1,599		\$	(88

				Fan N	Motor Sa	vings							
Building	System ID	Existing Motor HP	New Motor HP	Difference HP	Break HP / Motor HP	kW / HP	Quantity	Future Run Hours	Motor Efficiency	Increased (kWh)	Rate (kWh)	_	osts (\$)
Attica Elem. School	Main Fan System	25.00											
	New Relief Fan		1.50										
				23.50	0.80	0.746	1	2,755	85%	9,093	\$ 0.099	\$	898
										•			
Savings												\$	898

	Variable Speed Drive Savings														
	Full Load	d Power	Total	Current	Future	Average	kWh								
			Runtime	Average	Average	kW	Savings	Consumption	Utility						
Description	Total	Total	Hours	Speed	Speed	Input		Rate	Savings						
	(HP)	(kW)						(\$)	(\$)						
Attica Elementary School															
AHU#1 - Media Center	5	3.43	2,755	100.00%	75.00%	1.98	3,987	\$ 0.099	\$ 394						
AHU#2 - Administration	5	3.43	2,840	100.00%	75.00%	1.98	4,110	\$ 0.099	\$ 406						
AHU#3 - Gymnasium	7.5	5.14	2,755	100.00%	75.00%	2.97	5,981	\$ 0.099	\$ 591						
AHU#4 - Multipurpose	15	10.17	2,840	100.00%	75.00%	5.88	12,190	\$ 0.099	\$ 1,204						
TOTAL							26,267		\$ 2,595						

		Pun	np Mot	or Savi	ngs						
System	Rated	Operating	Conversion	Quantity	Motor	Average	Operating		Electric		
ID	Power (HP)	Power (HP)	Factor (kW / HP)		Efficiency %	Usage (kW)	<b>Hours</b> (Hours / Year)	<b>Usage</b> (kWh)	<b>Rate</b> (kWh)	S	avings (\$)
Attica Elem. School Existing											
Hot Water Pumps	7.50	6.75	0.746	1	80%	6.29	5,096	32,076	0.099	\$	3,169
Subtotal								32,076		\$	3,169
Proposed											
Low Speed on Dual Temp Pump *	20.00	2.50	0.746	1	91%	2.05	5,096	10,444	0.099	\$	1,032
Subtotal								10,444		\$	1,032
Difference								21,632		\$	2,137
Existing											
Chilled Water Pumps (1 @ 10 HP & 1 @ 20HP)	30.00	19.50	0.746	1	80%	18.18	937	17,036	0.099	\$	1,683
Subtotal								17,036		\$	1,683
Proposed											
Dual Temp Pump	20.00	18.00	0.746	1	91%	14.76	937	13,825	0.099	\$	1,366
Subtotal								13,825		\$	1,366
Difference								3,211		\$	317

Note: \* Formula for operating power at low speed on dual temp pump is as follows: Operating Power = (RPM<sub>2</sub>/RPM<sub>1</sub>)<sup>3</sup> X BHP<sub>1</sub> therefore (50/100)<sup>3</sup> X 20 = 2.50

#### Formula:

Pump Motor Savings (\$) = Pump Motor Electric Cost Before (\$) - Pump Motor Electric Cost After (\$)

Pump Motor Electric Cost (\$) = Operating Power (HP) x (.746 kW / HP) x (Operating Hour) x (\$ / kWh)

		Air (	Conditi	oning E	fficiency	Saving	S				
System	Efficiency	Total	Total	Average	Average	Average	Operating	Savings	Rate	S	Savings
ID	(kW / Ton)	Tonage	kW	Output	Tonage	kW	Hours / Year	(kWh)	(kWh)	<u> </u>	(\$)
Savings											
Attica Elementary School											
Existing											
York Chiller	1.33	213.00	283.29	35%	74.55	99.15	937	92,895	\$ 0.099	\$	9,177
Subtotal		213.00			74.55	99.15		92,895		\$	9,177
Proposed											
New Air Cooled Chiller	1.28	190.30	243.58	39%	74.55	95.42	937	89,403	\$ 0.099	\$	8,832
Subtotal		190.30			74.55	95.42		89,403		\$	8,832
Savings								3,492		\$	345

Notes:

#### Formula:

AC Efficiency Savings $_{\rm kWh}$  = (AC $_{\rm effB}$  – AC $_{\rm effA}$ ) x (Operatin Hours) x (Baseline AC Tonage)

AC Savings\$ = (AC Runtime Savings $_{\rm kWh}$  + AC Efficiency Savings $_{\rm kWh}$ ) x Rate $_{\rm Composite}$ 

	Adjust	tment f	or Larg	er Fan N	lotors	and Fa	n Runti	me			
Larger Fan Motors for Air-Conditioning											
System	Incre	eased Motor F	Power	Conversion	Quantity	Motor	Average	Operating		Electric	
ID	Before	After	Increase	Factor		Efficiency	Usage	Hours	Usage	Rate	Cost
	(HP)	(HP)	(HP)	(kW / HP)		%	(kW)	(Hours / Year)	(kWh)	(kWh)	(\$)
Attica Elementary School											
Fan for Media Center	1.61	5.00	3.39	0.746	1	86%	2.94	2,755	8,107	\$ 0.099	\$ 801
Relief Fans	-	1.50	1.50	0.746	4	86%	5.20	250	1,301	\$ 0.099	\$ 129
Classroom UV Fans (heating season)	-	0.25	0.25	0.746	38	82%	8.64	1,818	15,716	\$ 0.099	\$ 1,553
Classroom UV Fans (cooling season)	0.13	0.25	0.13	0.746	38	82%	4.32	937	4,049	\$ 0.099	\$ 400
Total											\$ 2,882

Note: Existing fan coil units in the media center have 300 watt motors

#### Formula:

Increased Motor Power (HP) = Increased Motor Power Before (HP) - Increased Motor Power After (HP)

Pump Motor Electric Cost (\$) = Increased Motor Power (HP) x Quantity x (.746 kW / HP) x (Operating Hour) x (\$ / kWh) Motor Efficiency (%)

### **Outside Air Heating & Cooling Costs**

#### Formula:

Heating energy (BTU) = [1.08 BTU / (HR-CFM-°F)] x outside air saved (CFM) x [avg. interior temperature (F) - avg. exterior temperature (F)] x HR

Heating energy (\$) = wasted heating energy (BTU) x heating fuel cost (\$/CCF)

heating fuel conversion factor (BTU / CCF) x boiler seasonal efficiency (%)

Cooling energy (BTU) = [sensible & latent cooling coefficient for location (BTU/Year/1000 CFM)] x [OA air volume (CFM)] x [occupied hours per week / 40 hours]

Cooling energy (\$) =  $\frac{\text{cooling energy (BTU)} \times \text{air conditioning fuel cost ($/kWh)}}{\text{cooling energy ($TU)}}$ 

air conditioning fuel conversion factor (BTU / kWh) x chiller efficiency (COP)

\* Average winter interior temperature =

\* Average winter temperature (from National Weather Service) =

\* Average summer interior temperature (composite temperature accounting for occupied and unoccupied temperatures) =

\* Average summer temperature during occupied periods (from National Weather Service) =

\* Annual average wet bulb degree hours above 66 °F wet bulb (US Government Printing Office) =

\* Energy used to cool and dehumidify outside air for 40 hours / week =

\* Boiler seasonal efficiency =

\* Attica Elem. School heating fuel cost

\* Heating fuel conversion factor =

\* Chiller efficiency =

\* Attica Elem. School air conditioning fuel cost

\* Air conditioning conversion factor =

72 °F
-------

37 °F

74 °F

04 4 0=

81.4 °F 4000 hours

10,000,000 BTU / YR / 1000 CFM

92%

\$0.81 Per Therm 100,000 BTU/Therm

2.96 COP

\$0.099 Per kWh

0.033 FEL (1)4/1

3,413 BTU / kWh

Reduce	ed Heating & A	\ir-co	nditio	ning Co	osts Res	ulting Fro	m CO <sub>2</sub> S	ensors	
Building	Unit	Occup	ied Hours	Heating	Air Condition	Occupied En	ergy Change	Dollars	s Change
	Туре	Winter	Summer	OA	OA	Heating	Cooling	Heating	Cooling
		(Hours)	(Hours)	(CFM)	(CFM)	(BTU)	(BTU)	\$	\$
Attica Elementary School Gymnasium	Fresh Air for 100 people	1,275	425	1,500	1,500	72,292,500	9,960,938	\$ 639	\$ 97
Attica Elementary School Gymnasium	Fresh Air for 30 People	1,275	425	450	450	21,687,750	2,988,281	\$ 192	\$ 29
Subtotal				1,050	1,050	50,604,750	6,972,656	\$ 447	\$ 68
Attica Elementary School Cafeteria	Fresh Air for 225 people	1,350	450	3,375	3,375	172,226,250	23,730,469	\$ 1,522	\$ 232
Attica Elementary School Cafeteria	Fresh Air for 30 People	1,350	450	450	450	22,963,500	3,164,063	\$ 203	\$ 31
Subtotal				2,925	2,925	149,262,750	20,566,406	\$ 1,319	\$ 201
Total for Attica Elementary								1,766	269

### **Outside Air Heating & Cooling Costs**

#### Formula:

Heating energy (BTU) = [1.08 BTU / (HR-CFM-°F)] x outside air saved (CFM) x [avg. interior temperature (F) - avg. exterior temperature (F)] x HR

Heating energy (\$) = wasted heating energy (BTU) x heating fuel cost (\$/CCF)

heating fuel conversion factor (BTU / CCF) x boiler seasonal efficiency (%)

Cooling energy (BTU) = [sensible & latent cooling coefficient for location (BTU/Year/1000 CFM)] x [OA air volume (CFM)] x [occupied hours per week / 40 hours]

Cooling energy (\$) = cooling energy (BTU) x air conditioning fuel cost (\$/kWh)

air conditioning fuel conversion factor (BTU / kWh) x chiller efficiency (COP)

Where: \* Average winter interior temperature =

\* Average winter temperature (from National Weather Service) =

\* Average summer interior temperature (composite temperature accounting for occupied and unoccupied temperatures) = 74 °F 81.4 °F \* Average summer temperature during occupied periods (from National Weather Service) =

\* Annual average wet bulb degree hours above 66 °F wet bulb (US Government Printing Office) =

\* Energy used to cool and dehumidify outside air for 40 hours / week =

\* Boiler seasonal efficiency =

\* Attica Elem. School heating fuel cost

\* Heating fuel conversion factor =

\* Chiller efficiency =

\* Attica Elem. School air conditioning fuel cost

\* Air conditioning conversion factor =

72	٥.
//	· F

37 °F

4000 hours

10,000,000 BTU / YR / 1000 CFM OA

92%

\$0.81 Per Therm

100,000 BTU/Therm

2.96 COP

\$0.099 Per kWh

3,413 BTU / kWh

Increased Heating Cost Due to Increased Fresh Air Amounts														
Building	Unit	Occupied Hours		Heating OA		Air-conditioned OA		Occupied Energy Change		Dollars Change				
	Туре	Winter	Summer	Current	Current Future		Current Future		Cooling	Heating	Cooling			
		(Hours)	(Hours)	(CFM)	(CFM)	(CFM)	(CFM)	(BTU)	(BTU)	\$	\$			
Attica Elementary School	Classrooms	1,275	425	-	14,250	-	-	686,778,750	-	\$ 6,069	\$ -			
Subtotal				-	14,250	-	-	686,778,750	-	\$ 6,069	\$ -			
Total										\$ 6,069	\$ -			

Owner:	Attica Consolidated School Corporat							
Building:	Attica Ele	ementary School						
FIM:	Gymnasium Lighting Modifications							
KWH Unit Cost:	\$	0.056						
KW Unit Cost:		0						
# Months Ltg Peak:		0						
Do not print								

Prelim #s:	Annual Energy Savings:	\$ (443.12)	
	Annual Ops Savings:	\$ 2,619.07	
	Cost (Matl. , Lab. & Recycle):	\$ 6,875.56	
	Internal Costs (@ 14%):	\$ 962.58	
	Approx. TDC:	\$ 7,838.14	
	Margin:	\$ 2,612.71	
	Approx. Sell (@25%):	\$ 10,450.85	
	Rough Payback:	4.80	years
Do not print			

### **Gymnasium Lighting Modifications**

kWh Unit Cost:	\$ \$	0.056	
Monthly kW Unit Cost:	\$	-	
Lighting Peak Demand Months:		-	
Total Mean Lumens Before		256,284.0	
Total Mean Lumens After		477,072.0	
Total Mean Lumens Difference		220,788.0	186%
Total kW Before		4.2	
Total kW Before (Adj. for Lumen Increase)		7.8	
Total kW After		7.3	
Total kW Saved		0.5	
Demand Adjustment:	\$	-	
Demand Savings:	\$ \$	-	
Weighted Fixture Operating Hours Before:		2200	
Weighted Fixture Operating Hours After:		2306	
Total kWh Before		9185	
Total kWh Before (Adj. for Lumen Increase)		17097.9	
Total kWh After		16873.7	
Total kWh Saved		224.2	
Usage Adjustment:	\$	(443.12)	
Usage Savings:	\$	12.55	
5 5	•		
Total Utility Baseline Adjustment:	\$	(443.12)	
Total Adjusted Annual Savings:	\$	12.55	

### **New High Efficiency Boiler Savings**

### Existing Boiler Data - Attica Flementary School

Boiler Efficiency Savings:	\$		
,			
* Cost of fuel (Current Year or Max.)	\$	0.81	
* Proposed building heating boiler input		2,654,158,078	•
* Building heating cost:	\$	21,499	/ year
* Proposed boiler seasonal heating efficient	ı	92%	
* Percent seasonal load carried per boiler:		50%	
* Number of boilers:		3	
Proposed Boiler Data			
* Building heating requirement boiler outpu	I	2,441,825,432	BTU / year
* Building heating requirement boiler input		3,590,919,753	BTU / year
* Building heating costs:	\$	29,086	/ year
* Other heating costs:	\$ \$ \$	1,080	/ year
* Kitchen fuel cost:	\$	-	/ year
* Total season heating cost:	\$	30,166	/ year
* Fuel conversion factor:		100,000	BTU / therm
*Base Year Cost of fuel		\$0.81	/ therm
* Fuel type:		Natural gas	
* Average seasonal efficiency		68%	
* Burner firing rate losses		9%	
* Jacket losses (radiation & convection)		4%	
* Estimated combustion efficiency		81%	
* Percent "design day" load carried per boil		100%	
* Number of boilers:		2	
* Boiler size (each):		6,650 MBH	
* Boiler date of manufacture:		1968	
* Boiler quantity / type:		2 / firebox	
* Boiler manufacturer / model number:		& Semvower / CA	\-6015-W

### **Domestic Hot Water Storage Tank Thermal Loss Savings**

Existing St	orage Ta	nk Instulation "U	I" Val	lue:	New Storage	Tank Instu	lation "U" \	/alue:
Outside Su	ırface =			0.17	Outside Surfac	ce =		0.17
1" Asbesto	s Insulati	on =		4.00	DHWH Insulat	ion (per M	anufacturer	12.00
Inside Surf	ace =			0.61	Inside Surface	• •		0.61
		R=	=	4.78			R=	12.78
		U=	=	0.2092			U=	0.0782
Old Tank:					New Tank:			
Old Talik.	Tank				new fallk.	Tank	Surf.	
Taul Dia	-	Court Awara/ft	C	: A	Taul Dia	-		Court Avec
Tank Dia.	Height	Surf. Area/ft	Suri	Area	Tank Dia.	Height	Area/ft	Surf Area
48	7.50	12.6	5	94.2	44	8.00	11.5	92.1
		Total Heated W	ater'	Storage Hours:				
		Heated Water V	Veeks	s/Year =	42			
		Hours/Week Aft	fecte	d =	168			
		Total Affected F	lours	=	7056			
		Average Storage	e Wat	er Temp. =	140			
		Average Surrou			69			
		Old Tank Surf. A	rea (:	Square Feet) =	94			
		New Tank Surf.		•	92			
		Exist. Tank Heat	Loss	=	9,872,791	BTU/YR		
		New Tank Heat			3,610,581	-		
		Total Heat Loss			6,262,209			
		Existing DHW H	eatin	g Plant Efficiency =	80%			
		Cost of Fuel =		J 2 2 5 5,		Per Therm	1	
		Fuel Energy Con	tent	=		BTU/Theri		
		Total Annual Sa			\$64	7		
				•	ŢŨ.			

### **Window Replacement Savings**

Existing Window "U" Value: Window U=	1.13		New Window "U" Value: Window U=	0.55
Total Occupied Hours per Heating Season: Heating Season Weeks = Hours/Week Occupied = Total Occupied Hours = Average Occupied Space Temp. =  Average Winter Temp. =	30 42.5 1275 72 39.7		Total Unoccupied Hours per Heating Season Heating Season Weeks = Hour/Week Unoccupied = Total Unoccupied Hours = Avg. Unoccupied Space Temp. =	30 125.5 3765 60
Window Area (Square Feet) =	Existing 4992	New 4992		
Exist. Window Occ. Heat Loss =  Exist. Window Unocc. Heat Loss =  Total Exist. Window Heat Loss =  New Window Occ. Heat Loss =	232,308,835 B 431,135,752 B 663,444,588 B 113,070,672 B	TU/YR TU/YR TU/YR		
New Window Unocc. Heat Loss =  Total New Window Heat Loss =	209,844,835 B 322,915,507 B	=		
New Window Energy Savings =  New Heating Plant Efficiency =	340,529,080 B	TU/YR		
Cost of Fuel =		er Therm		
Fuel Energy Content =	100,000 B	TU/Therm		

\$3,009

Total Annual Savings =

### **Plumbing Systems Replacement Water and Sewer Savings**

Flushes Per Day Per Person =	2.0	Flushes
Aprox. Qty of Male Students =	280.0	
Qty of Student Urinals Qty of Replacement Urinals	26 14	
Urinal Unit Replacement Factor =	54%	
Number of Occupied Days Per Year =	180.0	Days
Gallons Per Flush Savings = (1.5 - 1.0 = 0.5) urinals Based Upon Plumbing Industry Design Standards	0.5	Gal/Flush
Annual Water Savings =	27,138	Gal/Year
Cost of Water =	\$0.0036	Per Gal
Cost of Sewer =	\$0.0039	Per Gal
Water Savings =	\$97	
Sewer Savings =	\$107	
		=

\$204

Total Water and Sewer Savings =

### **ADA Systems Replacement and Sewer Savings**

Total Water and Sewer Savings =	\$122	
Sewer Savings =	\$64	_
Water Savings =	\$58	
Cost of Sewer =	\$0.0039	Per Gal
Cost of Water =	\$0.0036	Per Gal
Annual Water Savings =	16,300	Gal/Year
Gallons Per Flush Savings = (3.5 - 1.6 = 1.9) toilets Based Upon Plumbing Industry Design Standards	1.9	Gal/Flush
Number of Occupied Days Per Year =	180.0	Days
Toilet Unit Replacement Factor =	9%	
Qty of Student toilets Qty of Replacement Toilets	47 4	
Aprox. Qty of Students =	560.0	
Flushes Per Day Per Person =	1.0	Flushes





### **Covington Independent Schools**

### Utility Savings Summary

Utility Savings										
Improvements		Electric Natural Gas						Miscellaneous		
	Gross	Safety Factor	Net	Gross	Safety Factor	Net	Gross	Safety Factor	Net	Total
CAMPUS WIDE ECM										
Telecommunications Upgrade							\$136,515	5%	\$129,690	\$129,69
Subtotal - Campus Wide Ecm Savings	\$0		\$0	\$0		\$0	\$136,515		\$129,690	\$129,690
HOLMES HIGH SCHOOL, HOLMES MIDDLE SCHOOL, AND ADMINISTRATION BUILDING										
* Savings due to interior lighting retrofit	\$4,171	5%	\$3,962							\$3,962
al - Holmes High School, Holmes Middle School, And Administration Building Savings	\$4,171		\$3,962	\$0		\$0	\$0		\$0	\$3,962
FIELDHOUSE, SCIENCE BUILDING, AND CHAPMAN VOCATIONAL EDUCATION CENTER										
* Savings due to building envelope improvements	\$1,997	5%	\$1,897	\$7,414	40%	\$4,449				\$6,346
* Savings due to interior lighting retrofit	\$1,545	5%	\$1,468	γ1, <del>111</del>	40/0	Ş <del>1</del> ,113				\$1,468
* Savings due to new energy efficient transformers	\$1,575	5%	\$1,496							\$1,496
al - Fieldhouse, Science Building, And Chapman Vocational Education Center Savings	\$5,117		\$4,861	\$7,414		\$4,449	\$0		\$0	\$9,310
SIXTH DISTRICT ELEMENTARY SCHOOL										
Savings due to building envelope improvements	\$1,290	5%	\$1,225	\$9,792	50%	\$4,896				\$6,121
* Savings due to building envelope improvements	\$2,797	5%	\$2,657	J3,132	3078	34,830				\$2,657
* Savings due to new solar photovoltaic electrical generation system	\$12,051	0%	\$12,051							\$12,051
* Savings due to sale of Solar Renewable Energy Credits (SRECs)							\$2,245	0%	\$2,245	\$2,245
* Savings due to chiller replacement with more efficient chiller	\$1,699	20%	\$1,359							\$1,359
* Savings due to boiler replacement with more efficient boiler				\$1,900	20%	\$1,520				\$1,520
* Savings due to new office furnace and condensing unit	\$72	20%	\$58	\$13	20%	\$10				\$68
* Savings due to fan and pump runtime reduction	\$705	20%	\$564							\$564
* Savings due to fan and pump motor efficiency improvement	\$141	20%	\$113							\$113
* Savings due to variable speed fan/pump via variable frequency drive	\$36	20%	\$29							\$29
Subtotal - Sixth District Elementary School Savings	\$18,790		\$18,055	\$11,704		\$6,426	\$2,245		\$2,245	\$26,726
NINTH DISTRICT ELEMENTARY SCHOOL										
***	40.040	===	44.040							44.040
* Savings due to interior lighting retrofit	\$2,042	5% 20%	\$1,940	\$187	20%	\$150				\$1,940
* ALTERNATE: Savings due to new exterior doors	\$20	20%	\$16	\$187	20%	\$120				\$166
Subtotal - Ninth District Elementary School Savings	\$2,062		\$1,956	\$187		\$150	\$0		\$0	\$2,106
JOHN G. CARLISLE ELEMENTARY SCHOOL										
* Savings due to building envelope improvements	\$187	5%	\$178	\$1,179	5%	\$1,120				\$1,298
* Savings due to interior lighting retrofit	\$2,430	5%	\$2,309	Ų1,173	370	Ų1,120				\$2,309
	\$1,413	5%	\$1,342							\$1,342
* Savings due to new energy efficient transformers				40.440	20%	\$1,695				\$1,695
Savings due to new energy efficient transformers     Savings due to boiler replacement with more efficient boiler	7 37 1.20			\$2,119	20%	<b>V1,033</b>				
	\$4,030		\$3,828	\$2,119	20%	\$2,816	\$0		\$0	\$6,644
* Savings due to boiler replacement with more efficient boiler			\$3,828		20%		\$0		\$0	\$6,644
Savings due to boiler replacement with more efficient boiler     Subtotal - John G. Carlisle Elementary School Savings  LATONIA ELEMENTARY SCHOOL	\$4,030	5%			20%		\$0		\$0	7-7-
Savings due to boiler replacement with more efficient boiler  Subtotal - John G. Carlisle Elementary School Savings  LATONIA ELEMENTARY SCHOOL  Savings due to interior lighting retrofit	\$4,030 \$4,231	5% 0%	\$4,019		20%		\$0		\$0	\$4,019
Savings due to boiler replacement with more efficient boiler  Subtotal - John G. Carlisle Elementary School Savings  LATONIA ELEMENTARY SCHOOL  Savings due to interior lighting retrofit Savings due to new solar photovoltaic electrical generation system	\$4,030	5% 0%			20%		<b>,</b>	0%	,~	\$4,019 \$17,950
Savings due to boiler replacement with more efficient boiler  Subtotal - John G. Carlisle Elementary School Savings  LATONIA ELEMENTARY SCHOOL  Savings due to interior lighting retrofit	\$4,030 \$4,231		\$4,019		20%		\$0 \$3,275		\$3,275	\$4,019 \$17,950 \$3,275
Savings due to boiler replacement with more efficient boiler  Subtotal - John G. Carlisle Elementary School Savings  LATONIA ELEMENTARY SCHOOL  Savings due to interior lighting retrofit Savings due to new solar photovoltaic electrical generation system Savings due to sale of Solar Renewable Energy Credits (SRECs)	\$4,030 \$4,231 \$17,950	0%	\$4,019 \$17,950	\$3,299		\$2,816	<b>,</b>		,~	\$4,019 \$17,950 \$3,275 \$2,737
Savings due to boiler replacement with more efficient boiler  Subtotal - John G. Carlisle Elementary School Savings  LATONIA ELEMENTARY SCHOOL  Savings due to interior lighting retrofit Savings due to new solar photovoltaic electrical generation system Savings due to sale of Solar Renewable Energy Credits (SRECs) Savings due to new rooftop HVAC units	\$4,030 \$4,231 \$17,950 \$2,482	20%	\$4,019 \$17,950 \$1,985	\$3,299		\$2,816	<b>,</b>		,~	\$4,019 \$17,950 \$3,275 \$2,737 \$3,885
Savings due to boiler replacement with more efficient boiler  Subtotal - John G. Carlisle Elementary School Savings  LATONIA ELEMENTARY SCHOOL  Savings due to interior lighting retrofit Savings due to new solar photovoltaic electrical generation system Savings due to sale of Solar Renewable Energy Credits (SRECs) Savings due to new rooftop HVAC units Savings due to fan and pump runtime reduction	\$4,030 \$4,231 \$17,950 \$2,482 \$4,856	0% 20% 20%	\$4,019 \$17,950 \$1,985 \$3,885	\$3,299		\$2,816	<b>,</b>		,~	\$4,019 \$17,950 \$3,275 \$2,737 \$3,885 \$445
Subtotal - John G. Carlisle Elementary School Savings  LATONIA ELEMENTARY SCHOOL  Savings due to interior lighting retrofit Savings due to new solar photovoltaic electrical generation system Savings due to sale of Solar Renewable Energy Credits (SRECs) Savings due to new rooftop HVAC units Savings due to fan and pump runtime reduction Savings due to fan and pump motor efficiency improvement	\$4,030 \$4,231 \$17,950 \$2,482 \$4,856 \$556 \$3,434	0% 20% 20% 20% 20%	\$4,019 \$17,950 \$1,985 \$3,885 \$445	\$3,299		\$2,816	<b>,</b>	0%	,~	\$4,019 \$17,950 \$3,275 \$2,737 \$3,885 \$445 \$2,747





	Utilit					tility Savings				
Improvements		Electric			Natural Ga	ıs		Miscellaneo	us	Tatal
		Safety Factor	Net	Gross	Safety Factor	Net	Gross	Safety Factor	Net	Total
CUENNI O CIMINO ELEMENTADIVICOU ODI										
GLENN O. SWING ELEMENTARY SCHOOL										
* Savings due to building envelope improvements	\$802	5%	\$762	\$4,489	50%	\$2,244				\$3,007
* Savings due to interior lighting retrofit	\$2,378	10%	\$2,140							\$2,140
* Savings due to new solar photovoltaic electrical generation system	\$23,806	0%	\$23,806				4	201	44.464	\$23,806
* Savings due to sale of Solar Renewable Energy Credits (SRECs)  * Savings due to pour soften HVAC units	\$316	20%	\$253	\$668	20%	\$535	\$4,464	0%	\$4,464	\$4,464 \$787
Savings due to new rooftop HVAC units     Savings due to fan and pump runtime reduction	\$553	20%	\$442	\$008	20%	\$555				\$442
* Savings due to fan and pump motor efficiency improvement	\$367	20%	\$294							\$294
* Savings due to variable speed fan/pump via variable frequency drive	\$1,045	30%	\$731							\$731
* ALTERNATE: Savings due to new windows	\$274	20%	\$219	\$2,288	20%	\$1,830				\$2,049
* ALTERNATE: Savings due to new exterior doors	\$14	20%	\$11	\$116	20%	\$93				\$104
Subtotal - Glenn O. Swing Elementary School Savings	\$29,554		\$28,658	\$7,562		\$4,703	\$4,464		\$4,464	\$37,825
JAMES E BIGGS EARLY CHILDHOOD										
* Savings due to interior lighting retrofit	\$702	5%	\$667							\$667
* Savings due to boiler replacement with more efficient boiler				\$3,167	20%	\$2,533				\$2,533
* Savings due to boiler runtime savings  * Capitage due to chiller replacement with more officient chiller	ć1 400	2007	61.405	\$4,815	20%	\$3,852				\$3,852
Savings due to chiller replacement with more efficient chiller     Savings due to fan and pump runtime reduction	\$1,482 \$1,308	20%	\$1,185 \$1,046							\$1,185 \$1,046
* Savings due to fan and pump runtime reduction  * Savings due to fan and pump motor efficiency improvement	\$1,308	20%	\$1,046							\$1,046
Savings due to rarrand pump motor emclency improvement     Savings due to variable speed fan/pump via variable frequency drive	\$2,556	20%	\$2,045							\$2,045
* Cost/savings due to changes in outside air treatment	\$55	20%	\$44	\$358	0%	\$358				\$403
* Savings due to new domestic water heater				\$117	20%	\$94				\$94
* Cost/savings due to new kitchen make-up air unit	-\$1,137	0%	-\$1,137	-\$151	0%	-\$151				-\$1,289
	4- 4		40.0==	40.000		40.000	4-		40	410.550
Subtotal - James E Biggs Early Childhood Savings	\$5,123		\$3,977	\$8,306		\$6,686	\$0		\$0	\$10,663
INSTRUCTIONAL SUPPORT & DISTRICT ENROLLMENT CENTER (LEVASSOR)										
* Savings due to building envelope improvements	\$939	15%	\$798	\$4,502	80%	\$900				\$1,699
* Savings due to interior lighting retrofit	\$225	5%	\$214	7 .,002		7000				\$214
Subtotal Instructional Support & District Envallment Contar (Louissee) Source	\$1,164		\$1,012	\$4,502		\$900	\$0		\$0	\$1,912
Subtotal - Instructional Support & District Enrollment Center (Levassor) Savings	\$1,164		\$1,012	\$4,502		\$900	ŞU		ŞU	\$1,912
CENTRAL OFFICE										
* Savings due to interior lighting retrofit	\$381	5%	\$362							\$362
0										
Subtotal - Central Office Savings	\$381		\$362	\$0		\$0	\$0		\$0	\$362
Subtotal Central Since Savings	Ų SOI		<b>400</b> 2	, ve		, ,	, , ,		Ŷ.	<b>4002</b>
BUS GARAGE / TRANSPORTATION (DIST. SERVICES)										
			4							
* Savings due to interior lighting retrofit	\$128	5%	\$122							\$122
			,							
Subtotal - Bus Garage / Transportation (Dist. Services) Savings	\$128		\$122	\$0		\$0	\$0		\$0	\$122
T.I. PIKE ST. BLDG. (DISTRICT SUPPORT SERVICES)										
	400	==/	40.4							404
* Savings due to interior lighting retrofit	\$89	5%	\$84							\$84
Subtotal - T.I. Pike St. Bldg. (District Support Services) Savings	\$89		\$84	\$0		\$0	\$0		\$0	\$84
MAINTENANCE BUILDING										
* Savings due to interior lighting retrofit	\$520	40%	\$312							\$312
Subtotal - Maintenance Building Savings	\$520		\$312	\$0		\$0	\$0		\$0	\$312
TOTAL UTILITY SAVINGS BEFORE ADJUSTMENTS	\$104,638		\$98,221	\$43,914		\$26,881	\$146,499		\$139,674	\$264,776
TOTAL ANALISA LITTLE	FORE ARMICE	AFNITC				ć				264 776
TOTAL ANNUAL UTILITY SAVINGS BE	FUKE ADJUSTN	VIENIS				\$				264,776
TOTAL ANNUAL OPERATIONAL & MAINT	ENANCE (O&M	I) SAVINGS				\$	-			11,690
TOTAL ANNUAL PROGRAM	1 SAVINGS					\$				276,466
TOTAL ANNUAL NET GUARANTEEL	UTILITY SAVII	NGS				\$				264,776
(Total Utility Savings Before Adjustments - 1	otal Baseline A	Adjustments	)							



	In	puts				-		
Building Name	Square Feet	Annual Electricity Usage (kWh)	Annual Nat. Gas Usage (therms)	Annual Electricity Cost	Annual lat. Gas Cost	Total Annual ility Cost	:	\$/ft^2
Covington Independent Schools								
Holmes High School, Holmes Middle School, and Administration								
Building	208,144	1,434,973	107,743	\$ 142,910	\$ 64,637	\$ 207,546	\$	0.997
Fieldhouse, Science Building, and Chapman Vocational Education								
Center	121,170	801,868	21,746	\$ 76,941	\$ 16,905	\$ 93,847	\$	0.775
Sixth District Elementary School	81,347	531,326	16,277	\$ 54,336	\$ 15,654	\$ 69,990	\$	0.860
Ninth District Elementary School	63,935	389,443	15,963	\$ 42,747	\$ 14,914	\$ 57,661	\$	0.902
John G. Carlisle Elementary School	58,940	361,464	11,623	\$ 45,045	\$ 10,959	\$ 56,004	\$	0.950
Latonia Elementary School	62,818	513,000	10,765	\$ 53,435	\$ 10,471	\$ 63,906	\$	1.017
Glenn O. Swing Elementary School	45,175	347,423	10,427	\$ 39,940	\$ 10,381	\$ 50,321	\$	1.114
James E Biggs Early Childhood	20,288	204,640	10,537	\$ 20,524	\$ 10,124	\$ 30,648	\$	1.511
Instructional Support & District Enrollment Center (Levassor)	13,000	57,215	3,528	\$ 6,444	\$ 4,459	\$ 10,903	\$	0.839
Central Office	11,767	164,920	4,413	\$ 17,039	\$ 4,534	\$ 21,573	\$	1.833
Bus Garage / Transportation (Dist. Services)	9,063	58,531	5,044	\$ 6,332	\$ 6,488	\$ 12,820	\$	1.415
T.I. Pike St. Bldg. (District Support Services)	3,000	30,289	4,107	\$ 3,588	\$ 4,968	\$ 8,556	\$	2.852
Adult High School	1,800	4,630	849	\$ 1,031	\$ 1,425	\$ 2,456	\$	1.364
Maintenance Building	1,275	18,944	1,986	\$ 2,324	\$ 2,679	\$ 5,003	\$	3.924
TOTAL	701,722	4,918,666	225,006	\$ 512,636	\$ 178,599	\$ 691,235	\$	0.985



		In	puts									
Building Name	Square Feet	<b>Consur</b> Summer	mption Rate (	Electric \$/kWh) Weighted Average	1	Demand Rate (\$/kW)		nposite /kWh)	Gas (\$/ therms)	Electricity EUI	Natural Gas EUI	TOTAL EUI
Covington Independent Schools				Average		(\$/ KVV)						
Holmes High School, Holmes Middle School, and Administration Building	208,144			\$ 0.0595	Ś	9.27	Ś	0.0996	\$ 0.60	23,530	51,764	75,293
Fieldhouse, Science Building, and Chapman Vocational Education				ψ 0.0000	+ +	3.27	Ť	0.0330	ψ 0.00	20,000	32). 0 .	7 3 ) 2 3 3
Center	121,170	\$ 0.0595	\$ 0.0739	\$ 0.0691	\$	9.27	\$	0.0960	\$ 0.78	22,586	17,946	40,533
Sixth District Elementary School	81,347			\$ 0.0703	\$	9.27	\$	0.1023	\$ 0.96	22,292	20,010	42,302
Ninth District Elementary School	63,935			\$ 0.0595	\$	9.27	\$	0.1098	\$ 0.93	20,789	24,967	45,756
John G. Carlisle Elementary School	58,940			\$ 0.0595	\$	9.27	\$	0.1246	\$ 0.94	20,931	19,720	40,651
Latonia Elementary School	62,818			\$ 0.0711	\$	9.27	\$	0.1042	\$ 0.97	27,872	17,137	45,009
Glenn O. Swing Elementary School	45,175			\$ 0.0719	\$	9.27	\$	0.1150	\$ 1.00	26,248	23,081	49,330
James E Biggs Early Childhood	20,288			\$ 0.0595	\$	9.27	\$	0.1003	\$ 0.96	34,426	51,938	86,364
Instructional Support & District Enrollment Center (Levassor)	13,000			\$ 0.0944	\$		\$	0.1126	\$ 1.26	15,021	27,137	42,158
Central Office	11,767			\$ 0.0595	\$	9.27	\$	0.1033	\$ 1.03	47,835	37,504	85,339
Bus Garage / Transportation (Dist. Services)	9,063			\$ 0.0944	\$	-	\$	0.1082	\$ 1.29	22,042	55,650	77,692
T.I. Pike St. Bldg. (District Support Services)	3,000			\$ 0.0944	\$	-	\$	0.1185	\$ 1.21	34,459	136,895	171,353
Adult High School	1,800			\$ 0.0944	\$	-	\$	0.2226	\$ 1.68	8,779	47,147	55,926
Maintenance Building	1,275			\$ 0.0944	\$	-	\$	0.1227	\$ 1.35	50,710	155,746	206,456
TOTAL	701,722									23,923	32,065	55,988



2021

2021

2021

2022

Total

Oct

Nov

Dec

Jan

10/14/21 to 11/12/21

11/12/21 to 12/15/21

12/15/21 to 1/18/22

1/18/22 to 2/16/22

63,600

103,200

118,800

128,400

801,868 \$

2,751 \$

#### **Base Year Utility Data**

	DIMES HIGH SCHOOL, HOLMES MIDDLE SCHOOL, AND ADMINISTRATION BUILDING															
HOLMES H	IGH SCHOOL,	HOLMES MIDDLE	SCHOOL,	AND ADMIN	ISTRATION BU	JILDING										
S.F. =	208,144	Electric Duke I	Energy		Rate:		\$ / kWh =	\$ -	\$ / S.F. =	\$ 0.687	Gas Duke Energy	Stand Energy		\$ / Therm =	\$ 0.60	Combined
		Account # 66700	678 01				\$ / kW =	\$ -	BTU / S.F. =	23,530	Account #: 6580-3754-0	01		\$ / S.F. =	\$ 0.31	\$ / S.F. = \$ 1.00
		Meter #: 10806	5055 & 10	08033644			\$ / Cmp =	\$ 0.100			Meter # :			BTU / S.F. =	51,764	BTU / S.F. = 75,293
Year	Month	Read Date	es	Consur	mption	Peak D	emand	Customer		Total	Read Dates	Consumption	Delivery	Pipeline	Total	Grand
		Start	End	kWh	\$	kW	\$	Charge	Adjustment		Start End	Therms \$	Charge	Trans. Charge		Total
2021	Feb	2/16/21 to 3	3/17/21	86,747		236				\$ 8,633	2/15/21 to 3/16/21	25,711 \$ 9,710		\$ 4,893	\$ 14,603	\$ 23,237
2021	Mar	3/17/21 to 4	1/16/21	88,188		256				\$ 8,905	3/16/21 to 4/15/21	12,494 \$ 5,401		\$ 2,599	\$ 8,000	\$ 16,905
2021	Apr	4/16/21 to 5	5/18/21	99,582		355				\$ 9,443	4/15/21 to 5/14/21	7,941 \$ 2,966		\$ 1,809	\$ 4,774	\$ 14,218
2021	May	5/18/21 to 6	5/16/21	125,746		395				\$ 11,341	5/14/21 to 6/15/21	545 \$ 185		\$ 525	\$ 710	\$ 12,050
2021	Jun	6/16/21 to 7	7/19/21	144,889		342				\$ 11,979	6/15/21 to 7/15/21	252 \$ 84		\$ 474	\$ 558	\$ 12,537
2021	Jul	7/19/21 to 8	3/16/21	159,870		387				\$ 12,475	7/15/21 to 8/13/21	241 \$ 85		\$ 472	\$ 557	\$ 13,032
2021	Aug	8/16/21 to 9	9/15/21	188,444		545				\$ 16,367	8/13/21 to 9/14/21	315 \$ 111		\$ 485	\$ 596	\$ 16,963
2021	Sept	9/15/21 to 1	0/14/21	132,981		437				\$ 11,937	9/14/21 to 10/13/21	441 \$ 156		\$ 506	\$ 662	\$ 12,599
2021	Oct	10/14/21 to 1	1/12/21	98,910		396				\$ 11,693	10/13/21 to 11/11/21	1,878 \$ 663		\$ 756	\$ 1,419	\$ 13,112
2021	Nov	11/12/21 to 1	2/15/21	107,033		268				\$ 13,057	11/11/21 to 12/14/21	16,553 \$ 5,849		\$ 3,304	\$ 9,152	\$ 22,209
2021	Dec	12/15/21 to 1	L/18/22	104,341		273				\$ 14,362	12/14/21 to 1/17/22	15,074 \$ 5,326		\$ 3,047	\$ 8,373	\$ 22,735
2022	Jan	1/18/22 to 2	2/16/22	98,242		249				\$ 12,719	1/17/22 to 2/15/22	26,298 \$ 9,292		\$ 5,939	\$ 15,232	\$ 27,951
Total				1,434,973	\$ -	4,139	\$ -	\$ -	\$ -	\$ 142,910		107,743 \$ 39,829	\$ -	\$ 24,808	\$ 64,637	\$ 207,546

FIELDHOU	SE, SCIENCE I	BUILDING, ANI	D CHAPMAN	VOCATIONAL	EDUCATION C	ENTER															
S.F. =	121,170	Electric	Duke Energ	у			\$ / kWh =	\$ -	\$ / S.F. =	\$ 0.635	Gas	[	Duke Energy	Stand Energy			\$ / Therm =	\$	0.78	Combined	
		Account #:	86700678	01			\$ / kW =	\$ -	BTU / S.F. =	22,586	Account #:	. 5	5440-2054-0	01			\$ / S.F. =	\$	0.14	\$ / S.F. =	\$ 0.77
		Meter # :	Rate DS (Ju	Rate EH (Oct-I	vlay)		\$ / Cmp =	\$ 0.096			Meter # :						BTU / S.F. =		17,946	BTU / S.F. =	40,533
Year	Month	Read I	Dates	Consur	nption	Peak D	emand	Customer		Total	Rea	ad Da	ites	Consur	nption	Delivery	Pipeline		Total	Gra	nd
		Start	End	kWh	\$	kW	\$	Charge	Adjustment		Start		End	Therms	\$	Charge	Trans. Charg	e		Tot	:al
2021	Feb	2/16/21 to	3/17/21	86,183		526				\$ 6,316	2/16/21	to	3/17/21	4,406	\$ 1,660		\$ 1,19	5 \$	2,855	\$	9,171
2021	Mar	3/17/21 to	4/16/21	53,122		723				\$ 4,005	3/17/21	to	4/16/21	1,836	\$ 793		\$ 74	9 \$	1,542	\$	5,548
2021	Apr	4/16/21 to	5/18/21	46,795		847				\$ 3,457	4/16/21	to	5/18/21	955	\$ 387		\$ 59	6 \$	982	\$	4,440
2021	May	5/18/21 to	6/16/21	13,968		145				\$ 2,701	5/18/21	to	6/16/21	367	\$ 125		\$ 49	4 \$	618	\$	3,319
2021	Jun	6/16/21 to	7/19/21	56,400		144				\$ 4,848	6/16/21	to	7/19/21	94	\$ 31		\$ 44	6 \$	477	\$	5,325
2021	Jul	7/19/21 to	8/16/21	51,600		174				\$ 4,733	7/19/21	to	8/16/21	1,080	\$ 369		\$ 61	8 \$	986	\$	5,719
2021	Aug	8/16/21 to	9/15/21	22,200		192				\$ 5,740	8/16/21	to	9/15/21	818	\$ 279		\$ 57	2 \$	851	\$	6,591
2021	Sept	9/15/21 to	10/14/21	57,600						\$ 4,061	9/15/21	to	10/14/21	881	\$ 301		\$ 58	3 \$	884	\$	4,945

5,592 10/14/21 to 11/12/21

9,802 11/12/21 to 12/15/21

13,022 12/15/21 to 1/18/22

12,664 1/18/22 to 2/16/22

76,941

1,101 \$

2,633 \$

2,906 \$

4,668 \$

21,746 \$

376

898

991

7,803 \$

1,593

621

887

934

1,408 \$

997 \$

1,785 \$

1,926 \$

3,001

9,103 \$ 16,905 \$

6,589

11,587

14,947

15,665

93,847

Confidential and Proprietary Document Page 1 of 7



SIXTH DISTRICT ELEMENTARY SCHOOL

S.F. =	81,347	Electric	Duke Energ	у	Rate:		\$ / kWh =	\$ -	\$ / S.F. =	\$ 0.668	Gas	Duke Energy		Rate:		\$ / Therm =	\$ 0.96	Combined	
		Account #:	74800130 2	20			\$ / kW =	\$ -	BTU / S.F. =	22,292	Account #:	74800130 20	)			\$ / S.F. =	\$ 0.19	\$ / S.F. =	\$ 0.86
		Meter # :					\$ / Cmp =	\$ 0.102			Meter # :					BTU / S.F. =	20,010	BTU / S.F. =	42,302
Year	Month	Read D	ates	Consun	nption	Peak De	emand	Customer		Total	Read	Dates	Consui	mption	Delivery	Pipeline	Total	Gra	and
		Start	End	kWh	\$	kW	\$	Charge	Adjustment		Start	End	Therms	\$	Charge	Trans. Charge		To	otal
2021	Feb	2/16/21 to	3/17/21	27,600		87				\$ 3,041	2/16/21 to	0 3/17/21	2,764				\$ 1,749	\$	4,790
2021	Mar	3/17/21 to	4/16/21	26,400		171				\$ 3,393	3/17/21 to	o 4/16/21	672				\$ 507	\$	3,900
2021	Apr	4/16/21 to	5/18/21	29,700		180				\$ 3,648	4/16/21 to	o 5/18/21	286				\$ 227	\$	3,875
2021	May	5/18/21 to	6/16/21	50,700		210				\$ 5,155	5/18/21 to	o 6/16/21	134				\$ 142	\$	5,297
2021	Jun	6/16/21 to	7/19/21	61,526		180				\$ 5,565	6/16/21 to	o 7/19/21	130				\$ 139	\$	5,705
2021	Jul	7/19/21 to	8/16/21	59,700		162				\$ 5,000	7/19/21 to	o 8/16/21	94				\$ 115	\$	5,115
2021	Aug	8/16/21 to	9/15/21	72,900		216				\$ 6,478	8/16/21 to	o 9/15/21	83				\$ 114	\$	6,592
2021	Sept	9/15/21 to	10/14/21	62,400		216				\$ 5,638	9/15/21 to	o 10/14/21	107				\$ 133	\$	5,771
2021	Oct	10/14/21 to	11/12/21	38,100		174				\$ 4,520	10/14/21 to	o 11/12/21	988				\$ 826	\$	5,346
2021	Nov	11/12/21 to	12/15/21	39,000		102				\$ 4,163	11/12/21 to	o 12/15/21	3,195				\$ 3,199	\$	7,363
2021	Dec	12/15/21 to	1/18/22	32,700		96				\$ 4,105	12/15/21 to	o 1/18/22	3,561				\$ 3,873	\$	7,978
2022	Jan	1/18/22 to	2/16/22	30,600		102				\$ 3,629	1/18/22 to	o 2/16/22	4,261				\$ 4,630	\$	8,259
Total				531,326	\$ -	1,896	\$ -	\$ -	\$ -	\$ 54,336			16,277	\$ -	\$ -	\$ -	\$ 15,654	\$	69,990

	DICTRICT		DV CC11001
NINIH	DISTRICT	FIFIVIFIXIA	RY SCHOOL

S.F. =	63,935	Electric	Duke Energ	у	Rate:		\$ / kWh =	\$ -	\$ / S.F. =	\$ 0.669	Gas	Duke Energy		Rate:		\$ / Therm =	\$	0.93	Combined	
		Account #:	15102055 0	)1			\$ / kW =	\$ -	BTU / S.F. =	20,789	Account #:	15102055 01	L			\$ / S.F. =	\$	0.23	\$ / S.F. =	\$ 0.90
		Meter # :					\$ / Cmp =	\$ 0.110			Meter # :					BTU / S.F. =	:	24,967	BTU / S.F. =	45,756
Year	Month	Read Da	ates	Consun	nption	Peak D	emand	Customer		Total	Read	Dates	Consu	mption	Delivery	Pipeline	Т	otal	Gra	ınd
		Start	End	kWh	\$	kW	\$	Charge	Adjustment		Start	End	Therms	\$	Charge	Trans. Charge			To	tal
2021	Feb	2/16/21 to	3/17/21	21,120		66				\$ 1,976	2/16/21 to	o 3/17/21	2,540				\$	1,674	\$	3,650
2021	Mar	3/17/21 to	4/16/21	24,640		147				\$ 3,050	3/17/21 to	o 4/16/21	1,102				\$	756	\$	3,805
2021	Apr	4/16/21 to	5/18/21	26,560		134				\$ 3,004	4/16/21 to	o 5/18/21	616				\$	430	\$	3,434
2021	May	5/18/21 to	6/16/21	33,120		150				\$ 3,539	5/18/21 to	o 6/16/21	215				\$	198	\$	3,736
2021	Jun	6/16/21 to	7/19/21	41,443		130				\$ 3,882	6/16/21 to	o 7/19/21	126				\$	136	\$	4,019
2021	Jul	7/19/21 to	8/16/21	44,000		189				\$ 4,468	7/19/21 to	o 8/16/21	137				\$	144	\$	4,612
2021	Aug	8/16/21 to	9/15/21	50,240		194				\$ 4,973	8/16/21 to	0 9/15/21	164				\$	176	\$	5,149
2021	Sept	9/15/21 to	10/14/21	43,200		155				\$ 3,991	9/15/21 to	o 10/14/21	208				\$	210	\$	4,202
2021	Oct	10/14/21 to	11/12/21	28,800		139				\$ 3,514	10/14/21 to	o 11/12/21	1,736				\$	1,396	\$	4,910
2021	Nov	11/12/21 to	12/15/21	27,840		138				\$ 3,630	11/12/21 to	o 12/15/21	2,584				\$	2,661	\$	6,292
2021	Dec	12/15/21 to	1/18/22	24,320		94				\$ 3,295	12/15/21 to	0 1/18/22	3,114				\$	3,418	\$	6,713
2022	Jan	1/18/22 to	2/16/22	24,160		138				\$ 3,426	1/18/22 to	o 2/16/22	3,421				\$	3,714	\$	7,140
Total				389,443	\$ -	1,674	\$ -	\$ -	\$ -	\$ 42,747			15,963	\$ -	\$ -	\$ -	\$	14,914	\$	57,661

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JOHN G. CARLISLE ELEMENTARY SCHOOL

S.F. =	58,940	Electric	Duke Energ	у	Rate:		\$ / kWh =	\$ -	\$ / S.F. =	\$	0.764	Gas	Duke Energy		Rate:		\$ / Therm =	\$ 0.94	Combined	
		Account #:	75702026 0	01			\$ / kW =	\$ -	BTU / S.F. =		20,931	Account #:	75702026 01	<u>.</u>			\$ / S.F. =	\$ 0.19	\$ / S.F. =	\$ 0.95
		Meter # :					\$ / Cmp =	\$ 0.125				Meter # :					BTU / S.F. =	19,720	BTU / S.F. =	40,651
Year	Month	Read D	ates	Consun	nption	Peak D	emand	Customer		T	otal	Read	Dates	Consu	mption	Delivery	Pipeline	Total	Gi	rand
		Start	End	kWh	\$	kW	\$	Charge	Adjustment			Start	End	Therms	\$	Charge	Trans. Charge		T	otal
2021	Feb	2/16/21 to	3/17/21	26,614		81				\$	3,305	2/16/21 to	o 3/17/21	2,508				\$ 1,666	\$	4,971
2021	Mar	3/17/21 to	4/16/21	24,155		132				\$	3,223	3/17/21 to	o 4/16/21	740				\$ 526	\$	3,749
2021	Apr	4/16/21 to	5/18/21	25,287		167				\$	3,265	4/16/21 to	o 5/18/21	418				\$ 308	\$ \$	3,573
2021	May	5/18/21 to	6/16/21	33,516		115				\$	3,731	5/18/21 to	o 6/16/21	169				\$ 166	\$	3,897
2021	Jun	6/16/21 to	7/19/21	34,862		99				\$	3,884	6/16/21 to	o 7/19/21	152				\$ 155	\$	4,039
2021	Jul	7/19/21 to	8/16/21	20,913		137				\$	2,968	7/19/21 to	o 8/16/21	102				\$ 120	\$	3,088
2021	Aug	8/16/21 to	9/15/21	29,061		150				\$	3,487	8/16/21 to	o 9/15/21	168				\$ 180	\$	3,666
2021	Sept	9/15/21 to	10/14/21	39,592		195				\$	4,492	9/15/21 to	o 10/14/21	173				\$ 184	\$	4,676
2021	Oct	10/14/21 to	11/12/21	29,296		143				\$	3,755	10/14/21 to	0 11/12/21	490				\$ 428	\$	4,183
2021	Nov	11/12/21 to	12/15/21	34,682		122				\$	4,233	11/12/21 to	0 12/15/21	1,525				\$ 1,613	\$	5,846
2021	Dec	12/15/21 to	1/18/22	31,417		127				\$	4,559	12/15/21 to	o 1/18/22	2,397				\$ 2,632	. \$	7,189
2022	Jan	1/18/22 to	2/16/22	32,069		92				\$	4,143	1/18/22 to	o 2/16/22	2,782				\$ 2,984	\$	7,127
Total				361,464	\$ -	1,560	\$ -	\$ -	\$ -	\$	45,045			11,623	\$ -	\$ -	\$ -	\$ 10,959	\$	56,004

ΙΔΤΩΝΙΔ	FIFMFNTARY	SCHOOL

S.F. =	62,818	Electric Duke Ene	rgy	Rate:		\$ / kWh =	Ş -	\$ / S.F. =	Ş	0.851	Gas	Duke Energy		Rate:		\$ / Therm =	\$ 0.97	Combined	
		Account #: 2870067	3 01			\$ / kW =	\$ -	BTU / S.F. =	2	7,872	Account #:	62302094 01	_			\$ / S.F. =	\$ 0.17	\$ / S.F. =	\$ 1.02
		Meter #: 1060620	7 & 108002345	5		\$ / Cmp =	\$ 0.104				Meter # :	1156316				BTU / S.F. =	17,137	BTU / S.F. =	45,009
Year	Month	Read Dates	Consu	mption	Peak D	emand	Customer		To	tal	Read	Dates	Consun	nption	Delivery	Pipeline	Total	Gra	ınd
		Start End	kWh	\$	kW	\$	Charge	Adjustment			Start	End	Therms	\$	Charge	Trans. Charge		Tot	tal
2021	Feb	2/16/21 to 3/17/2:	35,100		117				\$	3,292	2/16/21 to	3/17/21	1,724				\$ 1,113	\$	4,405
2021	Mar	3/17/21 to 4/16/2:	32,700		135				\$	3,404	3/17/21 to	4/16/21	577				\$ 433	\$	3,837
2021	Apr	4/16/21 to 5/18/2:	35,400		132				\$	3,487	4/16/21 to	5/18/21	374				\$ 281	\$	3,768
2021	May	5/18/21 to 6/16/2:	43,200		171				\$	4,329	5/18/21 to	6/16/21	105				\$ 122	\$	4,451
2021	Jun	6/16/21 to 7/19/2:	51,900		174				\$	4,965	6/16/21 to	7/19/21	108				\$ 125	\$	5,090
2021	Jul	7/19/21 to 8/16/2:	53,400		120				\$	4,771	7/19/21 to	8/16/21	97				\$ 116	\$	4,888
2021	Aug	8/16/21 to 9/15/2:	55,200		144				\$	5,575	8/16/21 to	9/15/21	119				\$ 142	\$	5,717
2021	Sept	9/15/21 to 10/14/2	45,900		108				\$ .	4,499	9/15/21 to	10/14/21	160				\$ 174	\$	4,673
2021	Oct	10/14/21 to 11/12/2	37,800		180				\$	4,555	10/14/21 to	11/12/21	406				\$ 373	\$	4,928
2021	Nov	11/12/21 to 12/15/2	42,000		126				\$	4,655	11/12/21 to	12/15/21	1,954				\$ 1,970	\$	6,625
2021	Dec	12/15/21 to 1/18/22	38,100		132				\$ .	4,955	12/15/21 to	1/18/22	2,371				\$ 2,602	\$	7,557
2022	Jan	1/18/22 to 2/16/22	42,300		138				\$	4,949	1/18/22 to	2/16/22	2,770				\$ 3,019	\$	7,969
Total			513,000	\$ -	1,677	\$ -	\$ -	\$ -	\$ 5	3,435			10,765	\$ -	\$ -	\$ -	\$ 10,471	\$	63,906

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GLENN O. SWING ELEMENTARY SCHOOL

S.F. =	45,175	Electric [	Duke Energ	у	Rate:		\$ / kWh =	\$ -	\$ / S.F. =	\$	0.884	Gas	Duke Energy		Rate:		\$ / Therm =	\$ 1.00	Combined	-
		Account #: 2	25102055 0	)1			\$ / kW =	\$ -	BTU / S.F. =		26,248	Account #:	25102055 01	L			\$ / S.F. =	\$ 0.23	\$ / S.F. =	\$ 1.11
		Meter # :					\$ / Cmp =	\$ 0.115				Meter # :					BTU / S.F. =	23,081	BTU / S.F. =	49,330
Year	Month	Read Da	tes	Consun	nption	Peak D	emand	Customer		T	otal	Read	Dates	Consui	nption	Delivery	Pipeline	Total	Gra	and
		Start	End	kWh	\$	kW	\$	Charge	Adjustment			Start	End	Therms	\$	Charge	Trans. Charge		Tot	tal
2021	Feb	2/16/21 to	3/17/21	18,080		67				\$	1,817	2/16/21 to	3/17/21	1,737				\$ 1,161	\$	2,978
2021	Mar	3/17/21 to	4/16/21	17,760		158				\$	2,755	3/17/21 to	4/16/21	484				\$ 360	\$	3,115
2021	Apr	4/16/21 to	5/18/21	20,960		131				\$	2,649	4/16/21 to	5/18/21	217				\$ 184	\$	2,834
2021	May	5/18/21 to	6/16/21	31,040		186				\$	3,773	5/18/21 to	6/16/21	52				\$ 86	\$	3,859
2021	Jun	6/16/21 to	7/19/21	39,903		173				\$	4,132	6/16/21 to	7/19/21	52				\$ 86	\$	4,218
2021	Jul	7/19/21 to	8/16/21	35,200		176				\$	3,850	7/19/21 to	8/16/21	33				\$ 72	\$	3,922
2021	Aug	8/16/21 to	9/15/21	48,320		226				\$	5,179	8/16/21 to	9/15/21	95				\$ 124	\$	5,303
2021	Sept	9/15/21 to	10/14/21	37,600		181				\$	3,934	9/15/21 to	10/14/21	90				\$ 120	\$	4,054
2021	Oct	10/14/21 to	11/12/21	23,520		118				\$	2,934	10/14/21 to	11/12/21	528				\$ 459	\$	3,392
2021	Nov	11/12/21 to	12/15/21	24,800		77				\$	2,813	11/12/21 to	12/15/21	1,554				\$ 1,620	\$	4,433
2021	Dec	12/15/21 to	1/18/22	24,800		74				\$	3,145	12/15/21 to	1/18/22	2,546				\$ 2,804	\$	5,949
2022	Jan	1/18/22 to	2/16/22	25,440		77				\$	2,959	1/18/22 to	2/16/22	3,039				\$ 3,306	\$	6,265
Total				347,423	\$ -	1,644	\$ -	\$ -	\$ -	\$	39,940			10,427	\$ -	\$ -	\$ -	\$ 10,381	\$	50,321

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S.F. =	20,288	Electric	Duke Energ	SY	Rate:		\$ / kWh =	\$ -	\$ / S.F. =	\$	1.012	Gas	Duke Energy		Rate:		\$ / Therm =	\$ 0.96	Combined	
		Account #:	26300128 2	23			\$ / kW =	\$ -	BTU / S.F. =	3	34,426	Account #:	26300128 23				\$ / S.F. =	\$ 0.50	\$ / S.F. =	\$ 1.51
		Meter # :					\$ / Cmp =	\$ 0.100				Meter # :					BTU / S.F. =	51,938	BTU / S.F. =	86,364
Year	Month	Read [	Dates	Consun	nption	Peak D	emand	Customer		To	otal	Read	Dates	Consur	nption	Delivery	Pipeline	Total	G	rand
		Start	End	kWh	\$	kW	\$	Charge	Adjustment			Start	End	Therms	\$	Charge	Trans. Charge		Т	otal
2021	Feb	2/16/21 to	3/17/21	12,960		40				\$	1,252	2/16/21 to	3/17/21	1,989				\$ 1,273	\$	2,524
2021	Mar	3/17/21 to	4/16/21	12,640		56				\$	1,421	3/17/21 to	4/16/21	726				\$ 543	\$	1,965
2021	Apr	4/16/21 to	5/18/21	13,440		62				\$	1,517	4/16/21 to	5/18/21	349				\$ 266	\$ \$	1,783
2021	May	5/18/21 to	6/16/21	19,040		59				\$	1,806	5/18/21 to	6/16/21	68				\$ 97	\$	1,903
2021	Jun	6/16/21 to	7/19/21	20,640		40				\$	1,715	6/16/21 to	7/19/21	58				\$ 90	\$	1,805
2021	Jul	7/19/21 to	8/16/21	21,440		53				\$	1,832	7/19/21 to	8/16/21	55				\$ 87	\$	1,919
2021	Aug	8/16/21 to	9/15/21	26,400		70				\$	2,345	8/16/21 to	9/15/21	67				\$ 102	\$	2,447
2021	Sept	9/15/21 to	10/14/21	20,160		61				\$	1,806	9/15/21 to	10/14/21	64				\$ 99	\$	1,905
2021	Oct	10/14/21 to	11/12/21	14,240		51				\$	1,623	10/14/21 to	11/12/21	624				\$ 540	\$	2,163
2021	Nov	11/12/21 to	12/15/21	14,400		40				\$	1,633	11/12/21 to	12/15/21	1,683				\$ 1,708	\$	3,342
2021	Dec	12/15/21 to	1/18/22	14,560		38				\$	1,844	12/15/21 to	1/18/22	2,086				\$ 2,293	\$	4,135
2022	Jan	1/18/22 to	2/16/22	14,720		42				\$	1,729	1/18/22 to	2/16/22	2,768				\$ 3,028	\$	4,757
Total				204,640	\$ -	612	\$ -	\$ -	\$ -	\$ :	20,524			10,537	\$ -	\$ -	\$ -	\$ 10,124	\$	30,648

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INSTRUCTIONAL SUPPORT & DISTRICT ENROLLMENT CENTER (LEVASSOR)

S.F. =	13,000	Electric	Duke Energ	.y	Rate:		\$ / kWh =	\$ -	\$ / S.F. =	\$	0.496	Gas	Duke Energy	,	Rate:		\$ / Therm =	\$	1.26	Combined	
		Account #:	66600561 2	21, 76600561 2	1, & 8660056	1 23	\$ / kW =	\$ -	BTU / S.F. =	1	5,021	Account #:	76600561 23	1, & 86600561	L 23		\$ / S.F. =	\$	0.34	\$ / S.F. =	\$ 0.84
		Meter # :					\$ / Cmp =	\$ 0.113				Meter # :					BTU / S.F. =	- 2	27,137	BTU / S.F. =	42,158
Year	Month	Read D	Dates	Consun	nption	Peak D	emand	Customer		To	tal	Read	Dates	Consu	mption	Delivery	Pipeline	T	otal	Gra	and
		Start	End	kWh	\$	kW	\$	Charge	Adjustment			Start	End	Therms	\$	Charge	Trans. Charge			То	tal
2021	Feb	2/16/21 to	3/17/21	2,865		16				\$	322	2/16/21 to	3/17/21	606				\$	476	\$	798
2021	Mar	3/17/21 to	4/16/21	2,503		25				\$	293	3/17/21 to	4/16/21	215				\$	247	\$	540
2021	Apr	4/16/21 to	5/18/21	2,742		26				\$	313	4/16/21 to	5/18/21	99				\$	161	\$	474
2021	May	5/18/21 to	6/16/21	5,759		31				\$	618	5/18/21 to	6/16/21	10				\$	107	\$	725
2021	Jun	6/16/21 to	7/19/21	6,913		26				\$	728	6/16/21 to	7/19/21	9				\$	106	\$	834
2021	Jul	7/19/21 to	8/16/21	7,939		30				\$	793	7/19/21 to	8/16/21	10				\$	107	\$	900
2021	Aug	8/16/21 to	9/15/21	8,732		33				\$	929	8/16/21 to	9/15/21	25				\$	108	\$	1,037
2021	Sept	9/15/21 to	10/14/21	5,737		29				\$	590	9/15/21 to	10/14/21	10				\$	108	\$	698
2021	Oct	10/14/21 to	11/12/21	2,977		20				\$	370	10/14/21 to	11/12/21	189				\$	250	\$	620
2021	Nov	11/12/21 to	12/15/21	3,247		16				\$	422	11/12/21 to	12/15/21	635				\$	724	\$	1,146
2021	Dec	12/15/21 to	1/18/22	3,858		19				\$	549	12/15/21 to	1/18/22	750				\$	913	\$	1,462
2022	Jan	1/18/22 to	2/16/22	3,943		18				\$	517	1/18/22 to	2/16/22	968				\$	1,151	\$	1,668
Total				57,215	\$ -	289	\$ -	\$ -	\$ -	\$	6,444			3,528	\$ -	\$ -	\$ -	\$	4,459	\$	10,903

CF			

S.F. =	11,767	Electric	Duke Energ	.y	Rate:		\$ / kWh =	\$ -	\$ / S.F. =	\$ 1.448	Gas	Duke Energy	,	Rate:		\$ / Therm =	\$	1.03	Combined	
		Account #:	46200314 2	20			\$ / kW =	\$ -	BTU / S.F. =	47,835	Account #:	46200314 20	)			\$ / S.F. =	\$	0.39	\$ / S.F. =	\$ 1.83
		Meter # :					\$ / Cmp =	\$ 0.103			Meter # :					BTU / S.F. =		37,504	BTU / S.F. =	85,339
Year	Month	Read I	Dates	Consun	nption	Peak D	emand	Customer		Total	Read	Dates	Consu	mption	Delivery	Pipeline	Т	otal	Gra	nd
		Start	End	kWh	\$	kW	\$	Charge	Adjustment		Start	End	Therms	\$	Charge	Trans. Charge			Tot	al
2021	Feb	2/16/21 to	3/17/21	14,200		43				\$ 1,338	2/16/21 t	o 3/17/21	957				\$	630	\$	1,968
2021	Mar	3/17/21 to	4/16/21	11,720		41				\$ 1,199	3/17/21 t	o 4/16/21	425				\$	338	\$	1,537
2021	Apr	4/16/21 to	5/18/21	10,760		38				\$ 1,102	4/16/21 t	o 5/18/21	170				\$	155	\$	1,257
2021	May	5/18/21 to	6/16/21	12,640		36				\$ 1,188	5/18/21 t	o 6/16/21	12				\$	58	\$	1,246
2021	Jun	6/16/21 to	7/19/21	15,200		41				\$ 1,416	6/16/21 t	o 7/19/21	6				\$	54	\$	1,470
2021	Jul	7/19/21 to	8/16/21	15,020		44				\$ 1,375	7/19/21 t	o 8/16/21	7				\$	55	\$	1,430
2021	Aug	8/16/21 to	9/15/21	16,920		44				\$ 1,510	8/16/21 t	o 9/15/21	8				\$	56	\$	1,567
2021	Sept	9/15/21 to	10/14/21	12,600		41				\$ 1,185	9/15/21 t	o 10/14/21	6				\$	55	\$	1,240
2021	Oct	10/14/21 to	11/12/21	10,680		38				\$ 1,220	10/14/21 t	o 11/12/21	134				\$	154	\$	1,374
2021	Nov	11/12/21 to	12/15/21	13,460		43				\$ 1,574	11/12/21 t	o 12/15/21	797				\$	839	\$	2,414
2021	Dec	12/15/21 to	1/18/22	14,780		50				\$ 1,954	12/15/21 t	o 1/18/22	869				\$	973	\$	2,927
2022	Jan	1/18/22 to	2/16/22	16,940		50				\$ 1,976	1/18/22 t	o 2/16/22	1,022				\$	1,167	\$	3,143
Total				164,920	\$ -	509	\$ -	\$ -	\$ -	\$ 17,039			4,413	\$ -	\$ -	\$ -	\$	4,534	\$	21,573

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BUS GARAGE / TRANSPORTATION (DIST. SERVICES)

S.F. =	9,063	Electric	Duke Energ	.y	Rate:		\$ / kWh =	\$ -	\$ / S.F. =	\$	0.699	Gas	Duke Energy	,	Rate:		\$ / Therm =	\$	1.29	Combined	
		Account #:	28600343	36, 18600343 2	1, 38600343	24, & 6710354	\$ / kW =	\$ -	BTU / S.F. =	2	22,042	Account #:	28600343 3	5, 18600343 2	1, 38600343	24, & 6710354	1 \$ / S.F. =	\$	0.72	\$ / S.F. =	\$ 1.41
		Meter # :	88600343 2	22			\$ / Cmp =	\$ 0.108				Meter # :	88600343 22	2			BTU / S.F. =	5	5,650	BTU / S.F. =	77,692
Year	Month	Read [	Dates	Consun	nption	Peak D	emand	Customer		To	otal	Read	Dates	Consu	mption	Delivery	Pipeline	To	tal	Gra	ınd
		Start	End	kWh	\$	kW	\$	Charge	Adjustment			Start	End	Therms	\$	Charge	Trans. Charge			Tot	tal
2021	Feb	2/16/21 to	3/17/21	3,821		8				\$	464	2/16/21 to	3/17/21	830				\$	694	\$	1,158
2021	Mar	3/17/21 to	4/16/21	3,982		8				\$	424	3/17/21 to	4/16/21	435				\$	440	\$	864
2021	Apr	4/16/21 to	5/18/21	3,542		9				\$	392	4/16/21 to	5/18/21	245				\$	298	\$	691
2021	May	5/18/21 to	6/16/21	4,844		10				\$	510	5/18/21 to	6/16/21	12				\$	143	\$	653
2021	Jun	6/16/21 to	7/19/21	6,762		11				\$	655	6/16/21 to	7/19/21	9				\$	141	\$	796
2021	Jul	7/19/21 to	8/16/21	6,561		12				\$	656	7/19/21 to	8/16/21	7				\$	140	\$	796
2021	Aug	8/16/21 to	9/15/21	6,517		11				\$	668	8/16/21 to	9/15/21	4				\$	138	\$	806
2021	Sept	9/15/21 to	10/14/21	5,414		9				\$	496	9/15/21 to	10/14/21	3				\$	137	\$	633
2021	Oct	10/14/21 to	11/12/21	4,243		9				\$	457	10/14/21 to	11/12/21	297				\$	389	\$	846
2021	Nov	11/12/21 to	12/15/21	4,727		8				\$	540	11/12/21 to	12/15/21	755				\$	935	\$	1,475
2021	Dec	12/15/21 to	1/18/22	4,528		7				\$	583	12/15/21 to	1/18/22	1,173				\$	1,469	\$	2,052
2022	Jan	1/18/22 to	2/16/22	3,590		9				\$	486	1/18/22 to	2/16/22	1,272				\$	1,564	\$	2,051
Total				58,531	\$ -	111	\$ -	\$ -	\$ -	\$	6,332			5,044	\$ -	\$ -	\$ -	\$	6,488	\$	12,820

T.I. PIKE ST	. BLDG. (	DISTRICT	SUPPORT	SERVICES)
S.F. =	3 (	000    Flect	ric	Duke Energ

S.F. =	3,000	Electric	Duke Energ	.y	Rate:		\$ / kWh =	\$ -	\$ / S.F. =	\$	1.196	Gas	Duke Energy	/	Rate:		\$ / Therm =	\$ 1	.21	Combined	
		Account #:	33800592 2	23 & 63800592	22		\$ / kW =	\$ -	BTU / S.F. =	3	4,459	Account #:	63800592 22	2, & 33800592	2 23		\$ / S.F. =	\$ 1	.66	\$ / S.F. =	\$ 2.85
		Meter # :					\$ / Cmp =	\$ 0.118				Meter #:					BTU / S.F. =	136,	395	BTU / S.F. =	171,353
Year	Month	Read D	ates	Consun	nption	Peak D	emand	Customer		To	tal	Read	Dates	Consu	mption	Delivery	Pipeline	Tota		Grar	nd
		Start	End	kWh	\$	kW	\$	Charge	Adjustment			Start	End	Therms	\$	Charge	Trans. Charge			Tota	al
2021	Feb	2/16/21 to	3/17/21	2,561		14				\$	293	2/16/21 t	o 3/17/21	594				\$ -	483	\$	776
2021	Mar	3/17/21 to	4/16/21	1,594		14				\$	205	3/17/21 t	o 4/16/21	233				\$	250	\$	455
2021	Apr	4/16/21 to	5/18/21	1,815		12				\$	225	4/16/21 t	o 5/18/21	180				\$	211	\$	436
2021	May	5/18/21 to	6/16/21	3,748		14				\$	409	5/18/21 t	o 6/16/21	50				\$	135	\$	543
2021	Jun	6/16/21 to	7/19/21	4,772		15				\$	517	6/16/21 t	o 7/19/21	37				\$	126	\$	643
2021	Jul	7/19/21 to	8/16/21	4,033		16				\$	428	7/19/21 t	o 8/16/21	38				\$	126	\$	554
2021	Aug	8/16/21 to	9/15/21	4,515		16				\$	483	8/16/21 t	o 9/15/21	42				\$	132	\$	615
2021	Sept	9/15/21 to	10/14/21	2,486		10				\$	276	9/15/21 t	o 10/14/21	41				\$	132	\$	408
2021	Oct	10/14/21 to	11/12/21	1,132		13				\$	170	10/14/21 t	o 11/12/21	339				\$	361	\$	531
2021	Nov	11/12/21 to	12/15/21	1,242		5				\$	191	11/12/21 t	o 12/15/21	682				\$	799	\$	990
2021	Dec	12/15/21 to	1/18/22	1,190		5				\$	202	12/15/21 t	o 1/18/22	863				\$ 1,	037	\$	1,239
2022	Jan	1/18/22 to	2/16/22	1,201		4				\$	190	1/18/22 t	o 2/16/22	1,008				\$ 1,	176	\$	1,367
Total				30,289	\$ -	138	\$ -	\$ -	\$ -	\$	3,588			4,107	\$ -	\$ -	\$ -	\$ 4,	968	\$	8,556

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ADULT HIGH SCHOOL

	JH JCHOOL																				
S.F. =	1,800	Electric	Duke Energ	Sy.	Rate:		\$ / kWh =	\$ -	\$ / S.F. =	\$ 0	0.573	Gas	Duke Energy	•	Rate:		\$ / Therm =	\$ 1	.68 <b>(</b> 0	Combined	
		Account #:	35500343 3	30			\$ / kW =	\$ -	BTU / S.F. =	8	3,779	Account #:	35500343 30	)			\$ / S.F. =	\$ 0	.79	\$ / S.F. =	\$ 1.36
		Meter # :					\$ / Cmp =	\$ 0.223				Meter #:					BTU / S.F. =	47,1	47	BTU / S.F. =	55,926
Year	Month	Read [	Dates	Consun	nption	Peak D	emand	Customer		Tot	al	Read	Dates	Consu	mption	Delivery	Pipeline	Tota		Gran	nd
		Start	End	kWh	\$	kW	\$	Charge	Adjustment			Start	End	Therms	\$	Charge	Trans. Charge			Tota	al
2021	Feb	2/16/21 to	3/17/21	516		1				\$	85	2/16/21 to	3/17/21	144				\$ 1	44	\$	229
2021	Mar	3/17/21 to	4/16/21	448		2				\$	79	3/17/21 to	4/16/21	106				\$ 1	.23	\$	202
2021	Apr	4/16/21 to	5/18/21	198		6				\$	54	4/16/21 to	5/18/21	9				\$	58	\$	112
2021	May	5/18/21 to	6/16/21	170		1				\$	51	5/18/21 to	6/16/21	1				\$	52	\$	104
2021	Jun	6/16/21 to	7/19/21	177		6				\$	53	6/16/21 to	7/19/21	-				\$	52	\$	104
2021	Jul	7/19/21 to	8/16/21	161		0				\$	50	7/19/21 to	8/16/21	-				\$	52	\$	102
2021	Aug	8/16/21 to	9/15/21	565		7				\$	147	8/16/21 to	9/15/21	-				\$	52	\$	199
2021	Sept	9/15/21 to	10/14/21	220		3				\$	112	9/15/21 to	10/14/21	-				\$	52	\$	164
2021	Oct	10/14/21 to	11/12/21	347		7				\$	71	10/14/21 to	11/12/21	47				\$	90	\$	161
2021	Nov	11/12/21 to	12/15/21	531		1				\$	96	11/12/21 to	12/15/21	136				\$ 1	91	\$	287
2021	Dec	12/15/21 to	1/18/22	656		1				\$	120	12/15/21 to	1/18/22	188				\$ 2	63	\$	384
2022	Jan	1/18/22 to	2/16/22	641		1				\$	111	1/18/22 to	2/16/22	217				\$ 2	99	\$	410
Total				4,630	\$ -	37	\$ -	\$ -	\$ -	\$ 1	1,031			849	\$ -	\$ -	\$ -	\$ 1,4	25	\$	2,456

MAINTENANCE BUILDING

S.F. =	1,275	Electric	Duke Energ	ЗУ	Rate:		\$ / kWh =	\$ -	\$ / S.F. =	\$ 1.823	Gas	Duke Energy	'	Rate:		\$ / Therm =	\$	1.35	Combined	
		Account #:	8860-0343	-22-4			\$ / kW =	\$ -	BTU / S.F. =	50,710	Account #:	8860-0343-2	2-4			\$ / S.F. =	\$	2.10	\$ / S.F. =	\$ 3.92
		Meter # :					\$ / Cmp =	\$ 0.123			Meter # :					BTU / S.F. =		155,746	BTU / S.F. =	206,456
Year	Month	Read	Dates	Consur	nption	Peak D	emand	Customer		Total	Read	d Dates	Consur	nption	Delivery	Pipeline	_	Total	Gra	ınd
		Start	End	kWh	\$	kW	\$	Charge	Adjustment		Start	End	Therms	\$	Charge	Trans. Charge			Tot	tal
2021	Feb	2/16/21 to	0 3/17/21	1,292		7				\$ 152	2/16/21 t	o 3/17/21	322				\$	274	\$	426
2021	Mar	3/17/21 to	0 4/16/21	1,165		6				\$ 142	3/17/21 t	o 4/16/21	143				\$	156	\$	298
2021	Apr	4/16/21 to	5/18/21	1,124		6				\$ 136	4/16/21 t	o 5/18/21	62				\$	96	\$	232
2021	May	5/18/21 to	o 6/16/21	1,921		8				\$ 219	5/18/21 t	o 6/16/21	-				\$	55	\$	274
2021	Jun	6/16/21 to	0 7/19/21	2,128		8				\$ 245	6/16/21 t	o 7/19/21	-				\$	55	\$	300
2021	Jul	7/19/21 to	0 8/16/21	2,164		8				\$ 240	7/19/21 t	o 8/16/21	1				\$	55	\$	295
2021	Aug	8/16/21 to	9/15/21	2,203		8				\$ 249	8/16/21 t	o 9/15/21	-				\$	55	\$	303
2021	Sept	9/15/21 to	0 10/14/21	1,509		7				\$ 169	9/15/21 t	o 10/14/21	-				\$	55	\$	223
2021	Oct	10/14/21 to	0 11/12/21	1,281		7				\$ 169	10/14/21 t	o 11/12/21	93				\$	134	\$	303
2021	Nov	11/12/21 to	0 12/15/21	1,364		6				\$ 189	11/12/21 t	o 12/15/21	351				\$	436	\$	626
2021	Dec	12/15/21 to	0 1/18/22	1,456		6				\$ 224	12/15/21 t	o 1/18/22	474				\$	615	\$	839
2022	Jan	1/18/22 t	0 2/16/22	1,337		6				\$ 191	1/18/22 t	o 2/16/22	539				\$	693	\$	884
Total				18,944	\$ -	82	\$ -	\$ -	\$ -	\$ 2,324			1,986	\$ -	\$ -	\$ -	\$	2,679	\$	5,003

Data missing or estimating

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			Fan Runtime Savings  Current Fan Runtime  School yEar Summer School School Summer School Summer School Summer School Summer School Summer School School Summer School Summer School School Summer School Summer School Scho																							
						Currer	nt Fan F	luntime																		
Description					SCH	OOL YE	AR						SUMN	MER SCH	HOOL						SUN	IMER				Total
Building	System	Weeks	/ year =		40	Cycle T	íme =		15.0%	Weeks	s / year =		7	Cycle T	ime =		15.0%	Weeks	s / year =		5	Cycle T	Time =		15.0%	Runtime
	ID	W	EEK		AT		SUN	Cycle	Total	V	VEEK		AT		SUN	Cycle	Total	_	WEEK		SAT		UN	Cycle	Total	ı
		ON	OFF	ON	OFF	ON	OFF	Time	Runtime	ON	OFF	ON	OFF	ON	OFF	Time	Runtime	ON	OFF	ON	OFF	ON	OFF	Time	Runtime	
Sixth District Elementary School	(2) Boilers (SB-1 & SB-2)	5.5		-	-	-	-	14	1,737	-	-	-	-	-	-	25	176	-	-	-	-	- '	-	25	126	2,039
Sixth District Elementary School	Chiller (SCH-1)	5.5	18.0	-	-	-	-	16	1,044	5.5	18.0	-	-	-	-	16	548	5.5	18.0	-	-	- !	-	16	392	1,984
Sixth District Elementary School	(2) HW Pumps (SP-2A & SP-2B)	5.5	20.0	-	-	-	-	14	2,547	-	-	-	-	-	-	25	194	-	-	-	-	- !	-	25	139	2,880
Sixth District Elementary School	CW Pump (SP-1)	5.5	18.0	-	-	-	-	16	1,723	5.5	18.0	-	-	-	-	16	603	5.5	18.0	-	-	[ - '	-	16	431	2,757
Sixth District Elementary School	Office split system (SF-1 & SOU-1)	5.0		5.0				12	4,102	5.0	18.0	5.0	18.0	5.0	18.0	12	718	5.0	18.0	5.0	18.0	5.0	18.0	12	513	5,333
John G. Carlisle Elementary School	(2) Boilers (JB-1 & JB-2)	5.5	16.0	8.0	13.0	13.0	16.0	16	1,533	-	-	-	-	-	-	25	176	-	-	-	-		-	25	126	1,835
Latonia Elementary School	LRTU-1	5.0	20.5	8.5	15.0	8.5	17.0	11	4,153	5.0	20.5	8.5	15.0	8.5	17.0	11	727	5.0	20.5	8.5	15.0	8.5	17.0	11	519	5,399
Latonia Elementary School	LRTU-2	5.0	20.5	8.5	15.0	8.5	17.0	11	4,153	5.0	20.5	8.5	15.0	8.5	17.0	11	727	5.0	20.5	8.5	15.0	8.5	17.0	11	519	5,399
Latonia Elementary School	LRTU-3	5.0	20.5	8.5	15.0	8.5	17.0	11	4,153	5.0	20.5	8.5	15.0	8.5	17.0	11	727	5.0	20.5	8.5	15.0	8.5	17.0	11	519	5,399
Latonia Elementary School	LRTU-4	5.0	20.5	8.5	15.0	8.5		11	4,153	5.0	20.5	8.5	15.0	8.5	17.0	11	727	5.0	20.5	8.5	15.0	8.5	17.0	11	519	5,399
Latonia Elementary School	LRTU-5	5.0		8.5	15.0	8.5	17.0	11	4,153	5.0	20.5	8.5	15.0	8.5	17.0	11	727	5.0	20.5	8.5	15.0	8.5	17.0	11	519	5,399
Latonia Elementary School	LRTU-6	5.0	20.5	8.5	15.0	8.5		11	4,153	5.0	20.5	8.5	15.0	8.5	17.0	11	727	5.0	20.5	8.5	15.0	8.5	17.0	11	519	5,399
Glenn O. Swing Elementary School	GRTU-1	5.0	16.0	-	1 -	-	<u> </u>	14	2,765	5.0	16.0	1 -	-	- 1	-	17	504	5.0	16.0	-	1 -		-	17	360	3,628
Glenn O. Swing Elementary School	GRTU-2	5.0		-	-	-	-	14	2,765	5.0	16.0	-	-	- 1	-	17	504	5.0	16.0	-	-		-	17	360	3,628
Glenn O. Swing Elementary School	GRTU-3	5.0	16.0	-	-	-	-	14	2,765	5.0	16.0	-	-	- 1	-	17	504	5.0	16.0	-	-		-	17	360	3,628
Glenn O. Swing Elementary School	GRTU-4	5.0	16.0	-	-	-	-	14	2,765	5.0	16.0	-	-	- 1	-	17	504	5.0	16.0	-	-		-	17	360	3,628
Glenn O. Swing Elementary School	Existing RTU-5	5.0	16.0	_	l .	_	-	14	2,765	5.0	16.0	l _	_		-	17	504	5.0	16.0	-	l .		_	17	360	3,628
Glenn O. Swing Elementary School	Existing RTU-6	5.0	16.0			-	-	14	2,765	5.0	16.0		-			17	504	5.0	16.0		l -	$\vdash \vdash$		17	360	3,628
Glenn O. Swing Elementary School	GRTU-7	5.0	16.0	_	-	-	-	14	2,765	5.0	16.0	-	-	-		17	504	5.0	16.0	-		F	-	17	360	3,628
Glenn O. Swing Elementary School	GRTU-8	5.0	16.0	-	-	-	1	14	2,765	5.0	16.0	ļ -	-	- 1		17	504	5.0	16.0	-	-	<u></u> -	-	17	360	3,628
Glenn O. Swing Elementary School	GRTU-9	5.0	16.0	-	-	-	-	14	2,765	5.0	16.0	ļ -	-	- 1	-	17	504	5.0	16.0	-	<u> </u>	<u></u> -	-	17	360	3,628
Glenn O. Swing Elementary School	GRTU-10 (Kitchen/Cafeteria)	5.0	18.0	-	-	-	-	13	3,115	5.0	18.0	ļ -	-		-	15	563	5.0	18.0	-	-	<u></u> -	-	15	402	4.080
	, , ,	6.0		-	-						_	-	-		-	14				-	<u> </u>	<u> </u>		14		,
Glenn O. Swing Elementary School	GRTU-11 (Gym)		21.5	-	-	-	-	11	3,553	6.0	21.5	-	-	-	-	17	638	6.0	21.5	-	-		-		455	4,645
Glenn O. Swing Elementary School Glenn O. Swing Elementary School	Existing RTU-12 GRTU-13	5.0 5.0	16.0 16.0	-	-	-		14 14	2,765 2,765	5.0 5.0	16.0 16.0	-	-		-	17	504 504	5.0	16.0 16.0	-	-		-	17 17	360 360	3,628 3,628
Glenn O. Swing Elementary School	GRTU-13 GRTU-14 (Office)	6.0	17.0	-	-	-	-	14	2,765	6.0	17.0	-	-			17	504	6.0	17.0	-	-	<u> </u>	-	17	360	3,628
Glenn O. Swing Elementary School	GRTU-15	5.0	16.0	-	-	-		14	2,765	5.0	16.0	-	-	-	-	17	504	5.0	16.0	-			-	17	360	3,628
James E Biggs Early Childhood	Basement FCUs	0.0		_	1 -	-	┿	16	3,048	6.0	18.0	<del>-</del>	-	-		16	533	6.0	18.0	_	÷	<del>ا</del>	<del></del>	16	381	3,962
James E Biggs Early Childhood	Outside Air FCUs	6.0	18.0	-	-	-	-	16	3,048	6.0	18.0	-	-	-	-	16	533	6.0	18.0	-	-	<u>-</u> -	-	10	381	
James E Biggs Early Childhood	Stairwell FCUs	-	-	-	-	-	<u> </u>	-	-	-	-	-	-	-		-	-	-		-	<u> </u>	<u> </u>	-	+		-
James E Biggs Early Childhood	Hallways FCUs	5.0	20.0	5.0	20.0	5.0	20.0	- 9	4,578	5.0	20.0	5.0	20.0	5.0	20.0	9	801	5.0	20.0	5.0	20.0	5.0	20.0	9	572	5,951
James E Biggs Early Childhood	Classroom UVs	5.0	20.0	5.0	20.0	5.0		9	4,578	5.0	20.0	5.0	20.0	5.0	20.0	9	801	5.0	20.0	5.0	20.0	5.0	20.0	9	572	5,951
James E Biggs Early Childhood	Office UVs	5.0	20.0	5.0	20.0	5.0		9	4,578	5.0	20.0	5.0	20.0	5.0	20.0	9	801	5.0	20.0	5.0	20.0	5.0	20.0	9	572	5,951
James E Biggs Early Childhood	Elevator Room Mini-split	3.0	20.0	5.0	20.0	5.0	20.0	- 9	4,376	5.0	20.0	5.0	20.0	5.0	20.0	9	901	5.0	20.0	5.0	20.0	3.0	20.0	9	- 5/2	5,951
James E Biggs Early Childhood	HW Pumps (BHWP-1 & 2)	5.0	20.0	5.0	20.0	5.0	20.0	9	5,036	-			-	-		25	194	-	-	-		F		25	139	5.368
James E Biggs Early Childhood	CW Pumps (BCWP-1 & 2)	5.0		5.0	20.0	5.0		9	2,518	5.0	20.0	5.0	20.0	5.0	20.0	9	881	5.0	20.0	5.0	20.0	5.0	20.0	9	629	4,029
James E Biggs Early Childhood	Preheat Coil Pumps (CCP-1, 2, & 3)	5.0	20.0	5.0	20.0	5.0	20.0	- 9	2,518	5.0	20.0	5.0	20.0	5.0	20.0	9	881	5.0	20.0	5.0	20.0	5.0	20.0	9 1	629	4,029
James E Biggs Early Childhood	Chiller (BCH-1)	7.0		7.0	17.0	7.0		15	1,694	7.0	17.0	7.0	17.0	7.0	17.0	15	593	7.0	17.0	7.0	17.0	7.0	17.0	15	424	2,710
James E Biggs Early Childhood	Boilers (BB-1 & BB-2)	5.0		7.0	17.0	7.0	17.0	14	3,558	7.0	17.0	7.0	17.0	7.0	17.0	25	194	7.0	17.0	7.0	17.0	7.0	17.0	25	139	3,891
James E Biggs Early Childhood	Kitchen Exhaust Hood Fans (EF-1 & 2)	5.0		<u> </u>	1	<u> </u>	-	18	2,538	5.0	14.0	<del>-</del>	-	HH		18	444	5.0	14.0	<u> </u>	1	<u> </u>	<u> </u>	18	317	3,891
James E Biggs Early Childhood	Rooftop Exhaust Fan (EF-3)	6.0		<u> </u>	H-	-	-	16	3,048	6.0	18.0	1	-	HH		16	533	6.0	18.0	<u> </u>	1	<u> </u>	<u> </u>	16	381	3,299
James E Biggs Early Childhood	Bathroom Exhaust Fans (EF-4 & 5)	6.0		<u> </u>	<u> </u>	<u> </u>	1 -	16	3,048	6.0	18.0	<u> </u>	<u> </u>	H		16	533	6.0	18.0	<u> </u>	<del>-</del>	<u> </u>	-	16	381	3,962
James E Biggs Early Childhood	Kitchen Make-up Air Unit (MAU-1)	6.0		<u> </u>	<u> </u>	<u> </u>	-	16	3,048	6.0	18.0	<u> </u>	<u> </u>	H	-	16	533	6.0	18.0	<u> </u>	<u> </u>	<u> </u>	-	16	381	3,962
James E Biggs Early Childhood	DHW Circulator Pumps (HWCP-1 & 2)	6.0	24.0	-	24.0	<u> </u>	24.0	16	6,720	0.0	24.0	<u> </u>	24.0	H-1	24.0	10	1.176	0.0	24.0	<u> </u>	24.0	<u> </u>	24.0	10	840	8,736
James E Biggs Early Childhood	DHW Circulator Pumps (HWCP-1 & 2) DHW Heater (BWH-1)	H	24.0		24.0	H	24.0		6,720	H.	24.0	H.	24.0		24.0	-	1,176	H.	24.0	H	24.0		24.0	+:-'	840	8,736
sames a biggs carry chilumoou	IDITAN HEATEL (DANIL-T)		1 24.0		1 24.0		24.0		0,720		24.0	1 -	1 24.U	- 1	24.0	-	1,1/0		24.0	_	1 24.0		24.0		040	0,730

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								luntime																		
Description						OOL YE								MER SCHO							SUM					Total
Building	System	Weeks	/ year :	-	40	Cycle 1	īme =		12.5%	Weeks	s / year =		7	Cycle Tir	ne =		10.0%	Weeks	/ year =		5	Cycle Tim	ie =		10.0%	Runtim
	ID	W	'EEK		AT		UN	Cycle	Total		VEEK	SA			UN	Cycle	Total		WEEK	SA		SUN		Cycle '	Total	
		ON	OFF	ON	OFF	ON	OFF	Time	Runtime	ON	OFF	ON	OFF	ON	OFF	Time	Runtime	ON	OFF	ON	OFF	ON (	OFF	Time Ru	ıntime	
Sixth District Elementary School	(2) Boilers (SB-1 & SB-2)	5.5	16.0	-	-	-	-	14	1,339	Ι	-	- 1	-	-	-	17	118	-	-	- 1	-	-	-	17	84	1,5
Sixth District Elementary School	Chiller (SCH-1)	5.5	16.0	-	-	-	-	14	893	5.5	16.0	-	-	-	-	12	448	5.5	16.0	-	-	-	-	12	320	1,6
Sixth District Elementary School	(2) HW Pumps (SP-2A & SP-2B)	5.5	16.0	-	-	-	-	14	1,785	-	-	-	-	-	-	17	118	-	-	-	- '	-	-	17	84	1,9
Sixth District Elementary School	CW Pump (SP-1)	5.5	16.0	-	-	-	-	14	1,339	5.5	16.0	- 1	-	-	-	12	448	5.5	16.0	-	'	-	-	12	320	2,1
Sixth District Elementary School	Office split system (SF-1 & SOU-1)	6.5	17.0	5.0	-	5.0	-	16	2,328	6.5	17.0	5.0	-	5.0	-	13	385	6.5	17.0	5.0	-	5.0	-	13	275	2,9
John G. Carlisle Elementary School	(2) Boilers (JB-1 & JB-2)	5.5	16.0	-	-	-	-	14	1,339	Τ-	-	T - T	-	- 1	-	17	118	-	-	I - I	-	-	-	17	84	1,5
Latonia Elementary School	LRTU-1	5.5	17.0	-	-	-	-	14	2,853	6.5	16.0	- 1	-	- 1	-	12	417	6.5	16.0	i - i	-	-	-	12	298	3,5
Latonia Elementary School	LRTU-2	5.5	17.0	-	-	-	-	14	2,853	6.5	16.0	-	-	-	-	12	417	6.5	16.0	-	-	-	-	12	298	3,5
Latonia Elementary School	LRTU-3	5.5	17.0	-	-	-	-	14	2,853	6.5	16.0	-	-	-	-	12	417	6.5	16.0	-	-	-	-	12	298	3,5
Latonia Elementary School	LRTU-4	5.5	17.0	-	-	-	-	14	2,853	6.5	16.0	- 1	-	-	-	12	417	6.5	16.0	- 1	-	-	-	12	298	3,5
Latonia Elementary School	LRTU-5	5.5		-	-	-	-	14	2,853	6.5	16.0	- 1	-	-	-	12	417	6.5	16.0	- 1	-	-	-	12	298	3,5
Latonia Elementary School	LRTU-6	5.5	17.0	-	-	-	-	14	2,853	6.5	16.0	-	-	-	-	12	417	6.5	16.0	-	-	-	-	12	298	3,5
Glenn O. Swing Elementary School	GRTU-1	5.5	16.0	-	-	-	-	14	2,678	6.0	16.0	- 1	-	- T	-	12	433	6.0	16.0	- 1	-	-	- 1	12	309	3,4
Glenn O. Swing Elementary School	GRTU-2	5.5	16.0	-	-	-	-	14	2,678	6.0	16.0	- 1	-	-	-	12	433	6.0	16.0	- 1	-	-	-	12	309	3,4
Glenn O. Swing Elementary School	GRTU-3	5.5	16.0	-	-	-	-	14	2,678	6.0	16.0	- 1	-	-	-	12	433	6.0	16.0	- 1	-	-	-	12	309	3,4
Glenn O. Swing Elementary School	GRTU-4	5.5	16.0	-	-	-	-	14	2,678	6.0	16.0	-	-	-	-	12	433	6.0	16.0	-	-	-	-	12	309	3,4
Glenn O. Swing Elementary School	Existing RTU-5	5.5	16.0	-	-	-	-	14	2,678	6.0	16.0	-	-	-	-	12	433	6.0	16.0	-	-	-	-	12	309	3,4
Glenn O. Swing Elementary School	Existing RTU-6	5.5	16.0	-	-	-	-	14	2,678	6.0	16.0	-	-	-	-	12	433	6.0	16.0	-	-	-	-	12	309	3,4
Glenn O. Swing Elementary School	GRTU-7	5.5	16.0	-	-	-	-	14	2,678	6.0	16.0	-	-	-	-	12	433	6.0	16.0	-	-	-	-	12	309	3,4
Glenn O. Swing Elementary School	GRTU-8	5.5	16.0	-	-	-	-	14	2,678	6.0	16.0	-	-	-	-	12	433	6.0	16.0	-	-	-	-	12	309	3,4
Glenn O. Swing Elementary School	GRTU-9	5.5	16.0	-	-	-	-	14	2,678	6.0	16.0	-	-	-	-	12	433	6.0	16.0	-	-	-	-	12	309	3,4
Glenn O. Swing Elementary School	GRTU-10 (Kitchen/Cafeteria)	5.5	18.0	-	-	-	-	13	3,028	6.0	18.0	-	-	-	-	11	496	6.0	18.0	-	-	-	-	11	354	3,8
Glenn O. Swing Elementary School	GRTU-11 (Gym)	5.5	20.0	-	-	-	-	12	3,378	6.0	18.0	-	-	-	-	11	496	6.0	18.0	-	-	-	-	11	354	4,2
Glenn O. Swing Elementary School	Existing RTU-12	5.5	16.0	-	-	-	-	14	2,678	6.0	16.0	-	-	-	-	12	433	6.0	16.0	- 1	-	-	-	12	309	3,4
Glenn O. Swing Elementary School	GRTU-13	5.5		-	-	-	-	14	2,678	6.0	16.0	-	-	-	-	12	433	6.0	16.0		-	-	-	12	309	3,4
Glenn O. Swing Elementary School	GRTU-14 (Office)	6.0		-	-	-	-	14	2,765	6.0	17.0		-	-	-	11	464	6.0	17.0	-	-	-	-	11	332	3,5
Glenn O. Swing Elementary School	GRTU-15	5.5		-	-	-	-	14	2,678	6.0	16.0	_	-	-	-	12	433	6.0	16.0	-		-	-	12	309	3,4
James E Biggs Early Childhood	Basement FCUs	5.5		-	-	-	-	14	2,678	5.5	16.0	-	-	-	-	12	448	0.0	16.0	-	-	-	-	12	320	3,4
James E Biggs Early Childhood	Outside Air FCUs	7.5	16.0	-	-	-	-	16	2,328	7.5	16.0	-	-	-	-	13	385	7.5	16.0	-	-	-	-	13	275	2,9
James E Biggs Early Childhood	Stairwell FCUs	5.5		-	-	-	-	14	2,678	5.5	16.0	-	-	-	-	12	448	5.5	16.0	-	-	-	-	12	320	3,4
James E Biggs Early Childhood	Hallways FCUs	7.5	16.0	-	-	-	-	16	2,328	7.5	16.0	-	-	-	-	13	385	7.5	16.0	-	-	-	-	13	275	2,9
James E Biggs Early Childhood	Classroom UVs	5.5	16.0	-	-	-	-	14	2,678	5.5	16.0	-	-	-	-	12	448	5.5	16.0	-	-	-	-	12	320	3,4
James E Biggs Early Childhood	Office UVs	5.5	17.0	-	-	-	-	14	2,853	5.5	17.0	-	-	-	-	11	480	5.5	17.0	-	'	-	-	11	343	3,6
James E Biggs Early Childhood	Elevator Room Mini-split	7.5		-	-	-	-	16	2,328	7.5	16.0	-	-	-	-	13	385	7.5	16.0	-	-	-	-	13	275	2,9
James E Biggs Early Childhood	HW Pumps (BHWP-1 & 2)	5.5	17.0	-	-	-	-	14	2,092	5.5	17.0	-	-	-	-	11	480	5.5	17.0	-	-	-	-	11	343	2,9
James E Biggs Early Childhood	CW Pumps (BCWP-1 & 2)	5.5	17.0	-	-	-	-	14	1,255	5.5	17.0	-	-	-	-	11	480	5.5	17.0	-	-	-	-	11	343	2,0
James E Biggs Early Childhood	Preheat Coil Pumps (CCP-1, 2, & 3)	7.5		-	-	-	-	16	2,328	-	-	-	-	-	-	17	118	-	-	-	-	-	-	17	84	2,5
James E Biggs Early Childhood	Chiller (BCH-1)	5.5		-	-	-	-	14	1,426	5.5	17.0	-	-	-	-	11	480	5.5	17.0	-	-	-	-	11	343	2,2
James E Biggs Early Childhood	Boilers (BB-1 & BB-2)	5.5		-	-	-	-	14	2,282	5.5	17.0	-	-	-	-	11	480	5.5	17.0	-		-	-	11	343	3,1
James E Biggs Early Childhood	Kitchen Exhaust Hood Fans (EF-1 & 2)	5.5		-	-	-	-	16	2,328	5.5	14.0		-	-	-	13	385	5.5	14.0		-	-	-	13	275	2,9
James E Biggs Early Childhood	Rooftop Exhaust Fan (EF-3)	7.5		-	-	l -	-	16	2,328	7.5	16.0		-	-	-	13	385	7.5	16.0		-	-	-	13	275	2,9
James E Biggs Early Childhood	Bathroom Exhaust Fans (EF-4 & 5)	7.5		-	-	H	-	16	2,328	7.5	16.0	<b>⊢</b> ⁻	-	-	-	13	385	7.5	16.0		-	-	-	13	275	2,9
James E Biggs Early Childhood	Kitchen Make-up Air Unit (MAU-1)	5.5		-	-	-	-	16	2,328	5.5	14.0	<b>⊢</b> ⁻	-	-	-	13	385	5.5	14.0		-	-	-	13	275	2,9
James E Biggs Early Childhood	DHW Circulator Pumps (HWCP-1 & 2)	5.5 5.5		-	-	-	-	14 14	2,853 2,853	5.5 5.5	17.0 17.0	-	-		-	11	480 480	5.5 5.5	17.0 17.0		-	-	-	11 11	343 343	3,6
James E Biggs Early Childhood	DHW Heater (BWH-1)	5.5	1/.0	<u> </u>	1 -	<u> </u>	<u> </u>	14	2,853	5.5	17.0	1 - 1	-	-	-	1 11	1 480	5.5	17.0	1 - 1		-	-	11	343	3,6

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				Red	uced Fan	Runtime														
Description				SCHOOL	YEAR				SL	IMMER S	CHOOL					SUMMER			T	Total
Building	System ID	WEEK ON OFF	SAT ON		SUN OFF	Cycle Time	Total Runtime	WEEK ON OFF	SAT ON O	FF ON	SUN	Cycle		WEEK ON OFF	SAT ON C		SUN N OFF		Total	Runtime
Sixth District Elementary School	(2) Boilers (SB-1 & SB-2)		-				398		<u> </u>				59		-				42	499
Sixth District Elementary School	Chiller (SCH-1)						152						100						71	323
Sixth District Elementary School	(2) HW Pumps (SP-2A & SP-2B)						762						76						55	893
Sixth District Elementary School	CW Pump (SP-1)						384						155						111	650
Sixth District Elementary School	Office split system (SF-1 & SOU-1)						1,775						333						238	2,345
John G. Carlisle Elementary School	(2) Boilers (JB-1 & JB-2)						194						59						42	295
Latonia Elementary School	LRTU-1						1,301						310						221	1.832
Latonia Elementary School	LRTU-2						1,301						310						221	1,832
Latonia Elementary School	LRTU-3						1,301						310						221	1,832
Latonia Elementary School	LRTU-4						1,301						310						221	1,832
Latonia Elementary School	LRTU-5						1,301						310						221	1,832
Latonia Elementary School	LRTU-6						1,301						310						221	1,832
Glenn O. Swing Elementary School	GRTU-1						88						71						51	209
Glenn O. Swing Elementary School	GRTU-2						88						71						51	209
Glenn O. Swing Elementary School	GRTU-3						88						71						51	209
Glenn O. Swing Elementary School	GRTU-4						88						71						51	209
Glenn O. Swing Elementary School	Existing RTU-5						88						71						51	209
Glenn O. Swing Elementary School	Existing RTU-6						88						71						51	209
Glenn O. Swing Elementary School	GRTU-7						88						71						51	209
Glenn O. Swing Elementary School	GRTU-8						88						71						51	209
Glenn O. Swing Elementary School	GRTU-9						88						71						51	209
Glenn O. Swing Elementary School	GRTU-10 (Kitchen/Cafeteria)						88						68						48	203
Glenn O. Swing Elementary School	GRTU-11 (Gym)						175						142						101	418
Glenn O. Swing Elementary School	Existing RTU-12						88						71						51	209
Glenn O. Swing Elementary School	GRTU-13						88						71						51	209
Glenn O. Swing Elementary School	GRTU-14 (Office)						-						40						28	68
Glenn O. Swing Elementary School	GRTU-15						88						71						51	209
James E Biggs Early Childhood	Basement FCUs						371						85						61	516
James E Biggs Early Childhood	Outside Air FCUs						(2,328)						(385)						(275)	(2,988)
James E Biggs Early Childhood	Stairwell FCUs						(2,678)						(448)						(320)	(3,446)
James E Biggs Early Childhood	Hallways FCUs						2,251						416						297	2,963
James E Biggs Early Childhood	Classroom UVs					_	1,901						353						252	2,505
James E Biggs Early Childhood	Office UVs					_	1,726						321						230	2,276
James E Biggs Early Childhood	Elevator Room Mini-split						(2,328)						(385)						(275)	(2,988)
James E Biggs Early Childhood	HW Pumps (BHWP-1 & 2)						2,944						(286)						(204)	2,454
James E Biggs Early Childhood	CW Pumps (BCWP-1 & 2)						1,263						401					_	287	1,951
James E Biggs Early Childhood	Preheat Coil Pumps (CCP-1, 2, & 3)						(2,328)						(118)						(84)	(2,529)
James E Biggs Early Childhood	Chiller (BCH-1)					_	268						113 (286)						81 (204)	462 786
James E Biggs Early Childhood	Boilers (BB-1 & BB-2)					-	1,276													
James E Biggs Early Childhood	Kitchen Exhaust Hood Fans (EF-1 & 2)						211 721						59 148						42 106	311 974
James E Biggs Early Childhood	Rooftop Exhaust Fan (EF-3)																			
James E Biggs Early Childhood	Bathroom Exhaust Fans (EF-4 & 5) Kitchen Make-up Air Unit (MAU-1)						721 721						148 148						106 106	974 974
James E Biggs Early Childhood	DHW Circulator Pumps (HWCP-1 & 2)						3.868						696						497	5,061
James E Biggs Early Childhood													696						497	5,061
James E Biggs Early Childhood	DHW Heater (BWH-1)						3,868						696						497	5,061

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	FAN	I/PUMP I	MOTOR F	RUNTIN	IE SAVI	NGS					
Building	System	Motor HP	Break HP /	kW / HP	Speed	kW	Saved	Motor	Savings	Rate	Savings
	ID		Motor HP		Speeu	KVV	Hrs / Yr	Efficiency	(kWh)	(kWh)	(\$)
Sixth District Elementary School	(2) HW Pumps (SP-2A & SP-2B)	7.5	0.8	0.746	100%	6	893	80%	4,996	\$ 0.070	\$ 351
Sixth District Elementary School	CW Pump (SP-1)	7.5	0.8	0.746	100%	6	650	80%	3,635	\$ 0.070	
Sixth District Elementary School	Office split system (SF-1 & SOU-1)	0.75	0.8	0.746	100%	1	2,345	75%	1,399	\$ 0.070	\$ 98
Subtotal									10,030		\$ 705
Latonia Elementary School	LRTU-1	5.0	0.8	0.746	100%	4	1,832	80%	6,833	\$ 0.071	\$ 486
Latonia Elementary School	LRTU-2	10.0	0.8	0.746	100%	7	1,832	80%	13,665	\$ 0.071	\$ 971
Latonia Elementary School	LRTU-3	10.0	0.8	0.746	100%	7	1,832	80%	13,665	\$ 0.071	\$ 971
Latonia Elementary School	LRTU-4	10.0	0.8	0.746	100%	7	1,832	80%	13,665	\$ 0.071	\$ 971
Latonia Elementary School	LRTU-5	5.0	0.8	0.746	100%	4	1,832	80%	6,833	\$ 0.071	\$ 486
Latonia Elementary School	LRTU-6	10.0	0.8	0.746	100%	7	1,832	80%	13,665	\$ 0.071	\$ 971
Subtotal									68,326		\$ 4,856
Glenn O. Swing Elementary School	GRTU-1	2.5	0.8	0.746	100%	2	209	90%	347	\$ 0.072	
Glenn O. Swing Elementary School	GRTU-2	2.5	0.8	0.746	100%	2	209	90%	347	\$ 0.072	\$ 25
Glenn O. Swing Elementary School	GRTU-3	2.5	0.8	0.746	100%	2	209	90%	347	\$ 0.072	\$ 25
Glenn O. Swing Elementary School	GRTU-4	2.5	0.8	0.746	100%	2	209	90%	347	\$ 0.072	\$ 25
Glenn O. Swing Elementary School	Existing RTU-5	2.5	0.8	0.746	100%	2	209	90%	347	\$ 0.072	\$ 25
Glenn O. Swing Elementary School	Existing RTU-6	5.0	0.8	0.746	100%	3	209	92%	679	\$ 0.072	\$ 49
Glenn O. Swing Elementary School	GRTU-7	5.0	0.8	0.746	100%	3	209	92%	679	\$ 0.072	\$ 49
Glenn O. Swing Elementary School	GRTU-8	5.0	0.8	0.746	100%	3	209	92%	679	\$ 0.072	\$ 49
Glenn O. Swing Elementary School	GRTU-9	2.5	0.8	0.746	100%	2	209	90%	347	\$ 0.072	\$ 25
Glenn O. Swing Elementary School	GRTU-10 (Kitchen/Cafeteria)	5.0	0.8	0.746	100%	3	203	92%	659	\$ 0.072	\$ 47
Glenn O. Swing Elementary School	GRTU-11 (Gym)	5.0	0.8	0.746	100%	3	418	92%	1,357	\$ 0.072	\$ 98
Glenn O. Swing Elementary School	Existing RTU-12	5.0	0.8	0.746	100%	3	209	92%	679	\$ 0.072	\$ 49
Glenn O. Swing Elementary School	GRTU-13	3.0	0.8	0.746	100%	2	209	90%	416	\$ 0.072	\$ 30
Glenn O. Swing Elementary School	GRTU-14 (Office)	2.5	0.8	0.746	100%	2	68	90%	112	\$ 0.072	\$ 8
Glenn O. Swing Elementary School	GRTU-15	2.5	0.8	0.746	100%	2	209	90%	347	\$ 0.072	\$ 25
Subtotal									7,689		\$ 553



Building	System	Motor HP	Break HP /	kW/HP	Casad	kW	Saved	Motor	Savings	Rate	Savings
	ID		Motor HP		Speed	KVV	Hrs / Yr	Efficiency	(kWh)	(kWh)	(\$)
James E Biggs Early Childhood	Basement FCUs	11.0	0.8	0.746	100%	7	516	90%	3,766	\$ 0.060	\$ 224
James E Biggs Early Childhood	Outside Air FCUs	0.8	0.8	0.746	100%	1	(2,988)	80%	(1,672)	\$ 0.060	\$ (100)
James E Biggs Early Childhood	Stairwell FCUs	1.5	0.8	0.746	100%	1	(3,446)	80%	(3,917)	\$ 0.060	\$ (233)
James E Biggs Early Childhood	Hallways FCUs	0.3	0.8	0.746	100%	0	2,963	85%	694	\$ 0.060	\$ 41
James E Biggs Early Childhood	Classroom UVs	5.5	0.8	0.746	100%	4	2,505	90%	9,137	\$ 0.060	\$ 544
James E Biggs Early Childhood	Office UVs	0.3	0.8	0.746	100%	0	2,276	85%	533	\$ 0.060	\$ 32
James E Biggs Early Childhood	Elevator Room Mini-split	0.08	0.8	0.746	100%	0	(2,988)	80%	(186)	\$ 0.060	\$ (11)
James E Biggs Early Childhood	HW Pumps (BHWP-1 & 2)	2.0	0.8	0.746	100%	1	2,454	85%	3,446	\$ 0.060	\$ 205
James E Biggs Early Childhood	CW Pumps (BCWP-1 & 2)	5.0	0.8	0.746	100%	3	1,951	90%	6,468	\$ 0.060	\$ 385
James E Biggs Early Childhood	Preheat Coil Pumps (CCP-1, 2, & 3)	0.25	0.8	0.746	100%	0	(2,529)	80%	(472)	\$ 0.060	\$ (28)
James E Biggs Early Childhood	Kitchen Exhaust Hood Fans (EF-1 & 2)	6.0	0.8	0.746	100%	4	311	90%	1,239	\$ 0.060	\$ 74
James E Biggs Early Childhood	Rooftop Exhaust Fan (EF-3)	0.17	0.8	0.746	100%	0	974	85%	114	\$ 0.060	\$ 7
James E Biggs Early Childhood	Bathroom Exhaust Fans (EF-4 & 5)	0.33	0.8	0.746	100%	0	974	85%	228	\$ 0.060	\$ 14
James E Biggs Early Childhood	Kitchen Make-up Air Unit (MAU-1)	2.0	0.8	0.746	100%	1	974	85%	1,368	\$ 0.060	\$ 81
James E Biggs Early Childhood	DHW Circulator Pumps (HWCP-1 & 2)	0.3	0.8	0.746	100%	0	5,061	85%	1,218	\$ 0.060	\$ 73
Subtotal									21,964		\$ 1,308

Total Fan Savings: \$ 7,421



FAN/PUMP MOTOR EFFICIENCY SAVINGS										
Building	System ID	HP	Motor Effic.	kW	Operating Hours / Year	Usage (kWh)	Rate (kWh)	(	Cost (\$)	
Sixth District Elementary School	(2) HW Pumps (SP-2A & SP-2B)	7.5	80%	5.6	1,540	8,618	\$ 0.070	\$	606	
Sixth District Elementary School	CW Pump (SP-1)	7.5	80%	5.6	1,661	9,294	\$ 0.070	\$	653	
Sixth District Elementary School	Office split system (SF-1 & SOU-1)	0.8	91%	0.5	1,987	977	\$ 0.070	\$	69	
Subtotal		0.0	31/0	11.7	2,507	18,889	ψ 0.07 0	\$	1,328	
Sixth District Elementary School	(2) HW Pumps (SP-2A & SP-2B)	7.5	90%	5.0	1,540	7,661	\$ 0.070	\$	539	
Sixth District Elementary School	CW Pump (SP-1)	7.5	90%	5.0	1,661	8,261	\$ 0.070	\$	581	
Sixth District Elementary School	Office split system (SF-1 & SOU-1)	0.8	93%	0.5	1,987	956	\$ 0.070	\$	67	
Subtotal	omee spine system (Sr 1 & Sec 1)	0.0	3370	10.4	1,507	16,878	ŷ 0.070	\$	1,187	
SAVINGS				1.3		2,011		\$	141	
Latonia Elementary School	LRTU-1	5.0	80%	3.7	3,567	13,305	\$ 0.071	\$	946	
Latonia Elementary School	LRTU-2	10.0	80%	7.5	3,567	26,611	\$ 0.071	\$	1,891	
Latonia Elementary School	LRTU-3	10.0	80%	7.5	3,567	26,611	\$ 0.071	\$	1,891	
Latonia Elementary School	LRTU-4	10.0	80%	7.5	3,567	26,611	\$ 0.071	\$	1,891	
Latonia Elementary School	LRTU-5	5.0	80%	3.7	3,567	13,305	\$ 0.071	\$	946	
Latonia Elementary School	LRTU-6	10.0	80%	7.5	3,567	26,611	\$ 0.071	\$	1,891	
Subtotal				37.3		133,053		\$	9,456	
Latonia Elementary School	LRTU-1	5.0	85%	3.5	3,567	12,523	\$ 0.071	\$	890	
Latonia Elementary School	LRTU-2	10.0	85%	7.0	3,567	25,045	\$ 0.071	\$	1,780	
Latonia Elementary School	LRTU-3	10.0	85%	7.0	3,567	25,045	\$ 0.071	\$	1,780	
Latonia Elementary School	LRTU-4	10.0	85%	7.0	3,567	25,045	\$ 0.071	\$	1,780	
Latonia Elementary School	LRTU-5	5.0	85%	3.5	3,567	12,523	\$ 0.071	\$	890	
Latonia Elementary School	LRTU-6	10.0	85%	7.0	3,567	25,045	\$ 0.071	\$	1,780	
Subtotal				35.1		125,226		\$	8,900	
SAVINGS				2.2		7,827		\$	556	
						,-				
Glenn O. Swing Flementary School	GRTU-1	2.5	75%	2.0	3.419	6.802	\$ 0.072	Ś	489	
Glenn O. Swing Elementary School	GRTU-1	2.5	75% 75%	2.0	3,419 3,419	6,802 6,802	\$ 0.072	\$	489 489	
Glenn O. Swing Elementary School	GRTU-2	2.5	75%	2.0	3,419	6,802	\$ 0.072	\$	489	
Glenn O. Swing Elementary School Glenn O. Swing Elementary School	GRTU-2 GRTU-3	2.5 2.5	75% 75%	2.0 2.0	3,419 3,419	6,802 6,802	\$ 0.072 \$ 0.072	\$ \$	489 489	
Glenn O. Swing Elementary School Glenn O. Swing Elementary School Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4	2.5 2.5 2.5	75% 75% 75%	2.0 2.0 2.0	3,419 3,419 3,419	6,802 6,802 6,802	\$ 0.072 \$ 0.072 \$ 0.072	\$ \$ \$	489 489 489	
Glenn O. Swing Elementary School Glenn O. Swing Elementary School Glenn O. Swing Elementary School Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7	2.5 2.5 2.5 5.0	75% 75% 75% 80%	2.0 2.0 2.0 3.7	3,419 3,419 3,419 3,419	6,802 6,802 6,802 12,753	\$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072	\$ \$ \$	489 489 489 917	
Glenn O. Swing Elementary School Glenn O. Swing Elementary School Glenn O. Swing Elementary School Glenn O. Swing Elementary School Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8	2.5 2.5 2.5 5.0 5.0	75% 75% 75% 80% 80%	2.0 2.0 2.0 3.7 3.7	3,419 3,419 3,419 3,419 3,419	6,802 6,802 6,802 12,753 12,753	\$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072	\$ \$ \$ \$	489 489 489 917 917	
Glenn O. Swing Elementary School Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9	2.5 2.5 2.5 5.0 5.0 2.5	75% 75% 75% 80% 80% 75%	2.0 2.0 2.0 3.7 3.7 2.0	3,419 3,419 3,419 3,419 3,419 3,419	6,802 6,802 6,802 12,753 12,753 6,802	\$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072	\$ \$ \$ \$ \$	489 489 489 917 917 489	
Glenn O. Swing Elementary School Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria)	2.5 2.5 2.5 5.0 5.0 2.5 5.0	75% 75% 75% 80% 80% 75% 80%	2.0 2.0 2.0 3.7 3.7 2.0 3.7	3,419 3,419 3,419 3,419 3,419 3,419 3,877	6,802 6,802 12,753 12,753 6,802 14,462	\$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072	\$ \$ \$ \$ \$	489 489 489 917 917 489 1,040	
Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-11 (Gym)	2.5 2.5 2.5 5.0 5.0 2.5 5.0 5.0	75% 75% 75% 80% 80% 75% 80% 80%	2.0 2.0 2.0 3.7 3.7 2.0 3.7 3.7	3,419 3,419 3,419 3,419 3,419 3,419 3,877 4,227	6,802 6,802 12,753 12,753 6,802 14,462 15,767	\$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072	\$ \$ \$ \$ \$	489 489 917 917 489 1,040 1,133	
Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-11 (Gym) GRTU-13	2.5 2.5 2.5 5.0 5.0 2.5 5.0 5.0 3.0	75% 75% 75% 80% 80% 75% 80% 80%	2.0 2.0 2.0 3.7 3.7 2.0 3.7 3.7 2.2	3,419 3,419 3,419 3,419 3,419 3,419 3,877 4,227 3,419	6,802 6,802 12,753 12,753 6,802 14,462 15,767 7,652	\$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072	\$ \$ \$ \$ \$ \$	489 489 917 917 489 1,040 1,133 550	
Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-11 (Gym) GRTU-13 GRTU-14 (Office)	2.5 2.5 2.5 5.0 5.0 2.5 5.0 5.0 3.0	75% 75% 75% 80% 80% 75% 80% 80% 75%	2.0 2.0 2.0 3.7 3.7 2.0 3.7 2.2 2.0	3,419 3,419 3,419 3,419 3,419 3,419 3,877 4,227 3,419 3,561	6,802 6,802 12,753 12,753 6,802 14,462 15,767 7,652 7,083	\$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072	\$ \$ \$ \$ \$ \$	489 489 917 917 489 1,040 1,133 550	
Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-11 (Gym) GRTU-13 GRTU-14 (Office) GRTU-15	2.5 2.5 2.5 5.0 5.0 2.5 5.0 5.0 3.0	75% 75% 75% 80% 80% 75% 80% 80%	2.0 2.0 2.0 3.7 3.7 2.0 3.7 3.7 2.2	3,419 3,419 3,419 3,419 3,419 3,419 3,877 4,227 3,419	6,802 6,802 12,753 12,753 6,802 14,462 15,767 7,652 7,083 6,802	\$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072 \$ 0.072	\$ \$ \$ \$ \$ \$	489 489 917 917 489 1,040 1,133 550 509	
Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-11 (Gym) GRTU-13 GRTU-14 (Office) GRTU-15	2.5 2.5 5.0 5.0 2.5 5.0 5.0 3.0 2.5 2.5	75% 75% 75% 80% 80% 75% 80% 80% 75% 75%	2.0 2.0 3.7 3.7 2.0 3.7 2.0 2.2 2.0 2.0 31.1	3,419 3,419 3,419 3,419 3,419 3,877 4,227 3,419 3,561 3,419	6,802 6,802 12,753 12,753 6,802 14,462 15,767 7,652 7,083 6,802 111,281	\$ 0.072 \$ 0.072	\$ \$ \$ \$ \$ \$ \$ \$	489 489 917 917 489 1,040 1,133 550 509 489 7,999	
Glenn O. Swing Elementary School Subtotal Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-11 (Gym) GRTU-13 GRTU-14 (Office) GRTU-15	2.5 2.5 5.0 5.0 2.5 5.0 3.0 2.5 2.5 2.5	75% 75% 80% 80% 75% 80% 80% 75% 80% 75%	2.0 2.0 3.7 3.7 2.0 3.7 2.2 2.0 2.0 31.1	3,419 3,419 3,419 3,419 3,419 3,419 3,877 4,227 3,419 3,561 3,419	6,802 6,802 12,753 12,753 6,802 14,462 15,767 7,652 7,083 6,802 111,281	\$ 0.072 \$ 0.072	\$ \$ \$ \$ \$ \$ \$ \$	489 489 917 917 489 1,040 1,133 550 509 489 7,999	
Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-11 (Gym) GRTU-13 GRTU-14 (Office) GRTU-15 GRTU-15	2.5 2.5 5.0 5.0 2.5 5.0 3.0 2.5 2.5 2.5 2.5	75% 75% 75% 80% 80% 80% 80% 75% 80% 80% 80% 80% 80%	2.0 2.0 3.7 3.7 2.0 3.7 2.2 2.0 2.0 31.1	3,419 3,419 3,419 3,419 3,419 3,419 3,877 4,227 3,419 3,561 3,419 3,419 3,419	6,802 6,802 12,753 12,753 6,802 14,462 15,767 7,652 7,083 6,802 111,281 6,377 6,377	\$ 0.072 \$ 0.072	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	489 489 917 917 489 1,040 1,133 550 509 489 7,999	
Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-13 GRTU-13 GRTU-14 (Office) GRTU-15 GRTU-15 GRTU-1 GRTU-1	2.5 2.5 5.0 5.0 2.5 5.0 3.0 2.5 2.5 2.5 2.5 2.5	75% 75% 80% 80% 80% 80% 80% 80% 80% 80% 80% 80	2.0 2.0 3.7 3.7 2.0 3.7 2.2 2.0 2.0 31.1 1.9	3,419 3,419 3,419 3,419 3,419 3,419 3,877 4,227 3,419 3,561 3,419 3,419 3,419 3,419	6,802 6,802 12,753 12,753 6,802 14,462 15,767 7,652 7,083 6,802 111,281 6,377 6,377	\$ 0.072 \$ 0.072	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	489 489 917 917 489 1,040 1,133 550 509 489 7,999 458 458	
Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-13 GRTU-13 GRTU-14 (Office) GRTU-15 GRTU-1 GRTU-1 GRTU-1 GRTU-1 GRTU-1 GRTU-1	2.5 2.5 5.0 5.0 2.5 5.0 3.0 2.5 2.5 2.5 2.5 2.5 2.5	75% 75% 75% 80% 80% 80% 80% 75% 80% 80% 80% 80% 80% 80%	2.0 2.0 3.7 3.7 2.0 3.7 2.2 2.0 2.0 31.1 1.9 1.9	3,419 3,419 3,419 3,419 3,419 3,419 3,877 4,227 3,419 3,561 3,419 3,419 3,419 3,419 3,419 3,419	6,802 6,802 12,753 12,753 6,802 14,462 15,767 7,652 7,083 6,802 111,281 6,377 6,377 6,377	\$ 0.072 \$ 0.072	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	489 489 917 917 489 1,040 1,133 550 509 489 7,999 458 458 458	
Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-13 GRTU-14 GRTU-15 GRTU-15 GRTU-15 GRTU-1 GRTU-1 GRTU-1 GRTU-1 GRTU-1 GRTU-1	2.5 2.5 5.0 5.0 2.5 5.0 3.0 2.5 2.5 2.5 2.5 2.5 2.5 5.0	75% 75% 75% 80% 80% 80% 80% 75% 80% 80% 80% 80% 80% 80% 80%	2.0 2.0 3.7 3.7 2.0 3.7 2.2 2.0 2.0 31.1 1.9 1.9 1.9	3,419 3,419 3,419 3,419 3,419 3,419 3,877 4,227 3,419 3,561 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419	6,802 6,802 12,753 12,753 6,802 14,462 15,767 7,652 7,083 6,802 111,281 6,377 6,377 6,377 6,377	\$ 0.072 \$ 0.072	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	489 489 917 917 489 1,040 1,133 550 509 489 7,999 458 458 458 458	
Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-13 GRTU-14 GRTU-15 GRTU-15 GRTU-1 GRTU-1 GRTU-1 GRTU-1 GRTU-1 GRTU-1 GRTU-1 GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-7	2.5 2.5 5.0 5.0 2.5 5.0 3.0 2.5 2.5 2.5 2.5 2.5 5.0	75% 75% 75% 80% 80% 80% 80% 75% 80% 80% 80% 80% 80% 80% 83%	2.0 2.0 3.7 3.7 2.0 3.7 2.2 2.0 2.0 31.1 1.9 1.9 1.9 1.9 3.6 3.6	3,419 3,419 3,419 3,419 3,419 3,419 3,877 4,227 3,419 3,561 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419	6,802 6,802 12,753 12,753 6,802 14,462 15,767 7,652 7,083 6,802 111,281 6,377 6,377 6,377 6,377 12,367	\$ 0.072 \$ 0.072	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	489 489 917 917 489 1,040 1,133 550 509 489 7,999 458 458 458 458 889 889	
Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-13 GRTU-14 GRTU-15 GRTU-15 GRTU-1 GRTU-1 GRTU-1 GRTU-1 GRTU-1 GRTU-7 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9	2.5 2.5 5.0 5.0 2.5 5.0 3.0 2.5 2.5 2.5 2.5 2.5 5.0 2.5 2.5 2.5 2.5 2.5	75% 75% 75% 80% 80% 80% 80% 75% 80% 80% 80% 80% 80% 80% 83% 83%	2.0 2.0 3.7 3.7 2.0 3.7 2.2 2.0 2.0 31.1 1.9 1.9 1.9 1.9 3.6 3.6	3,419 3,419 3,419 3,419 3,419 3,419 3,877 4,227 3,419 3,561 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419	6,802 6,802 12,753 12,753 6,802 14,462 15,767 7,652 7,083 6,802 111,281 6,377 6,377 6,377 12,367 12,367 6,183	\$ 0.072 \$ 0.072	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	489 489 917 917 489 1,040 1,133 550 509 489 7,999 458 458 458 458 889 889	
Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-13 GRTU-14 GRTU-15 GRTU-15 GRTU-1 GRTU-2 GRTU-3 GRTU-3 GRTU-4 GRTU-7 GRTU-9 GRTU-7 GRTU-9 GRTU-10 (Kitchen/Cafeteria)	2.5 2.5 5.0 5.0 2.5 5.0 3.0 2.5 2.5 2.5 2.5 2.5 5.0 5.0	75% 75% 75% 80% 80% 80% 80% 75% 80% 80% 80% 80% 80% 83% 83% 83%	2.0 2.0 3.7 3.7 2.0 3.7 2.2 2.0 2.0 31.1 1.9 1.9 1.9 3.6 3.6	3,419 3,419 3,419 3,419 3,419 3,419 3,877 4,227 3,419 3,561 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419	6,802 6,802 12,753 12,753 6,802 14,462 15,767 7,652 7,083 6,802 111,281 6,377 6,377 6,377 12,367 12,367 6,183 14,023	\$ 0.072 \$ 0.072	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	489 489 917 917 489 1,040 1,133 550 509 489 7,999 458 458 458 458 458 444 1,008	
Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-13 GRTU-14 GRTU-15 GRTU-15 GRTU-1 GRTU-2 GRTU-3 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria)	2.5 2.5 5.0 5.0 2.5 5.0 3.0 2.5 2.5 2.5 2.5 2.5 5.0 5.0 5.0	75% 75% 75% 80% 80% 80% 80% 75% 80% 80% 80% 80% 80% 83% 83% 83% 83%	2.0 2.0 3.7 3.7 2.0 3.7 2.2 2.0 2.0 31.1 1.9 1.9 1.9 3.6 3.6 3.6 3.6	3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,561 3,419	6,802 6,802 12,753 12,753 6,802 14,462 15,767 7,652 7,083 6,802 111,281 6,377 6,377 6,377 12,367 12,367 12,367 6,183 14,023 15,289	\$ 0.072 \$ 0.072	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	489 489 917 917 489 1,040 1,133 550 509 489 7,999 458 458 458 458 458 458 458 458 458 458	
Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-13 GRTU-14 GRTU-15 GRTU-15 GRTU-1 GRTU-2 GRTU-3 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-11 (Gym) GRTU-11 (Gym)	2.5 2.5 5.0 5.0 2.5 5.0 3.0 2.5 2.5 2.5 2.5 2.5 5.0 5.0 3.0 3.0 2.5 5.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3	75% 75% 75% 80% 80% 80% 80% 75% 80% 80% 80% 80% 80% 83% 83% 83% 83% 83%	2.0 2.0 3.7 3.7 2.0 3.7 2.2 2.0 2.0 31.1 1.9 1.9 1.9 3.6 3.6 3.6 3.6 3.6	3,419 3,419 3,419 3,419 3,419 3,419 3,877 4,227 3,419 3,561 3,419	6,802 6,802 12,753 12,753 6,802 14,462 15,767 7,652 7,083 6,802 111,281 6,377 6,377 6,377 12,367 12,367 12,367 6,183 14,023 15,289 7,420	\$ 0.072 \$ 0.072	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	489 489 917 917 489 1,040 1,133 550 509 489 7,999 458 458 458 458 458 458 458 458 458 1,008 1,009 533	
Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-13 GRTU-14 (Office) GRTU-15  GRTU-15  GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-11 (Gym) GRTU-13 GRTU-14 (Office)	2.5 2.5 5.0 5.0 2.5 5.0 3.0 2.5 2.5 2.5 2.5 2.5 5.0 5.0 3.0 2.5 5.0 3.0 2.5 5.0 3.0 2.5 2.5 2.5 2.5 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	75% 75% 75% 80% 80% 80% 80% 75% 80% 80% 80% 80% 83% 83% 83% 83% 83% 83%	2.0 2.0 3.7 3.7 2.0 3.7 2.2 2.0 2.0 31.1 1.9 1.9 1.9 3.6 3.6 3.6 3.6 2.2	3,419 3,419 3,419 3,419 3,419 3,419 3,877 4,227 3,419 3,561 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,561	6,802 6,802 12,753 12,753 6,802 14,462 15,767 7,652 7,083 6,802 111,281 6,377 6,377 6,377 12,367 12,367 12,367 12,367 12,367 4,023 15,289 7,420 6,641	\$ 0.072 \$ 0.072	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	489 489 917 917 489 1,040 1,133 550 509 489 7,999 458 458 458 458 458 458 458 1,008 1,009 533 477	
Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-13 GRTU-14 GRTU-15 GRTU-15 GRTU-1 GRTU-2 GRTU-3 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-11 (Gym) GRTU-11 (Gym)	2.5 2.5 5.0 5.0 2.5 5.0 3.0 2.5 2.5 2.5 2.5 2.5 5.0 5.0 3.0 3.0 2.5 5.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3	75% 75% 75% 80% 80% 80% 80% 75% 80% 80% 80% 80% 80% 83% 83% 83% 83% 83%	2.0 2.0 3.7 3.7 2.0 3.7 2.2 2.0 2.0 31.1 1.9 1.9 1.9 3.6 3.6 3.6 3.6 2.2 1.9	3,419 3,419 3,419 3,419 3,419 3,419 3,877 4,227 3,419 3,561 3,419	6,802 6,802 12,753 12,753 6,802 14,462 15,767 7,652 7,083 6,802 111,281 6,377 6,377 6,377 12,367 12,367 12,367 12,367 4,023 15,289 7,420 6,641 6,377	\$ 0.072 \$ 0.072	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	489 489 917 917 489 1,040 1,133 550 509 489 7,999 458 458 458 458 458 458 458 458	
Glenn O. Swing Elementary School	GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-13 GRTU-14 (Office) GRTU-15  GRTU-15  GRTU-2 GRTU-3 GRTU-4 GRTU-7 GRTU-8 GRTU-9 GRTU-10 (Kitchen/Cafeteria) GRTU-11 (Gym) GRTU-13 GRTU-14 (Office)	2.5 2.5 5.0 5.0 2.5 5.0 3.0 2.5 2.5 2.5 2.5 2.5 5.0 5.0 3.0 2.5 5.0 3.0 2.5 5.0 3.0 2.5 2.5 2.5 2.5 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	75% 75% 75% 80% 80% 80% 80% 75% 80% 80% 80% 80% 83% 83% 83% 83% 83% 83%	2.0 2.0 3.7 3.7 2.0 3.7 2.2 2.0 2.0 31.1 1.9 1.9 1.9 3.6 3.6 3.6 3.6 2.2	3,419 3,419 3,419 3,419 3,419 3,419 3,877 4,227 3,419 3,561 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,419 3,561	6,802 6,802 12,753 12,753 6,802 14,462 15,767 7,652 7,083 6,802 111,281 6,377 6,377 6,377 12,367 12,367 12,367 12,367 12,367 4,023 15,289 7,420 6,641	\$ 0.072 \$ 0.072	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	489 489 917 917 489 1,040 1,133 550 509 489 7,999 458 458 458 458 458 458 458 458 1,008 1,009 533 477	



Building	System	HP	Motor	kW	Operating	Usage	Rate	Cost
	ID		Effic.		Hours / Year	(kWh)	(kWh)	(\$)
ames E Biggs Early Childhood	Basement FCUs	11.0	80%	8.2	3,446	28,279	\$ 0.060	\$ 1,683
ames E Biggs Early Childhood	Hallways FCUs	0.3	75%	0.3	2,988	793	\$ 0.060	\$ 47
ames E Biggs Early Childhood	Classroom UVs	5.5	75%	4.4	3,446	15,082	\$ 0.060	\$ 898
ames E Biggs Early Childhood	Office UVs	0.3	75%	0.3	3,675	975	\$ 0.060	\$ 58
ames E Biggs Early Childhood	HW Pumps (BHWP-1 & 2)	2.0	80%	1.5	2,914	4,348	\$ 0.060	\$ 259
ames E Biggs Early Childhood	CW Pumps (BCWP-1 & 2)	5.0	80%	3.7	2,078	7,750	\$ 0.060	\$ 461
ames E Biggs Early Childhood	Kitchen Exhaust Hood Fans (EF-1 & 2)	6.0	80%	4.5	2,988	13,375	\$ 0.060	\$ 796
ames E Biggs Early Childhood	Rooftop Exhaust Fan (EF-3)	0.2	75%	0.1	2,988	396	\$ 0.060	\$ 24
ames E Biggs Early Childhood	Bathroom Exhaust Fans (EF-4 & 5)	0.3	75%	0.3	2,988	793	\$ 0.060	\$ 47
ames E Biggs Early Childhood	Kitchen Make-up Air Unit (MAU-1)	2.0	75%	1.6	2,988	4,755	\$ 0.060	\$ 283
ames E Biggs Early Childhood	DHW Circulator Pumps (HWCP-1 & 2)	0.3	75%	0.3	3,675	1,003	\$ 0.060	\$ 60
Subtot	al .			25.1		77,548		\$ 4,616
ames E Biggs Early Childhood	Basement FCUs	11.0	85%	7.7	3,446	26,615	\$ 0.060	\$ 1,584
ames E Biggs Early Childhood	Hallways FCUs	0.3	80%	0.2	2,988	743	\$ 0.060	\$ 44
ames E Biggs Early Childhood	Classroom UVs	5.5	80%	4.1	3,446	14,139	\$ 0.060	\$ 842
ames E Biggs Early Childhood	Office UVs	0.3	80%	0.2	3,675	914	\$ 0.060	\$ 54
ames E Biggs Early Childhood	HW Pumps (BHWP-1 & 2)	2.0	82%	1.5	2,914	4,242	\$ 0.060	\$ 253
ames E Biggs Early Childhood	CW Pumps (BCWP-1 & 2)	5.0	85%	3.5	2,078	7,294	\$ 0.060	\$ 434
ames E Biggs Early Childhood	Kitchen Exhaust Hood Fans (EF-1 & 2)	6.0	85%	4.2	2,988	12,588	\$ 0.060	\$ 749
ames E Biggs Early Childhood	Rooftop Exhaust Fan (EF-3)	0.2	80%	0.1	2,988	372	\$ 0.060	\$ 22
ames E Biggs Early Childhood	Bathroom Exhaust Fans (EF-4 & 5)	0.3	80%	0.2	2,988	743	\$ 0.060	\$ 44
ames E Biggs Early Childhood	Kitchen Make-up Air Unit (MAU-1)	3.0	85%	2.1	2,988	6,294	\$ 0.060	\$ 375
ames E Biggs Early Childhood	DHW Circulator Pumps (HWCP-1 & 2)	0.3	80%	0.3	3,675	940	\$ 0.060	\$ 56
Subtot	al entre			24.2		74,884		\$ 4,458
SAVINGS				0.8		2,664		\$ 159
TOTAL SAVINGS								



### **Constant Volume to Variable Speed Fan/Pump Conversion**

Electric Fan and Pump Savings

	Full Load	d Power	Spe	ed	Average	Future		Composite	
Description	(HP)	(kW)	Current Average Amount	Future Average Amount	kW Savings (kWh)	Operating Hours	Savings (kWh)	Consumption Rate (\$)	Utility Savings (\$)
Sixth District Elementary School	0.75	0.527	1000/	000/	0.26	4.007	F44	¢ 0.070	¢ 26
Office split system (SF-1 & SOU-1)  Subtotal	0.75	0.527	100%	80%	0.26	1,987	511 511	\$ 0.070	\$ 36 \$ 36
Subtotal							211		\$ 30
Latonia Elementary School									
LRTU-1	5.00	3.511	100%	85%	1.35	3,567	4,832	\$ 0.071	\$ 343
LRTU-2	10.00	7.021	100%	85%	2.71	3,567	9,664	\$ 0.071	\$ 687
LRTU-3	10.00	7.021	100%	85%	2.71	3,567	9,664	\$ 0.071	\$ 687
LRTU-4	10.00	7.021	100%	85%	2.71	3,567	9,664	\$ 0.071	\$ 687
LRTU-5	5.00	3.511	100%	85%	1.35	3,567	4,832	\$ 0.071	\$ 343
LRTU-6	10.00	7.021	100%	85%	2.71	3,567	9,664	\$ 0.071	\$ 687
Subtotal							48,322		\$ 3,434
Glenn O. Swing Elementary School									
GRTU-1	2.50	1.755	100%	95%	0.25	3,419	856	\$ 0.072	\$ 62
GRTU-2	2.50	1.755	100%	95%	0.25	3,419	856	\$ 0.072	\$ 62
GRTU-3	2.50	1.755	100%	95%	0.25	3,419	856	\$ 0.072	\$ 62
GRTU-4	2.50	1.755	100%	95%	0.25	3,419	856	\$ 0.072	\$ 62
GRTU-7	5.00	3.511	100%	95%	0.50	3,419	1,712	\$ 0.072	\$ 123
GRTU-8	5.00	3.511	100%	95%	0.50	3,419	1,712	\$ 0.072	\$ 123
GRTU-9	2.50	1.755	100%	95%	0.25	3,419	856	\$ 0.072	\$ 62
GRTU-10 (Kitchen/Cafeteria)	5.00	3.511	100%	95%	0.50	3,877	1,941	\$ 0.072	\$ 140
GRTU-11 (Gym)	5.00	3.511	100%	95%	0.50	4,227	2,116	\$ 0.072	\$ 152
GRTU-13	3.00	2.106	100%	95%	0.30	3,419	1,027	\$ 0.072	\$ 74
GRTU-14 (Office)	2.50	1.755	100%	95%	0.25	3,561	891	\$ 0.072	\$ 64 \$ 62
GRTU-15 Subtotal	2.50	1.755	100%	95%	0.25	3,419	856 14,536	\$ 0.072	\$ 62 \$ 1,045
Subtotal							14,550		\$ 1,045
James E Biggs Early Childhood									
Basement FCUs	11.00	7.723	100%	70%	5.07	3,446	17,486	\$ 0.060	\$ 1,041
Outside Air FCUs	0.75	0.527	100%	90%	0.14	2,988	426	\$ 0.060	\$ 1,041
Stairwell FCUs	1.52	1.070	100%	70%	0.14	3,446	2,422	\$ 0.060	\$ 144
Hallways FCUs	0.33	0.234	100%	70%	0.15	2,988	459	\$ 0.060	\$ 27
Classroom UVs	5.50	3.862	100%	85%	1.49	3,446	5,135	\$ 0.060	\$ 306
Office UVs	0.33	0.234	100%	80%	0.11	3,675	420	\$ 0.060	\$ 25
HW Pumps (BHWP-1 & 2)	2.00	1.404	100%	80%	0.69	2,914	1,997	\$ 0.060	\$ 119
CW Pumps (BCWP-1 & 2)	5.00	3.511	100%	80%	1.71	2,078	3,559	\$ 0.060	\$ 212
Kitchen Exhaust Hood Fans (EF-1 & 2)	6.00	4.213	100%	70%	2.77	2,988	8,270	\$ 0.060	\$ 492
Kitchen Make-up Air Unit (MAU-1)	2.00	1.404	100%	70%	0.92	2,988	2,757	\$ 0.060	\$ 164
Subtotal							42,933		\$ 2,556
TOTAL							106,301		\$ 7,071



### **Outside Air Heating & Cooling Calculations**

#### Formula:

Heating energy (BTU) = [1.085 BTU / (HR-CFM-oF)] x outside air saved (CFM) x [avg. interior temperature (F) - avg. exterior temperature (F)] x HR

Heating energy (\$) = \_\_\_\_\_wasted heating energy (BTU) x heating fuel cost (\$/CCF)

heating fuel conversion factor (BTU / CCF) x boiler seasonal efficiency (%)

Cooling energy (BTU) = 4.45 x outside air saved [CFM] x (outside air average enthalpy - inside air average enthalpy) x Summer hours

Cooling energy (\$) = \_\_\_\_\_\_cooling energy (BTU) x air conditioning fuel cost (\$/kWh)

air conditioning fuel conversion factor (BTU / kWh) x chiller efficiency (COP)

Where: \* Average winter interior temperature =

> \* Average winter temperature (from National Weather Service) = 37 °F \* Average summer interior temperature (composite temperature accounting for occupied and unoccupied temperatures) =

\* Outside air enthalpy average for May through September, above 26 BTU / Ib dry air 32.57 BTU / lb dry air

- assumes outside air below 26 BTU / lb dry air the chiller would be off on OAT.

\* Inside air enthalpy during occupied (8 am - 4 pm) air-conditioned periods (OA > 65F)

- assumes space air is 72 F drybulb & 50% RH

\* Boiler seasonal efficiency =

\* Heating fuel conversion factor =

\* Chiller efficiency =

\* Air conditioning conversion factor =

74 °F

72 °F

26.5 BTU / lb dry air

93% 100,000 BTU / Therm

3.50 COP

3,414 BTU / kWh

#### Outside Air Heating & Cooling Savings/Costs Resulting From HVAC System Modifications

Building	Unit	Quantity	Old	OA	Reduce	d Hours	New	OA	Energy Saving	s/Penalties	Energy Savin	gs/Penalties	Savings	/Costs
	Туре		Heating	Cooling	Winter	Summer	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling
			(CFM)	(CFM)	(Hours)	(Hours)	(CFM)	(CFM)	(BTU)	(BTU)	(therms)	(kWh)	(\$)	(\$)
Latonia Elementary School	LRTU-1	1			1,170	661	2,280	2,280	(101,341,072)	(40,730,047)	(1,090)	(3,409)	\$ 1,060	\$ 242
Latonia Elementary School	LRTU-2	1			1,170	661	2,280	2,280	(101,341,072)	(40,730,047)	(1,090)	(3,409)	\$ 1,060	\$ 242
Latonia Elementary School	LRTU-3	1			1,170	661	2,280	2,280	(101,341,072)	(40,730,047)	(1,090)	(3,409)	\$ 1,060	\$ 242
Latonia Elementary School	LRTU-4	1			1,170	661	2,280	2,280	(101,341,072)	(40,730,047)	(1,090)	(3,409)	\$ 1,060	\$ 242
Latonia Elementary School	LRTU-5	1			1,170	661	2,280	2,280	(101,341,072)	(40,730,047)	(1,090)	(3,409)	\$ 1,060	
Latonia Elementary School	LRTU-6	1			1,170	661	2,280	2,280	(101,341,072)	(40,730,047)	(1,090)	(3,409)	\$ 1,060	\$ 242
Subtotal									(608,046,434)	(244,380,280)	(6,538)	(20,452)	\$ 6,360	\$ 1,454
Glenn O. Swing Elementary School	GRTU-1	1			79	131	800	800	(2,392,425)	(2,821,081)	(26)	(236)	\$ 26	\$ 17
Glenn O. Swing Elementary School	GRTU-2	1			79	131	800	800	(2,392,425)	(2,821,081)	(26)	(236)	\$ 26	\$ 17
Glenn O. Swing Elementary School	GRTU-3	1			79	131	800	800	(2,392,425)	(2,821,081)	(26)	(236)	\$ 26	\$ 17
Glenn O. Swing Elementary School	GRTU-4	1			79	131	800	800	(2,392,425)	(2,821,081)	(26)	(236)	\$ 26	\$ 17
Glenn O. Swing Elementary School	GRTU-7	1			79	131	1,000	1,000	(2,990,531)	(3,526,351)	(32)	(295)	\$ 32	\$ 21
Glenn O. Swing Elementary School	GRTU-8	1			79	131	1,000	1,000	(2,990,531)	(3,526,351)	(32)	(295)	\$ 32	\$ 21
Glenn O. Swing Elementary School	GRTU-9	1			79	131	800	800	(2,392,425)	(2,821,081)	(26)	(236)	\$ 26	\$ 17
Glenn O. Swing Elementary School	GRTU-10 (Kitchen/Cafeteria)	1			79	125	1,400	1,400	(4,186,744)	(4,709,995)	(45)	(394)	\$ 45	\$ 28
Glenn O. Swing Elementary School	GRTU-11 (Gym)	1			158	261	1,600	1,600	(9,569,700)	(11,271,359)	(103)	(943)	\$ 102	\$ 68
Glenn O. Swing Elementary School	GRTU-13	1			79	131	800	800	(2,392,425)	(2,821,081)	(26)	(236)	\$ 26	\$ 17
Glenn O. Swing Elementary School	GRTU-14 (Office)	1			-	68	680	680	-	(1,245,338)	-	(104)	\$ -	\$ 7
Glenn O. Swing Elementary School	GRTU-15	1			79	131	320	320	(956,970)	(1,128,432)	(10)	(94)	\$ 10	\$ 7
Subtotal									(35,049,026)	(42,334,314)	(377)	(3,543)	\$ 375	\$ 255

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Building	Unit	Quantity	Old	OA	Reduce	d Hours	New	OA	Energy Saving	s/Penalties	Energy Savin	gs/Penalties	Savings	/Costs
	Туре		Heating	Cooling	Winter	Summer	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling
			(CFM)	(CFM)	(Hours)	(Hours)	(CFM)	(CFM)	(BTU)	(BTU)	(therms)	(kWh)	(\$)	(\$)
James E Biggs Early Childhood	Basement FCUs	1			2,410	1,036	2,930	2,930	(268,125,051)	(82,020,568)	(2,883)	(6,864)	\$ 2,770	\$ 409
James E Biggs Early Childhood	Outside Air FCUs	1			(2,095)	(893)	2,100	2,100	167,051,076	50,674,519	1,796	4,241	\$ (1,726)	\$ (252)
James E Biggs Early Childhood	Classroom UVs	11	115	115	1,710	795	300	300	132,182,079	43,691,635	1,421	3,657	\$ (1,366)	\$ (218)
James E Biggs Early Childhood	Office UVs	2	40	40	1,553	723	25	25	(1,769,198)	(586,163)	(19)	(49)	\$ 18	\$ 3
James E Biggs Early Childhood	Kitchen Make-up Air Unit (MAL	1	5,720	5,720	648	326	3,120	3,120	(64,024,711)	(22,884,413)	(688)	(1,915)	\$ 661	\$ 114
Subtotal									(34,685,805)	(11,124,990)	(373)	(931)	\$ 358	\$ 55
Total									(677,781,265)	(297,839,583)	(7,288)	(24,926)	\$ 7,093	\$ 1,764

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## **BOILER REPLACEMENT SAVINGS**Sixth District Elementary School

## BOILER REPLACEMENT SAVINGS John G. Carlisle Elementary School

Existing Boiler Data		Existing Boiler Data		
* Burner manufacturer, age, model number:	Bryan CL180 from 1998	* Burner manufacturer, age, model number:	Tel	edyne Laars HH 1430 from 1993
* Burner size:	1,440,000 Btu/hr output each	* Burner size:		1,158,300 Btu/hr output each
* Number of boilers:	2	* Number of boilers:		2
* Catalog boiler seasonal efficiency:	83%	* Catalog boiler seasonal efficiency:		81%
* Jacket losses (radiation & convection)	1%	* Jacket losses (radiation & convection)		3%
* Burner firing rate losses	5%	* Burner firing rate losses		7%
* Average seasonal efficiency	77%	* Average seasonal efficiency		71%
* Fuel type:	Natural gas	* Fuel type:		Natural gas
* Cost of fuel:	\$0.96 / therm	* Cost of fuel:		\$0.94 / therm
* Fuel conversion factor:	100,000 BTU / therm	* Fuel conversion factor:		100,000 BTU / therm
* Total heating cost:	\$ 15,654 / year	* Total heating cost:	\$	10,959 / year
* Kitchen fuel cost:	\$ 1,500 / year	* Kitchen fuel cost:	\$	750 / year
* Domestic HW heating costs:	\$ 2,500 / year	* Domestic HW heating costs:	\$	1,250 / year
* Building heating costs:	\$ 11,654 / year	* Building heating costs:	\$	8,959 / year
* Building heating requirement boiler output:	933,085,149 BTU / year	* Building heating requirement boiler output:	6	574,626,301 BTU/year
Proposed Boiler Data		Proposed Boiler Data		
* Number of boilers:	2	* Number of boilers:		2
* Percent "design day" load carried per boiler:	66%	* Percent "design day" load carried per boiler:		66%
* Proposed boiler seasonal heating efficiency:	92%	* Proposed boiler seasonal heating efficiency:		93%
* Building heating costs:	\$ 9,754 / year	* Building heating costs:	\$	6,840 / year
Boiler replacement savings:	\$ 1,900 / year	Boiler replacement savings:	\$	2,119 / year





## BOILER REPLACEMENT SAVINGS James E Biggs Early Childhood

#### Existing Boiler Data

Boiler replacement savings:	\$ 3,167	/ year
- · ·	 	
* Building heating costs:	\$ 5,758	/ year
* Proposed boiler seasonal heating efficiency:	93%	
* Percent "design day" load carried per boiler:	90%	
* Number of boilers:	2	
Proposed Boiler Data		
* Building heating requirement boiler output:	557,296,698	BTU / year
* Building heating costs:	\$ 8,924	/ year
* Domestic HW heating costs:	\$ 800	/ year
* Kitchen fuel cost:	\$ 400	/ year
* Total heating cost:	\$ 10,124	/ year
* Fuel conversion factor:	100,000	BTU / therm
* Cost of fuel:	\$0.96	/ therm
* Fuel type:	Natural gas	
* Average seasonal efficiency	60%	
* Burner firing rate losses	13%	
* Jacket losses (radiation & convection)	8%	
* Catalog boiler seasonal efficiency:	80%	
* Number of boilers:	1	
* Burner size:	1,600,000	Btu/hr output
* Burner manufacturer, age, model number:	Weil-McLain J	-17 from 1958
Existing Boiler Data		

## DOMESTIC HOT WATER HEATER REPLACEMENT SAVINGS James E Biggs Early Childhood

#### Existing Domestic Hot Water Heater Data

Boiler replacement savings:	\$	117	/ year
* Building heating costs:	\$	683	/ year
* Proposed boiler seasonal heating efficiency:		82%	
* Percent "design day" load carried per boiler:		100%	
* Number of boilers:		1	
Proposed Boiler Data			
* Building heating requirement boiler output:	į	58,283,246	BTU / year
* Building heating costs:	\$	800	/ year
* Domestic HW heating costs:	\$ \$	800	/ year
* Fuel conversion factor:		100,000	BTU / therm
* Cost of fuel:		\$0.96	/ therm
* Fuel type:		Natural gas	
* Average seasonal efficiency		70%	
* Burner firing rate losses		8%	
* Jacket losses (radiation & convection)		2%	
* Catalog boiler seasonal efficiency:		80%	
* Number of heaters:		1	ota,pac
* Burner size:			Btu/hr input
* Burner manufacturer, age, model number:	Α.0	O. Smith HW	/-200M from 2007



### RTU REPLACEMENT SAVINGS Latonia Elementary School

#### \* Total building area 62,818 ft^2 \* Approximation of RTU serivce area 47,114 ft^2 \* Existing natural gas energy use per area 17,137 Btu/ft^2 \* Assumption of percentage of gas that is used for space heating 88% \* Existing heating natural gas energy use per area 15,093 Btu/ft^2 \* Cost of fuel: \$0.97 / therm 100,000 BTU / therm \* Fuel conversion factor: \* Existing RTU natural gas input requirement: 711,064,650 Btu's \* Existing RTU heating costs: \$ 6,917 /year \* Existing RTU efficiency: 70% \* Existing RTU heating output: 497,745,255 Btu's \* Proposed new RTU heating efficiency: 81% \* New RTU natural gas input requirement: 614,428,072 \$ \* New RTU heating costs: 5,977 RTU replacement savings: 940 /year \$

### RTU REPLACEMENT SAVINGS Glenn O. Swing Elementary School

RTU replacement savings:	\$	668	/year
* New RTU heating costs:	\$	7,019	
* New RTU natural gas input requirement:	4	704,989,298	
* Proposed new RTU heating efficiency:		82%	
* Existing RTU heating output:		579,098,352	Btu's
* Existing RTU efficiency:		75%	
* Existing RTU heating costs:	\$	7,687	/year
* Existing RTU natural gas input requirement:		772,131,136	Btu's
* Fuel conversion factor:		100,000	BTU / therm
* Cost of fuel:		\$1.00	/ therm
* Existing heating natural gas energy use per area		21,365	Btu/ft^2
* Assumption of percentage of gas that is used for space heating		93%	
* Existing natural gas energy use per area		23,081	Btu/ft^2
* Approximation of RTU serivce area		36,140	ft^2
* Total building area		45,175	



### FURNACE REPLACEMENT SAVINGS Sixth District Elementary School

#### \* Total building area 81,347 ft^2 \* Approximation of Split System (SS) serivce area 1,700 ft^2 \* Existing natural gas energy use per area 20,010 Btu/ft^2 \* Assumption of percentage of gas that is used for space heating 92% \* Existing heating natural gas energy use per area 18,391 Btu/ft^2 \* Cost of fuel: \$0.96 / therm 100,000 BTU / therm \* Fuel conversion factor: \* Existing SS natural gas input requirement: 31,264,912 Btu's \* Existing SS heating costs: \$ 301 /year \* Existing SS efficiency: 90% \* Existing SS heating output: 28,138,421 Btu's \* Proposed new SS heating efficiency: 94% \* New SS natural gas input requirement: 29,934,490 \$ \* New SS heating costs: 288 SS replacement savings: \$ 13 /year

### COST DUE TO NEW KITCHEN MAU James E Biggs Early Childhood

RTU replacement savings:	\$	(151)	/year
New KTO Heating Costs.	Ş	151	
* New RTU natural gas input requirement:  * New RTU heating costs:	\$	15,734,490 151	
, ,			
* Proposed new RTU heating efficiency:		92%	
* Existing RTU natural gas input requirement:		14,475,766	Btu's
* Fuel conversion factor:		100,000	BTU / therm
* Cost of fuel:		\$0.96	/ therm
* Existing heating natural gas energy use per area		48,253	Btu/ft^2
* Assumption of percentage of gas that is used for space heating		93%	
* Existing natural gas energy use per area		51,938	Btu/ft^2
* Approximation of RTU serivce area		300	ft^2
* Total building area		20,288	ft^2



### **Chiller Efficiency Savings**

**Covington Independent Schools** 

System	Quantity	Efficiency	Total	Total	Average	Average	Average	Operating	Usage	Rate	Usage
ID	<b></b>	(kW / Ton)	Tonage	kW	Output	kW	Tonage	Hours / Year	(kWh/yr)	(\$/kWh)	(\$/yr)
Sixth District Elementary School	ol										
Existing											
Trane RTAA Rotary Chiller	1	1.19	120.1	143.12	70%	100.18	84.07	1,984	198,781	\$ 0.070	\$ 13,977
Proposed											
Chiller (SCH-1)	1	1.18	127.4	150.18	70%	105.12	89.18	1,661	174,621	\$ 0.070	\$ 12,278
Savings									24,160		\$ 1,699
Javings									24,100		3 1,033
James E Biggs Early Childhood											
Existing											
Carrier Air-cooled Chiller	1	1.22	77.40	94.40	70%	66.08	54.18	2,710	179,094	\$ 0.060	\$ 10,661.61
Proposed											
Chiller (BCH-1)	1	1.22	80	97.96	70%	68.57	56.00	2,249	154,207	\$ 0.060	\$ 9,180
Savings									24,887		\$ 1,482
, in the second									,==		
TOTAL SAVINGS									49,047		\$ 3,180
TOTAL SAVINGS									45,047		3,180 د

#### Note:

- 1. Average Output is calculated based on existing tonnage installed and calculated load.

  AO = (calculated load / installed tons) \* (60% average annual loading)
- 2. Efficiency based on part load operation of the aging equipment, used 1.28 kW/ton x 1.10 fouling factor.



### **Rooftop Unit Replacement - Cooling Efficiency Savings**

**Covington Independent Schools** 

System	Quantity	Efficiency	Total	Total	Average	Average	Average	Operating	Usage	Rate	Usage
ID		(kW / Ton)	Tonage	kW	Output	kW	Tonage	Hours / Year	(kWh/yr)	(\$/kWh)	(\$/yr)
Latonia Elementary School											
Existing											
Carrier RTUs	6	1.29	30.00	232.64	80%	186.12	24.00	3,567	663,894	\$ 0.071	\$ 47,183
Proposed											
New RTUs	6	1.22	30.00	220.41	80%	176.33	24.00	3,567	628,974	\$ 0.071	\$ 44,701
Total Savings									34,920		\$ 2,482
Glenn O. Swing Elementary Sc	chool										
Existing											
Carrier and Bryant RTUs	1	1.20	10.00	12.00	70%	8.40	7.00	3,419	28,720	\$ 0.072	\$ 2,065
Carrier and Bryant RTUs	1	1.20	10.00	12.00	70%	8.40	7.00	3,419	28,720	\$ 0.072	\$ 2,065
Carrier and Bryant RTUs	1	1.20	10.00	12.00	70%	8.40	7.00	3,419	28,720	\$ 0.072	\$ 2,065
Carrier and Bryant RTUs	1	1.20	10.00	12.00	70%	8.40	7.00	3,419	28,720	\$ 0.072	\$ 2,065
Carrier and Bryant RTUs	1	1.20	12.00	14.40	70%	10.08	8.40	3,419	34,465	\$ 0.072	\$ 2,477
Carrier and Bryant RTUs	1	1.20	12.00	14.40	70%	10.08	8.40	3,419	34,465	\$ 0.072	\$ 2,477
Carrier and Bryant RTUs	1	1.20	10.00	12.00	70%	8.40	7.00	3,419	28,720	\$ 0.072	\$ 2,065
Carrier and Bryant RTUs	1	1.20	18.00	21.60	70%	15.12	12.60	3,877	58,622	\$ 0.072	\$ 4,214
Carrier and Bryant RTUs	1	1.20	21.00	25.20	70%	17.64	14.70	4,227	74,566	\$ 0.072	\$ 5,360
Carrier and Bryant RTUs	1	1.20	10.00	12.00	70%	8.40	7.00	3,419	28,720	\$ 0.072	\$ 2,065
Carrier and Bryant RTUs	1	1.20	9.00	10.80	70%	7.56	6.30	3,561	26,918	\$ 0.072	\$ 1,935
Carrier and Bryant RTUs	1	1.20	4.00	4.80	70%	3.36	2.80	3,419	11,488	\$ 0.072	\$ 826
Subtotal	12		136	163					412,846		\$ 29,678





Proposed												
GRTU-1	1	1.16	10.00	11.62	70%	8.13	7.00	3,419	27,807	\$	0.072	\$ 1,999
GRTU-2	1	1.16	10.00	11.62	70%	8.13	7.00	3,419	27,807	\$	0.072	\$ 1,999
GRTU-3	1	1.16	10.00	11.62	70%	8.13	7.00	3,419	27,807	\$	0.072	\$ 1,999
GRTU-4	1	1.16	10.00	11.62	70%	8.13	7.00	3,419	27,807	\$	0.072	\$ 1,999
GRTU-7	1	1.18	12.00	14.20	70%	9.94	8.40	3,419	33,986	\$	0.072	\$ 2,443
GRTU-8	1	1.18	12.00	14.20	70%	9.94	8.40	3,419	33,986	\$	0.072	\$ 2,443
GRTU-9	1	1.16	10.00	11.62	70%	8.13	7.00	3,419	27,807	\$	0.072	\$ 1,999
GRTU-10 (Kitchen/Cafeteria)	1	1.18	18.00	21.30	70%	14.91	12.60	3,877	57,808	\$	0.072	\$ 4,156
GRTU-11 (Gym)	1	1.30	21.00	27.39	70%	19.17	14.70	4,227	81,034	\$	0.072	\$ 5,825
GRTU-13	1	1.16	10.00	11.62	70%	8.13	7.00	3,419	27,807	\$	0.072	\$ 1,999
GRTU-14 (Office)	1	1.16	9.00	10.46	70%	7.32	6.30	3,561	26,062	\$	0.072	\$ 1,873
GRTU-15	1	0.91	4.00	3.65	70%	2.56	2.80	3,419	8,739	\$	0.072	\$ 628
Subtotal	12		136	161					408,453			\$ 29,362
Total Savings									4,393			\$ 316
Total Savings									4,555			Ş 310
Sixth District Elementary Scho	ol											
Existing												
Trane Split System	1	1.14	30.00	34.29	70%	24.00	21.00	2,988	71,714	\$	0.070	\$ 5,042
Proposed												
New Split System	1	1.13	30.00	33.80	70%	23.66	21.00	2,988	70,690	\$	0.070	\$ 4,970
Total Savings									1,024			\$ 72
James E Biggs Early Childhood												
Existing												
Supply Fan	1	-	-	-	70%	1.492	-	2,988	4,458	\$	0.060	\$ 265
Proposed												
Kitchen Make-up Air Unit (MA		1.13	10.00	11.27	70%	7.89	7.00	2,988	(23,563)	اخ	0.060	\$ (1,403)
Micchell Make ap / III offic (IVI)	1	1.13	10.00	11.27	70%	7.03	7.00	2,300	(23,303)	7	0.000	
Total Savings	1	1.13	10.00	11.27	70%	7.83	7.00	2,300	(19,105)		0.000	\$ (1,137)

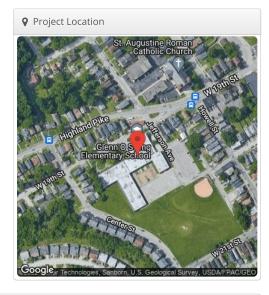


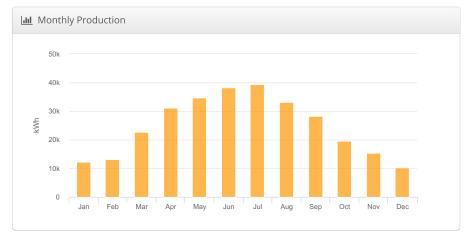
# DY Design 5 deg (PSI Required access paths) Glen O Swing School, 501 W 19th St,

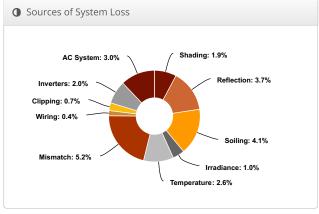
Covington, KY 41014



Lill System Me	etrics
Design	DY Design 5 deg (PSI Required access paths)
Module DC Nameplate	273.2 kW
Inverter AC Nameplate	200.0 kW Load Ratio: 1.37
Annual Production	297.6 MWh
Performance Ratio	77.9%
kWh/kWp	1,089.5
Weather Dataset	TMY, CINCINNATI MUNICIPAL AP LUNKI, NSRDB (tmy3, II)
Simulator Version	da3f9166d3-f2c722ade2-0d0a0544de- bfda68e074







	Description	Output	% Delta
	Annual Global Horizontal Irradiance	1,353.7	
	POA Irradiance	1,399.4	3.4%
Irradiance	Shaded Irradiance	1,372.5	-1.9%
(kWh/m²)	Irradiance after Reflection	1,322.3	-3.7%
	Irradiance after Soiling	1,268.6	-4.19
	Total Collector Irradiance	1,268.6	0.0%
	Nameplate	346,829.6	
	Output at Irradiance Levels	343,252.8	-1.09
	Output at Cell Temperature Derate	334,248.6	-2.69
Energy	Output After Mismatch	316,705.2	-5.2%
(kWh)	Optimal DC Output	315,281.7	-0.4%
	Constrained DC Output	313,140.8	-0.7%
	Inverter Output	306,836.1	-2.0%
	Energy to Grid	297,631.0	-3.0%
Temperature M	etrics		
	Avg. Operating Ambient Temp		15.9 °C
	Avg. Operating Cell Temp		23.1 °C
Simulation Met	rics		
		Operating Hours	4375
		Solved Hours	4375



Condition Set															
Description	PSI Standard														
Weather Dataset	TMY, CINCINNATI MUNICIPAL AP LUNKI, NSRDB (tmy3, II)														
Solar Angle Location	Mete	Meteo Lat/Lng													
Transposition Model	Pere:	z Mod	el												
Temperature Model	Sand	ia Mo	del												
	Rack	Туре			а			b			Ter	nperat	ure D	elta	
Temperature Model Parameters	Fixe	d Tilt			-3.	56		-0.0	075		3°C	:			
	Flus	h Mou	int		-2.	81	1 -0.0455			0°C					
Soiling (%)	J	F	М	Α		M		J	J		Α	S	0	N	D
	25	20	7	1		1	С	.5	0.5		0.5	0.5	1	8	10
Irradiation Variance	5%														
Cell Temperature Spread	4° C														
Module Binning Range	-2.5%	6 to 2.	5%												
AC System Derate	3.009	%													
Module Characterizations	Module Uploaded Characterization														
	LR4-72HPH-435M Folsom Spec Sheet Characterization, (Longi) PAN								ion,						
Component Characterizations	Devi	ce		Upl	oad	ed B	у			Cl	narac	terizat	ion		

☐ Compo	nents	
Component	Name	Count
Inverters	Sunny Tripower CORE1 50-US (SMA)	4 (200.0 kW)
Strings	10 AWG (Copper)	36 (10,607.9 ft)
Module	Longi, LR4-72HPH-435M (435W)	628 (273.2 kW)

A Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	11-18	Along Racking

III Field Segm	ents								
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Fixed Tilt	Landscape (Horizontal)	5°	151.02902°	0.8 ft	1x1	264	228	99.2 kW
Field Segment 2	Fixed Tilt	Landscape (Horizontal)	5°	150.28238°	0.8 ft	1x1	88	80	34.8 kW
Field Segment 3	Fixed Tilt	Landscape (Horizontal)	5°	150.18428°	0.8 ft	1x1	75	74	32.2 kW
Field Segment 4	Fixed Tilt	Landscape (Horizontal)	5°	150.69907°	0.8 ft	1x1	42	42	18.3 kW
Field Segment 5	Fixed Tilt	Landscape (Horizontal)	5°	150.69907°	0.8 ft	1x1	12	12	5.22 kW
Field Segment 6	Fixed Tilt	Landscape (Horizontal)	5°	150.69907°	0.8 ft	1x1	38	35	15.2 kW
Field Segment 7	Fixed Tilt	Landscape (Horizontal)	5°	150.69907°	0.8 ft	1x1	12	11	4.79 kW
Field Segment 8	Fixed Tilt	Landscape (Horizontal)	5°	150.69907°	0.8 ft	1x1	9	9	3.92 kW
Field Segment 10	Fixed Tilt	Landscape (Horizontal)	5°	150.69907°	0.8 ft	1x1	19	17	7.40 kW
Field Segment 10	Fixed Tilt	Landscape (Horizontal)	5°	150.69907°	0.8 ft	1x1	136	120	52.2 kW





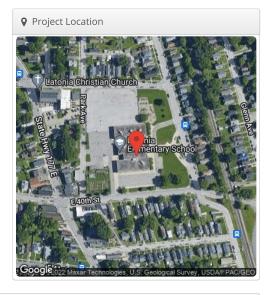


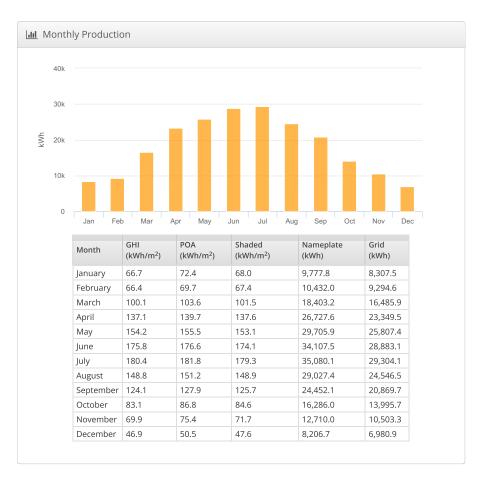
## DY Design 1: 5 DEG, terragen DT on GYM Latonia ES, 3901 Huntington Ave Covington, KY

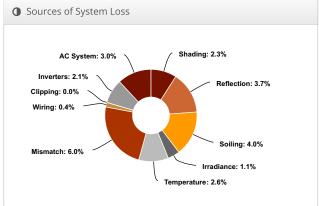
41015



Lill System Me	etrics
Design	DY Design 1: 5 DEG, terragen DT on GYM
Module DC Nameplate	202.7 kW
Inverter AC Nameplate	175.0 kW Load Ratio: 1.16
Annual Production	218.3 MWh
Performance Ratio	77.4%
kWh/kWp	1,077.0
Weather Dataset	TMY, CINCINNATI MUNICIPAL AP LUNKI, NSRDB (tmy3, II)
Simulator Version	77eaf2cdb5-02f2a7f506-20068b956b- d70d5f9ff0









4 Annual Pr	roduction		
	Description	Output	% Delta
	Annual Global Horizontal Irradiance	1,353.7	
	POA Irradiance	1,391.2	2.8%
Irradiance	Shaded Irradiance	1,359.5	-2.3%
(kWh/m²)	Irradiance after Reflection	1,308.9	-3.7%
	Irradiance after Soiling	1,256.6	-4.0%
	Total Collector Irradiance	1,256.6	0.0%
	Nameplate	254,916.3	
	Output at Irradiance Levels	252,232.6	-1.1%
	Output at Cell Temperature Derate	245,608.1	-2.6%
Energy	Output After Mismatch	230,945.2	-6.0%
(kWh)	Optimal DC Output	230,016.2	-0.4%
	Constrained DC Output	230,001.1	0.0%
	Inverter Output	225,080.7	-2.1%
	Energy to Grid	218,328.3	-3.0%
Temperature M	etrics		
	Avg. Operating Ambient Temp		15.9 °C
	Avg. Operating Cell Temp		23.0 °C
Simulation Met	rics		
		Operating Hours	4375
		Solved Hours	4375

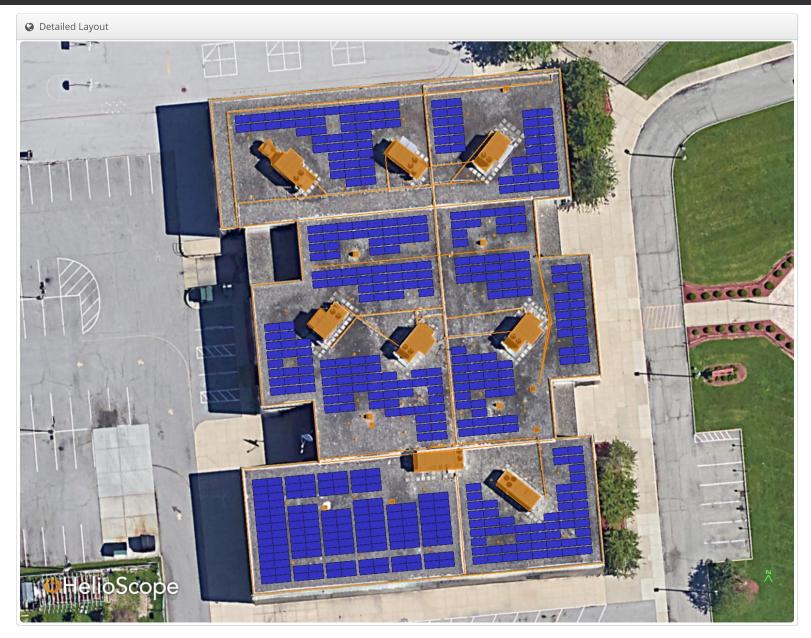
Description	PSI S	PSI Standards												
Weather Dataset	TMY,	TMY, CINCINNATI MUNICIPAL AP LUNKI, NSRDB (tmy3, II)												
Solar Angle Location	Mete	Meteo Lat/Lng												
Transposition Model	Pere	z Mod	el											
Temperature Model	Sano	Sandia Model												
	Rack	Туре			а		b			Ten	nperati	ure D	elta	
Temperature Model Parameters	Fixe	d Tilt			-3.56	5	-0.0	075		3°C				
	Flush Mount				-2.8	-0.0455		0455		0°C				
Soiling (%)	J	F	М	Α	M		J	J	'	A	S	0	N	D
3011118 (70)	25	25 20 7 1 1 0.5 0.5 0.5 0.5							1	8	10			
Irradiation Variance	5%													
Cell Temperature Spread	4° C													
Module Binning Range	-2.5%	6 to 2.	5%											
AC System Derate	3.00	%												
Module Characterizations	Mod	ule				Uploaded By		d	Characterization					
Wiodule Characterizations	LR4-72HPH-435M Folsom Spec Sheet C (Longi) Labs PAN							eet Ch	aract	erizat	ion,			
Component Characterizations	Devi	Device Uploaded By Characterization												

☐ Components								
Component	Name	Count						
Inverters	Sunny Tripower_Core1 62-US-41 (SMA)	2 (125.0 kW)						
Inverters	Sunny Tripower CORE1 50-US (SMA)	1 (50.0 kW)						
Strings	10 AWG (Copper)	30 (7,000.5 ft)						
Module	Longi, LR4-72HPH-435M (435W)	466 (202.7 kW)						

A Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	4-17	Along Racking
Wiring Zone 2	-	13-17	Along Racking

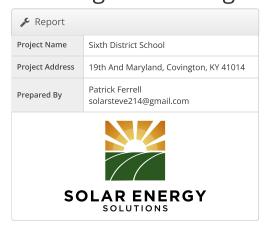
Field Segm	ients								
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Fixed Tilt	Landscape (Horizontal)	5°	174.68336°	0.8 ft	1x1	57	53	23.1 kW
Field Segment 2	Fixed Tilt	Landscape (Horizontal)	5°	174.68336°	0.8 ft	1x1	32	30	13.1 kW
Field Segment 3	Fixed Tilt	Landscape (Horizontal)	5°	174.68336°	0.8 ft	1x1	20	20	8.70 kW
Field Segment 4	Fixed Tilt	Landscape (Horizontal)	5°	174.68336°	0.8 ft	1x1	39	34	14.8 kW
Field Segment 5	Fixed Tilt	Landscape (Horizontal)	5°	174.68336°	0.8 ft	1x1	57	44	19.1 kW
Field Segment 6	Fixed Tilt	Landscape (Horizontal)	5°	174.68336°	0.8 ft	1x1	27	21	9.14 kW
Field Segment 7	Fixed Tilt	Landscape (Horizontal)	5°	174.68336°	0.8 ft	1x1	53	51	22.2 kW
Field Segment 8	Fixed Tilt	Landscape (Horizontal)	5°	174.68336°	0.8 ft	1x1	54	46	20.0 kW
Field Segment 9	Fixed Tilt	Landscape (Horizontal)	5°	174.68336°	0.8 ft	1x1	52	35	15.2 kW
Field Segment 10	East- West	Portrait (Vertical)	5°	174.68336°	1.5 ft	1x1	70	132	57.4 kW



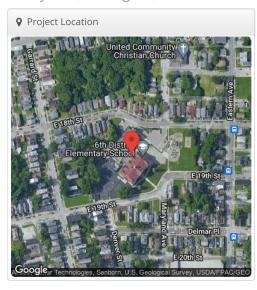


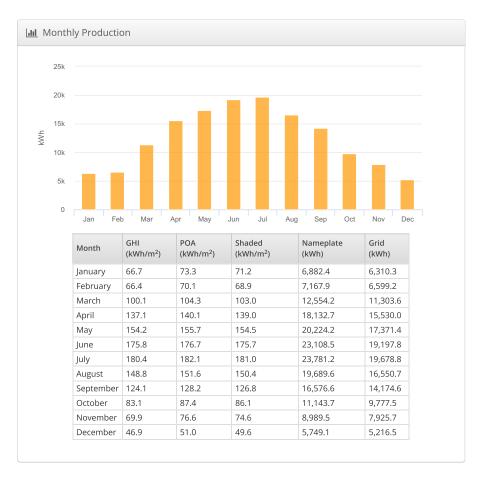


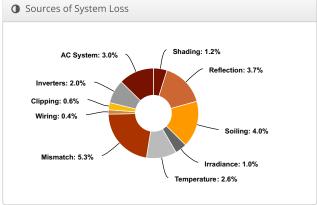
# DY Design 2 PSI 5deg standard Sixth District School, 19th And Maryland, Covington, KY 41014



Lill System Me	etrics
Design	DY Design 2 PSI 5deg standard
Module DC Nameplate	136.1 kW
Inverter AC Nameplate	100.0 kW Load Ratio: 1.36
Annual Production	149.6 MWh
Performance Ratio	78.7%
kWh/kWp	1,099.4
Weather Dataset	TMY, CINCINNATI MUNICIPAL AP LUNKI, NSRDB (tmy3, II)
Simulator Version	7f5f605573-6686cb6f0d-5a0bfcc6db- 1ba6e5901c









7 Annual P	roduction						
	Description	Output	% Delta				
	Annual Global Horizontal Irradiance	1,353.7					
	POA Irradiance	1,397.0	3.2%				
Irradiance	Shaded Irradiance	1,380.9	-1.2%				
(kWh/m <sup>2</sup> )	Irradiance after Reflection	1,329.1	-3.7%				
	Irradiance after Soiling	1,276.6	-4.0%				
	Total Collector Irradiance	1,276.6	0.0%				
	Nameplate	173,999.7					
	Output at Irradiance Levels	172,240.2	-1.0%				
	Output at Cell Temperature Derate	167,810.5	-2.6%				
Energy	Output After Mismatch	158,989.3	-5.3%				
(kWh)	Optimal DC Output	158,393.0	-0.4%				
	Constrained DC Output	157,431.8	-0.6%				
	Inverter Output	154,264.0	-2.0%				
	Energy to Grid	149,636.1	-3.0%				
Temperature M	etrics						
	Avg. Operating Ambient Temp		15.9 °C				
Avg. Operating Cell Temp							
Simulation Met	rics						
		Operating Hours	4375				
		Solved Hours	4375				

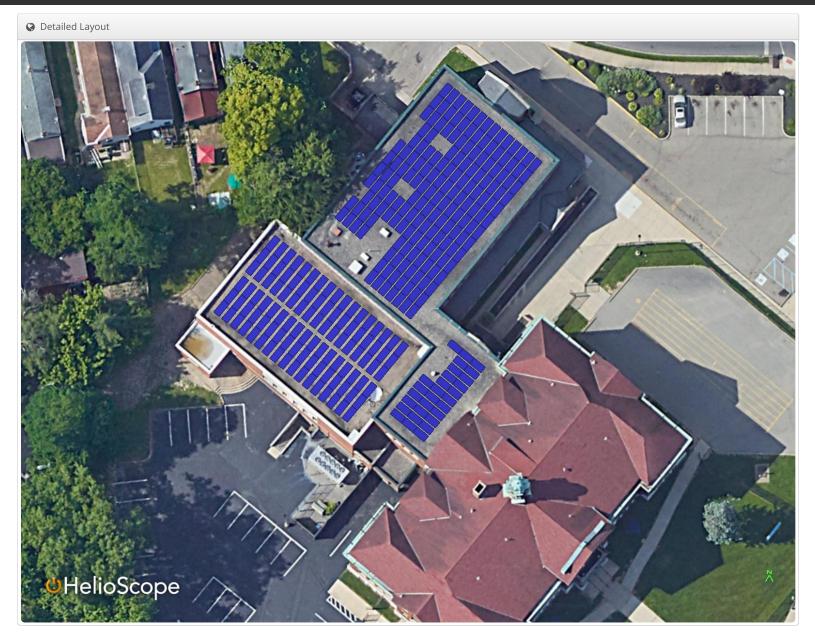
Condition Set															
Description	PSI S	tandaı	-d												
Weather Dataset	TMY,	MY, CINCINNATI MUNICIPAL AP LUNKI, NSRDB (tmy3, II)													
Solar Angle Location	Mete	leteo Lat/Lng													
Transposition Model	Perez	erez Model													
Temperature Model	Sand	andia Model													
Tomorousture Madel	Rack	Туре			а			b			Tem	peratu	re De	lta	
Temperature Model Parameters	Fixed	d Tilt			-3	3.56	I	-0.0	75		3°C				
	Flush Mount			-2	2.81		-0.0	455		0°C					
Soiling (%)	J	F	M	Α		M		J	J		Α	S	0	N	D
3011118 (70)	25	20	7	1		0.5	0	.5	0.5	C	).5	0.5	1	7	10
Irradiation Variance	5%														
Cell Temperature Spread	4° C														
Module Binning Range	-2.5%	to 2.5	5%												
AC System Derate	3.009	6													
	Mod	ule							lpload y	ed	Cha	racteri	zatio	n	
Module Characterizations	LR4-	72HPF	H-435	M (L	Lon	ngi)			olsom abs		Spec Sheet Characterization, PAN			N	
	CS3Y-490MB-AG (1000V) (Canadian Solar)							Folsom Labs		Spec Sheet Characterization, PAN				N	
Component Characterizations	Devi	ce		Uplo	oad	ded By				Cha	aract	erizatio	n		

☐ Components									
Component	Name	Count							
Inverters	Sunny Tripower CORE1 50-US (SMA)	2 (100.0 kW)							
Strings	10 AWG (Copper)	20 (3,835.4 ft)							
Module	Canadian Solar, CS3Y-490MB-AG (1000V) (490W)	102 (50.0 kW)							
Module	Longi, LR4-72HPH-435M (435W)	198 (86.1 kW)							

🚠 Wiring Zor	nes							
Description		Combiner Poles		String Size	Str	inging Strategy		
Wiring Zone		-		11-16	Alc	ong Racking		
Field Segn	nents							
Description	D = -1-1	Ovientetien	Tile A =i		C	C:	NA - ded	D

## Field Segments												
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power			
Field Segment 1	Fixed Tilt	Landscape (Horizontal)	10°	129.52234°	1.6 ft	1x1	51	51	25.0 kW			
Field Segment 2	Fixed Tilt	Landscape (Horizontal)	10°	129.52234°	1.6 ft	1x1	51	51	25.0 kW			
Field Segment 3	Fixed Tilt	Landscape (Horizontal)	5°	129.9397°	0.8 ft	1x1	169	169	73.5 kW			
Field Segment 4	Fixed Tilt	Landscape (Horizontal)	5°	219.59627°	0.8 ft	1x1	32	29	12.6 kW			





#### **Covington Public Schools**

25 E. 7th Street Covington, KY 41011



CURREI	VT			PROPOSED							
Туре	Quantity	Carrier	Term	Cost	Type	Quantity	Carrier	Term	Cost		
25 E. 7th Street, Covington, KY 41011					25 E. 7th Street, Covington, KY 41011						
23 Channel PRI (859 581-7555 122)	1	Cincinnati Bell	6/30/2022	\$360.13	Interconnected VOIP Low Usage	422	GoToConnect	60 Month	\$3,354.90		
DID Block of 20	5	Cincinnati Bell	6/30/2022		GoToConnect Standard	189	GoToConnect	60 Month	\$2,258.55		
Surcharges and Fees	1	Cincinnati Bell	6/30/2022		Voice Standard DID	564	GoToConnect	60 Month	\$282.00		
23 Channel PRI- Circuit ID 4.IPSD.59194 (859 815-6500 045)	1	Cincinnati Bell	None		Conference Device User	9	GoToConnect		\$107.55		
23 Channel PRI- Circuit ID 4.IPSD.59195 (859 815-6500 045)	1	Cincinnati Bell	None		Polycom VVX 450 Skyline	153			Included		
DID Block of 20	14	Cincinnati Bell	None		Polycom VVX 250 Skyline	615			Included		
Business Line- 859-267-3598 (859 815-6500 045)	1	Cincinnati Bell	None		Taxes and Fees				\$1,157.13		
Business Line- 859-261-3601 (859 815-6500 045)	1	Cincinnati Bell	None	Included					. , -		
Business Line- 859-261-3974 (859 815-6500 045)	1	Cincinnati Bell	None	Included							
Combination Trunks (859 815-6500 045)	7	Cincinnati Bell	None		Business Lines	3	Spectrum	Month to Month	\$89.97		
Surcharges and Fees	1	Cincinnati Bell	None	\$307.21			- p		7		
Interstate Outbound Long Distance (1227607)	1724.0	Cincinnati Bell	None	\$31.28							
Intrastate Outbound Long Distance (1227607)	340.0	Cincinnati Bell	None	\$11.28							
International Outbound Long Distance (1227607)	5.0	Cincinnati Bell	None	\$0.15							
Surcharges and Fees	1.0	Cincinnati Bell	None	\$117.25							
10G Managed Digital Service (859 D16-8052 052)	1	Cincinnati Bell	6/30/2025	\$7,680.00		. 1	Cincinnati Bell	6/30/2025	\$7,680.00		
Centrex Line- 859-292-5800 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	\$77.84		· •	Ciricii iida Beii	0,00,2025	ψ,,σσσ.σσ		
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included							
Deluxe Call Forwarding	1	Cincinnati Bell	6/30/2022	Included							
Centrex Caller ID w/ Name & Number	1	Cincinnati Bell	6/30/2022	Included							
Hunt Group 1	3	Cincinnati Bell	6/30/2022	Included							
Hunt Group 2	2	Cincinnati Bell	6/30/2022	Included							
Hunt Group 3	2	Cincinnati Bell	6/30/2022	Included							
Surcharges and Fees	1	Cincinnati Bell	6/30/2022	\$89.84							
Centrex Line- 859-292-5808 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included							
Centrex Basic Deluxe Line Festure	1	Cincinnati Bell	6/30/2022	Included							
Centrex Line- 859-292-5871 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included							
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included							
Centrex Caller ID w/ Name & Number	1	Cincinnati Bell	6/30/2022	Included							
Centrex Line- 859-292-2412 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included							
Centrex Caller ID w/ Name & Number	1	Cincinnati Bell	6/30/2022	Included							
Centrex Line- 859-292-5888 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included							
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included							
Centrex Caller ID w/ Name & Number	1	Cincinnati Bell	6/30/2022	Included							
Business Line (859 392-9110 386)	1	Cincinnati Bell	None	\$0.00							
Surcharges and Fees	1	Cincinnati Bell	None	\$10.35							
Business Line (859 292-5941 210)	1	Cincinnati Bell	None	\$0.00							
Taxes, Surcharges and Fees	1	Cincinnati Bell	None	\$10.04							
Traxes, Surcharges and rees	1	Ciriciliiati Beli	None	\$10.04							
401 W. Southern Avenue, Covington, KY 41015 (Maintence Building)					401 W. Southern Avenue, Covington, KY 41015	(Maintence	Ruilding)				
Business Line (859 669-1111 780)	1	Cincinnati Bell	None	<b>¢</b> በ በበ	Business Lines	3	Spectrum	Month to Month	\$89.97		
Unlisted Phone Number Fee	1	Cincinnati Bell	None	\$8.50		3	Specti uill	WIGHTH TO WIGHTH	Ç05.97		
Surcharges and Fees	1	Cincinnati Bell	None	\$8.50 \$9.78							
				•							
212 Levassor Place, Covington, KY 41014 (Covington Adult High School)	_	o			212 Levassor Place, Covington, KY 41014 (Coving	_					
Business Lines (859 491-1841 233)	4	Cincinnati Bell	None	•	Business Lines	3	Spectrum	Month to Month	\$89.97		
Outbound Long Distance	3.0	Cincinnati Bell	None	\$0.60							
Surcharges and Fees	4	Cincinnati Bell	None	\$26.78							

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CURRENT						D			
Туре	Quantity	Carrier	Term	Cost	Туре	Quantity	Carrier	Term	Cost
200 Home Road, Covington, KY 41011					200 Home Road, Covington, KY 41011				
Business Line (859 261-0124 101)	1	Cincinnati Bell	TBD	\$0.00	Business Lines	3	Spectrum	Month to Month	\$89.97
Taxes, Surcharges and Fees	1	Cincinnati Bell	TBD	\$10.62			·		
Single Mode Fiber (859 D16-8052 052)	1	Cincinnati Bell	6/30/2025	Included	Single Mode Fiber (859 D16-8052 052)	1	Cincinnati Bell	6/30/2025	Included
1901 Maryland Avenue, Covington, KY 41014 (Sixth District Elementary)					1901 Maryland Avenue, Covington, KY 4101	4 (Sixth District	Elementary)		
Business Line (859 261-0504 874)	1	Cincinnati Bell	TBD		Business Lines	3	Spectrum	Month to Month	\$89.97
Surcharges and Fees	1	Cincinnati Bell	TBD	\$10.38			.,		,
525 Scott Blvd, Covington, KY 41011 (Kenton County Adult Education)					525 Scott Blvd, Covington, KY 41011 (Kento	n County Adult E	ducation)		
Business Line (859 261-1432 208)	1	Cincinnati Bell	TBD	\$0.00	Business Lines	3	Spectrum	Month to Month	\$89.97
Taxes, Surcharges and Fees	1	Cincinnati Bell	TBD	\$10.04		ŭ	Special a	month to month.	φοσισ,
3618 Caroline Avenue, Latonia, KY 41015 (Adult High School)					3618 Caroline Avenue, Latonia, KY 41015 (A	dult High Schoo	n		
Business Line (859 292-3855 201)	1	Cincinnati Bell	TBD		Business Lines	3	Spectrum	Month to Month	\$89.97
Taxes, Surcharges and Fees	1	Cincinnati Bell	TBD	\$10.04	Dusiness Lines	,	Spectrum	IVIONAL CO IVIONAL	765.57
Centrex Line/ Secondary Location- 859-292-5937 (859 292-5800 104)	1	Cincinnati Bell	TBD	Included					
Centrex Enter Secondary Education 839-292-3937 (839-292-3800-104)	1	Cincinnati Bell	TBD	Included					
3901 Huntington Avenue, Covington, KY 41015 (Latonia Elementary School)					3901 Huntington Avenue, Covington, KY 41	01E /Latania Ela	mantanı Çaha	sn.	
Business Lines (859 292-5971 199)	2	Cincinnati Bell	TBD		Business Lines	3	Spectrum	Month to Month	\$89.97
Taxes, Surcharges and Fees	2	Cincinnati Bell	TBD	\$5.16	business Lines	3	Spectrum	WIGHTH TO WIGHTH	\$65.57
Centrex Line- 859-292-5826 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Jo.10 Included					
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included					
Centrex Caller ID w/ Name & Number	1	Cincinnati Bell	6/30/2022	Included					
Centrex Line/Secondary Location- 859-292-5843 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included					
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included					
Centrex Line- 859-292-5844 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included					
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included					
Centrex Caller ID w/ Name & Number	1	Cincinnati Bell	6/30/2022	Included					
Centrex Line/Secondary Location- 859-292-5918 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included					
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included					
Single Mode Fiber (859 D16-8052 052)	1	Cincinnati Bell	6/30/2025		Single Mode Fiber (859 D16-8052 052)	1	Cincinnati Bell	6/30/2025	Included
			.,,					.,,	
1120 Scott Blvd, Covington, KY 41011					1120 Scott Blvd, Covington, KY 41011				
Centrex Line/Secondary Location- 859-292-2415 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included	Business Lines	3	Spectrum	Month to Month	\$89.97
Hunt Group 3			6/30/2022						
Centrex Basic Deluxe Line Feature	1	Cincinnati Bell	6/30/2022	Included					
Centrex Caller ID w/ Name & Number	1	Cincinnati Bell	6/30/2022	Included					
Centrex Line- 859-292-5803 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included					
Centrex Basic Deluxe Line Feature	1	Cincinnati Bell	6/30/2022	Included					
Centrex Caller ID w/ Name & Number	1	Cincinnati Bell	6/30/2022	Included					
Centrex Line/Secondary Location- 859-292-5896 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included					
Hunt Group 3			6/30/2022						
Centrex Basic Deluxe Line Feature	1	Cincinnati Bell	6/30/2022	Included					
Centrex Caller ID w/ Name & Number	1	Cincinnati Bell	6/30/2022	Included					
Centrex Line/Secondary Location- 859-292-5956 (859 292-5800 104) Centrex Basic Line Feature	1 1	Cincinnati Bell Cincinnati Bell	6/30/2022 6/30/2022	Included Included					
	-		-,,						
1124 Scott Blvd, Covington, KY 41011 (James E. Biggs Early Childhood)	1	Cincinnati Ball	TBD		1124 Scott Blvd, Covington, KY 41011 (James			Month to Month	¢00.07
Business Line (859 292-5972 185)	1	Cincinnati Bell			Business Lines	3	Spectrum	Month to Month	\$89.97
Taxes, Surcharges and Fees	1 1	Cincinnati Bell	TBD	\$10.04	Circle Manda Filhan (OFO DAG COSTO OFG)		Circles 11 D 11	6/20/2025	11
Single Mode Fiber (859 D16-8052 052)		Cincinnati Bell	6/30/2025	Included	Single Mode Fiber (859 D16-8052 052)	1	Cincinnati Bell	6/30/2025	Included

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CURREN	Ī				PROPOSED	
Туре	Quantity	Carrier	Term	Cost	Type Quantity Carrier Term	Cost
2800 Indiana Avenue, Covington, KY 41015 (Ninth District Elementary Scho	ol)				2800 Indiana Avenue, Covington, KY 41015 (Ninth District Elementary School)	
Business Line (859 292-5998 161)	1	Cincinnati Bell	TBD	\$0.00	Business Lines 3 Spectrum Month to Month	\$89.9
Taxes, Surcharges and Fees	1	Cincinnati Bell	TBD	\$10.62		
Centrex Line/Secondary Location- 859-292-2414 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included		
Hunt Group 2						
Centrex Caller ID w/ Name & Number	1	Cincinnati Bell	6/30/2022	Included		
Centrex Line- 859-292-2416 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included		
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included		
Centrex Caller ID w/ Name & Number	1	Cincinnati Bell	6/30/2022	Included		
Centrex Line/Secondary Location- 859-292-5824 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included		
Hunt Group 2						
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included		
Centrex Caller ID w/ Name & Number	1	Cincinnati Bell	6/30/2022	Included		
Centrex Line/Secondary Location- 859-655-6933 (859-292-5800 104)	1	Cincinnati Bell	6/30/2022	Included		
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included		
Single Mode Fiber (859 D16-8052 052)	1	Cincinnati Bell	6/30/2025	Included	Single Mode Fiber (859 D16-8052 052) 1 Cincinnati Bell 6/30/2025	Include
257 Pike Street, Covington, KY 41011 (T.I. Pike Street Bldg District Suppor	t Services)				257 Pike Street, Covington, KY 41011 (T.I. Pike Street Bldg District Support Services)	
Business Line (859 392-3186 203)	1	Cincinnati Bell	TBD	\$0.00	Business Lines 3 Spectrum Month to Month	\$89.9
Surcharges and Fees	1	Cincinnati Bell	TBD	\$9.82	·	
1901 Manuland Avanua Covington VV 41014					1801 Maryland Avenue, Covington, KY 41014	
<b>1801 Maryland Avenue, Covington, KY 41014</b> Business Line (859 655-6906 148)	1	Cincinnati Bell	TBD	¢0.00	Business Lines 3 Spectrum Month to Month	\$89.9
Taxes, Surcharges and Fees	1	Cincinnati Bell	TBD	\$10.62	business Lines 5 Spectrum Month to Month	و.وهډ
Centrex Line- 859-292-2419 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included		
Centrex Basic Deluxe Line Feature	1	Cincinnati Bell	6/30/2022	Included		
Centrex Line- 859-292-5862 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included		
Centrex Basic Deluxe Line Feature	1	Cincinnati Bell	6/30/2022	Included		
Centrex Caller ID w/ Name & Number	1	Cincinnati Bell	6/30/2022	Included		
Centrex Line/Secondary Location- 859-292-5882 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included		
Centrex Basic Line Feature	1	Cincinnati Bell	6/30/2022	Included		
Centrex Line/Secondary Location- 859-655-6979 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included		
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included		
Single Mode Fiber (859 D16-8052 052)	1	Cincinnati Bell	6/30/2025	Included	Single Mode Fiber (859 D16-8052 052) 1 Cincinnati Bell 6/30/2025	Include
FOA W. 10th Street Conjugator IV 41014 (Claus O. Cuira Flamoutor) Sabar	-1\				FOR IN ARTH Character Continues IV 41014 (Claus O. Curina Flamenton, Cabasil)	
501 W. 19th Street, Covington, KY 41014 (Glenn O. Swing Elementary Scho Centrex Line/Secondary Location- 859-292-5840 (859 292-5800 104)	oi) 1	Cincinnati Bell	6/30/2022	المماريط ما	501 W. 19th Street, Covington, KY 41014 (Glenn O. Swing Elementary School)  Business Lines 3 Spectrum Month to Month	\$89.9
Hunt Group 1	1	Ciriciiiiati Beii	0/30/2022	iliciuueu	business tines 5 Spectrum Month to Month	و.وهډ
Centrex Basic Deluxe Line Feature	1	Cincinnati Bell	6/30/2022	Included		
Centrex Caller ID w/ Name & Number	1	Cincinnati Bell	6/30/2022	Included		
Centrex Line/Secondary Location- 859-292-5898 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included		
Hunt Group 1						
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included		
Centrex Caller ID w/ Name & Number	1	Cincinnati Bell	6/30/2022	Included		
Centrex Line/Secondary Location- 859-655-6915 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included		
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included		
Centrex Line/Secondary Location- 859-655-6937 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included		
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included		
Centrex Line/Secondary Location- 859 655-6976 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included		
Hunt Group 1						
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included		
			c /00 /0000			
Centrex Caller ID w/ Name & Number	1	Cincinnati Bell	6/30/2022	Included		

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CURRE	NT					PROPOS	PROPOSED			
Туре	Quantity	Carrier	Term	Cost	Type	Quantity	Carrier	Term	Cost	
2500 Madison Avenue, Covington, KY 41014					2500 Madison Avenue, Covington, KY 41014					
Centrex Line/Secondary Location- 859-292-5842 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included	Business Lines	3	Spectrum	Month to Month	\$89.97	
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included						
Centrex Line/Secondary Location- 859-292-5845 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included						
Centrex Basic Deluxe Line Feature	1	Cincinnati Bell	6/30/2022	Included						
Centrex Line/Secondary Location- 859-292-5907 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included						
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included						
Centrex Line- 859-292-5968 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included						
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included						
Centrex Line/Secondary Location- 859-292-5984 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included						
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included						
Centrex Line/Secondary Location- 859-655-6952 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included						
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included						
Centrex Line/Secondary Location- 859-655-6955 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included						
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included						
Centrex Line/Secondary Location- 859-655-6957 (859 292-5800-104)	1	Cincinnati Bell	6/30/2022	Included						
Centrex Basic Deluxe Line Feature	1	Cincinnati Bell	6/30/2022	Included						
Single Mode Fiber (859 D16-8052 052)	1	Cincinnati Bell	6/30/2025		Single Mode Fiber (859 D16-8052 052)	1	Cincinnati Bell	6/30/2025	Included	
910 Holman Avenue, Covington, KY 41011 (John G. Carlisle Elementary	School)				910 Holman Avenue, Covington, KY 41011 (Jo	ohn G. Carlisle	e Elementary Sc	hool)		
Business Line- 859-292-0492 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included	Business Lines	3	Spectrum	Month to Month	\$89.97	
Centrex Line/Secondary Location- 859-292-5979 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included					,	
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included						
Centrex Caller ID Name & Number	1	Cincinnati Bell	6/30/2022	Included						
Centrex Line/Secondary Location- 859-292-5983 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included						
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included						
Centrex Caller ID Name & Number	1	Cincinnati Bell	6/30/2022	Included						
Single Mode Fiber (859 D16-8052 052)	1	Cincinnati Bell	6/30/2025	Included	Single Mode Fiber (859 D16-8052 052)	1	Cincinnati Bell	6/30/2025	Included	
3304 Eugenia Avenue, Covington, KY 41015					3304 Eugenia Avenue, Covington, KY 41015					
Single Mode Fiber (859 D16-8052 052)	1	Cincinnati Bell	6/30/2025	Included	Single Mode Fiber (859 D16-8052 052)	1	Cincinnati Bell	6/30/2025	Included	
3306 Eugenia Avenue, Covington, KY 41015 (Bus Garage)					3306 Eugenia Avenue, Covington, KY 41015 (	Bus Garage)				
Centrex Line- 859-292-2413 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included	Business Lines	3	Spectrum	Month to Month	\$89.97	
Centrex Line/Secondary Location- 859-292-5881 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included						
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included						
Centrex Line/Secondary Location- 859-655-6927 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included						
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included						
Centrex Line/Secondary Location- 859-655-6928 (859 292-5800 104)	1	Cincinnati Bell	6/30/2022	Included						
Centrex Basic Line Feature Package	1	Cincinnati Bell	6/30/2022	Included						
Total			\$	27,745.91	Total			\$	16,369.62	

Monthly Savings:	\$ 11,376.29
Annual Savings:	136,515.48
Term Savings:	682,577.40
Percent:	41.0%

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Building	Annual kWh Savings	Peak kW Savings w/Diversity (Monthly)	Co	Annual Energy ost Savings	Annual Demand ost Savings	Annual aintenance ost Savings	tal Annual st Savings
Holmes High School	10,264	4.2	\$	611.00	\$ 464.98	\$ 254.54	\$ 1,330.53
Holmes Middle School	14,711	6.1	\$	875.76	\$ 680.84	\$ 459.11	\$ 2,015.71
Adminstration Building	14,175	6.2	\$	843.83	\$ 694.64	\$ 304.29	\$ 1,842.76
Science Building & Fieldhouse	12,292	6.8	\$	239.61	\$ 505.03	\$ 479.01	\$ 1,223.64
Chapman Vocational Education Center	12,993	7.4	\$	249.36	\$ 550.93	\$ 395.86	\$ 1,196.16
Glenn O. Swing Elementary School	20,424	10.5	\$	1,215.87	\$ 1,162.46	\$ 228.94	\$ 2,607.27
John G. Carlisle Elementary School	21,245	10.5	\$	1,264.75	\$ 1,165.52	\$ 270.33	\$ 2,700.59
Latonia Elementary School	39,285	17.0	\$	2,338.66	\$ 1,892.30	\$ 595.54	\$ 4,826.50
Ninth District Elementary School	17,803	8.8	\$	1,059.85	\$ 982.25	\$ 229.23	\$ 2,271.33
Sixth District Elementary School	24,291	12.1	\$	1,446.09	\$ 1,350.45	\$ 325.48	\$ 3,122.03
James E Biggs Early Childhood	7,437	3.3	\$	701.83	\$ -	\$ 146.91	\$ 848.74
Central Office	4,036	1.8	\$	380.89	\$ -	\$ 79.73	\$ 460.62
Bus Garage / Transportation (Dist. Services)	1,356	0.6	\$	128.00	\$ -	\$ 26.79	\$ 154.79
T.I. Pike St. Bldg. (District Support Services)	939	0.4	\$	88.65	\$ -	\$ 18.56	\$ 107.20
Instructional Support & District Enrollment Center (Levassor)	2,383	1.0	\$	224.91	\$ -	\$ 47.08	\$ 272.00
Maintenance Building	5,507	2.4	\$	519.69	\$ -	\$ 108.79	\$ 628.48
TOTAL	209,142	99.2	\$	12,188.74	\$ 9,449.41	\$ 3,970.20	\$ 25,608.35

### Fixture Schedule

PLAN MARK	MANU.	MODEL NUMBER	DESCRIPTION	QTY	WATTS	LUMENS	ССТ	VOLTS	WARRANTY	LISTING
L1	Keystone	KT-LED9T8-48G-840-DX2	9.5W, 4FT T8 LED TUBE, TYPE B DOUBLE-ENDED, 1650 LUMENS, 4000K, 120-277V, 10-YEARS WARRANTY	16778	9.5	1650	4000	120-277	10-YEARS	DLC STANDARD
L2	Keystone	KT-LED7T8-24GC-840-DX2	7W, 2FT T8 LED TUBE, TYPE B DOUBLE-ENDED, 900 LUMENS, 4000K, 120-277V, 10-YEARS WARRANTY	321	7	900	4000	120-277	10-YEARS	DLC STANDARD
L3	Keystone	KT-LED14.5T8-48G-840-DX2	14.5W, 4FT T8 LED TUBE, TYPE B DOUBLE-ENDED, 1810 LUMENS, 4000K, 120-277V, 10-YEARS WARRANTY	2060	14.5	1810	4000	120-277	10-YEARS	DLC STANDARD

Column Totals:

REF. LINE	SCOPE (Y/N)	BUILDING	ROOM NAME	<u>FIXTURE</u> <u>QUANTITY</u>	<u>PRE-CODE</u>	<u>POST-CODE</u>	ASHRAE SPACE TYPE
1	YES	Covington Multisite (Biggs ECE & Support Buildings?)	F G H I J & FAM REC, floor 2ND, map# 1	54	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
6	YES	Covington Multisite (Biggs ECE & Support Buildings?)	ELEV, floor , map# 6	3	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	8760
7	YES	Covington Multisite (Biggs ECE & Support Buildings?)	HALL, floor , map# 7	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2165.8
10	YES	Covington Multisite (Biggs ECE & Support Buildings?)	STAIR, floor , map# 10	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3094
11	YES	Covington Multisite (Biggs ECE & Support Buildings?)	A B C D E F, floor 1ST, map# 11	54	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
15	YES	Covington Multisite (Biggs ECE & Support Buildings?)	ENTRY, floor , map# 15	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3094
17	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFFICES, floor , map# 17	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
20	YES	Covington Multisite (Biggs ECE & Support Buildings?)	STAIR, floor , map# 21	8	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3094
21	YES	Covington Multisite (Biggs ECE & Support Buildings?)	STOR, floor BSM, map# 22	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
23	YES	Covington Multisite (Biggs ECE & Support Buildings?)	PINK RR, floor BSM, map# 24	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1295
27	YES	Covington Multisite (Biggs ECE & Support Buildings?)	STUDENT SUPPORT, floor BSM, map# 28	1	SSSMLTB-T82/8X21X2XXXXX	LTB-T822X-7/40	1751.4
28	YES	Covington Multisite (Biggs ECE & Support Buildings?)	STUDENT SUPPORT, floor BSM, map# 29	7	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
30	YES	Covington Multisite (Biggs ECE & Support Buildings?)	STOR, floor BSM, map# 32	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
31	YES	Covington Multisite (Biggs ECE & Support Buildings?)	CAFETERIA, floor BSM, map# 33	20	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2165.8
34	YES	Covington Multisite (Biggs ECE & Support Buildings?)	DRY STOR KIT, floor BSM, map# 36	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
36	YES	Covington Multisite (Biggs ECE & Support Buildings?)	BLUE RR, floor BSM, map# 38	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1295

41	YES	Covington Multisite (Biggs ECE & Support Buildings?)	DISH RM, floor BSM, map# 43	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
43	YES	Covington Multisite (Biggs ECE & Support Buildings?)	KIT, floor BSM, map# 45	9	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
46	YES	Covington Multisite (Biggs ECE & Support Buildings?)	CUST OFFICE, floor BSM, map# 48	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1751.4
47	YES	Covington Multisite (Biggs ECE & Support Buildings?)	BOILER RM, floor BSM, map# 50	5	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
49	YES	Covington Multisite (Biggs ECE & Support Buildings?)	ELEV RM, floor BSM, map# 52	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
58	YES	Covington Multisite (Biggs ECE & Support Buildings?)	STAIR, floor BSM, map# 3	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2704.1
61	YES	Covington Multisite (Biggs ECE & Support Buildings?)	BSMT, floor BSM, map# 6	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3124
63	YES	Covington Multisite (Biggs ECE & Support Buildings?)	LOUNGE, floor BSM, map# 8	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3124
64	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF, floor BSM, map# 9	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3124
65	YES	Covington Multisite (Biggs ECE & Support Buildings?)	HALL, floor BSM, map# 10	3	TRXLTB-T82/8X22X2XXXXX	LTB-T822X-7/40	3863
66	YES	Covington Multisite (Biggs ECE & Support Buildings?)	RR, floor BSM, map# 11	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1599
67	YES	Covington Multisite (Biggs ECE & Support Buildings?)	STAIR, floor BSM, map# 12	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2704
68	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF, floor BSM, map# 13	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
69	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF, floor BSM, map# 15	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3124
70	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OPEN OFF, floor BSM, map# 16	7	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
72	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF, floor BSM, map# 19	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3124
74	YES	Covington Multisite (Biggs ECE & Support Buildings?)	BOILER, floor BSM, map# 21	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
75	YES	Covington Multisite (Biggs ECE & Support Buildings?)		2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
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76	YES	Covington Multisite (Biggs ECE & Support Buildings?)	TECH OFF, floor BSM, map# 23	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
77	YES	Covington Multisite (Biggs ECE & Support Buildings?)	TECH OFF, floor BSM, map# 24	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
78	YES	Covington Multisite (Biggs ECE & Support Buildings?)	TECH OFF, floor BSM, map# 25	2	TRXLTB-T82/8X32X2XXXXX	LTB-T823X-7/40	2186.8
80	YES	Covington Multisite (Biggs ECE & Support Buildings?)	TECH OPEN AREA, floor BSM, map# 28	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
81	YES	Covington Multisite (Biggs ECE & Support Buildings?)	TECH OPEN AREA, floor BSM, map# 29	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
82	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF, floor BSM, map# 32	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
83	YES	Covington Multisite (Biggs ECE & Support Buildings?)	TECH STOR, floor BSM, map# 34	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
86	YES	Covington Multisite (Biggs ECE & Support Buildings?)	HALL, floor 1, map# 38	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2704.1
87	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF, floor 1, map# 40	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
88	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF, floor 1, map# 42	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
89	YES	Covington Multisite (Biggs ECE & Support Buildings?)	STOR, floor 1, map# 44	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
91	YES	Covington Multisite (Biggs ECE & Support Buildings?)	RR, floor 1, map# 46	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
92	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF, floor 1, map# 47	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
94	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF, floor 1, map# 50	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
95	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF, floor 1, map# 51	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
98	YES	Covington Multisite (Biggs ECE & Support Buildings?)	SEC AREA, floor 1, map# 55	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3124
100	YES	Covington Multisite (Biggs ECE & Support Buildings?)	FILE CAB, floor 1, map# 57	1	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	780
101	YES	Covington Multisite (Biggs ECE & Support Buildings?)		1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3124
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103	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OPEN OFF, floor 1, map# 60	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
105	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF, floor 1, map# 63	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
111	YES	Covington Multisite (Biggs ECE & Support Buildings?)	STUDENT SUPPORT, floor 1, map# 70	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
116	YES	Covington Multisite (Biggs ECE & Support Buildings?)	LEARN SUPPORT, floor 1, map# 75	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3124
117	YES	Covington Multisite (Biggs ECE & Support Buildings?)	SAFE, floor 1, map# 76	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
118	YES	Covington Multisite (Biggs ECE & Support Buildings?)	STAIR, floor 2ND, map# 78	2	SSSMLTB-T82/8X21X2XXXXX	LTB-T822X-7/40	3863
119	YES	Covington Multisite (Biggs ECE & Support Buildings?)	HALL, floor 2, map# 79	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2704.1
120	YES	Covington Multisite (Biggs ECE & Support Buildings?)	209, floor , map# 81	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
125	YES	Covington Multisite (Biggs ECE & Support Buildings?)	201, floor , map# 87	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
126	YES	Covington Multisite (Biggs ECE & Support Buildings?)	202 203 206 207, floor , map# 89	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
127	YES	Covington Multisite (Biggs ECE & Support Buildings?)	204, floor , map# 91	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
128	YES	Covington Multisite (Biggs ECE & Support Buildings?)	204, floor , map# 92	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
129	YES	Covington Multisite (Biggs ECE & Support Buildings?)	205, floor , map# 94	3	TRXLTB-T82/8X32X2XXXXX	LTB-T823X-7/40	2186.8
130	YES	Covington Multisite (Biggs ECE & Support Buildings?)	205, floor , map# 95	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
133	YES	Covington Multisite (Biggs ECE & Support Buildings?)	208, floor , map# 98	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
137	YES	Covington Multisite (Biggs ECE & Support Buildings?)	RR, floor , map# 102	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
138	YES	Covington Multisite (Biggs ECE & Support Buildings?)	W/RR, floor , map# 103	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
143	YES	Covington Multisite (Biggs ECE & Support Buildings?)		1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3124
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146	YES	Covington Multisite (Biggs ECE & Support Buildings?)	BASEMENT, floor BSM, map# 6	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3124
148	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFFICES, floor , map# 9	13	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
150	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFFICES, floor , map# 12	1	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	3124
151	YES	Covington Multisite (Biggs ECE & Support Buildings?)	LOUNGE, floor , map# 13	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
154	YES	Covington Multisite (Biggs ECE & Support Buildings?)	GARAGE, floor , map# 16	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
155	YES	Covington Multisite (Biggs ECE & Support Buildings?)	GARAGE, floor , map# 17	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3863
157	YES	Covington Multisite (Biggs ECE & Support Buildings?)	PARTS STOR, floor , map# 19	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
160	YES	Covington Multisite (Biggs ECE & Support Buildings?)	LOFT, floor , map# 2	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3124
161	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFFICE, floor , map# 3	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3124
162	YES	Covington Multisite (Biggs ECE & Support Buildings?)	RR, floor , map# 4	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
163	YES	Covington Multisite (Biggs ECE & Support Buildings?)	PARTS HALL, floor , map# 5	2	SSSMLTB-T82/8X21X2XXXXX	LTB-T822X-7/40	3863
164	YES	Covington Multisite (Biggs ECE & Support Buildings?)	RR, floor , map# 6	1	SSSMLTB-T82/8X11X2XXXXX	LTB-T821X-7/40	2284
166	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFFICE, floor , map# 8	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
167	YES	Covington Multisite (Biggs ECE & Support Buildings?)	PARTS STOR, floor , map# 10	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
168	YES	Covington Multisite (Biggs ECE & Support Buildings?)	PARTS STOR, floor , map# 11	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
178	YES	Covington Multisite (Biggs ECE & Support Buildings?)	COFFEE AREA, floor 1, map# 6	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3124
179	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFFICE, floor 1, map# 7	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
180	YES	Covington Multisite (Biggs ECE & Support Buildings?)		8	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
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181	YES	Covington Multisite (Biggs ECE & Support Buildings?)	CONF RM, floor 1, map# 10	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
183	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFFICE, floor 1, map# 13	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3124
184	YES	Covington Multisite (Biggs ECE & Support Buildings?)	COPY RM, floor 1, map# 14	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
185	YES	Covington Multisite (Biggs ECE & Support Buildings?)	COPY RM, floor 1, map# 15	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
187	YES	Covington Multisite (Biggs ECE & Support Buildings?)	TELLER AREA, floor 1, map# 18	3	SSSMLTB-T82/8X11X2XXXXX	LTB-T821X-7/40	3124
188	YES	Covington Multisite (Biggs ECE & Support Buildings?)	TELLER AREA, floor 1, map# 19	2	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	3124
189	YES	Covington Multisite (Biggs ECE & Support Buildings?)	SAFE, floor 1, map# 20	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3124
190	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFFICE, floor 1, map# 21	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
192	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OPEN OFFICE, floor 1, map# 24	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
193	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OPEN OFFICE, floor 1, map# 25	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
195	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFFICE, floor 1, map# 28	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
196	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFFICE, floor 1, map# 29	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
198	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFFICE, floor 1, map# 32	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3124
201	YES	Covington Multisite (Biggs ECE & Support Buildings?)	KIT, floor 1, map# 35	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2055
203	YES	Covington Multisite (Biggs ECE & Support Buildings?)	LOBBY, floor 1, map# 37	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2704.1
204	YES	Covington Multisite (Biggs ECE & Support Buildings?)	LOBBY, floor 1, map# 38	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2704.1
209	YES	Covington Multisite (Biggs ECE & Support Buildings?)	FLATS BLDG, floor 3, map# 44	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3124
213	YES	Covington Multisite (Biggs ECE & Support Buildings?)		2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3124
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215	YES	Covington Multisite (Biggs ECE & Support Buildings?)	FLATS BLDG, floor 2, map# 50	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3124
218	YES	Covington Multisite (Biggs ECE & Support Buildings?)	FLATS BLDG, floor 2, map# 53	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3124
225	YES	Covington Multisite (Biggs ECE & Support Buildings?)	RR, floor 1ST, map# 2	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
226	YES	Covington Multisite (Biggs ECE & Support Buildings?)	MECH, floor 1, map# 3	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
227	YES	Covington Multisite (Biggs ECE & Support Buildings?)	KIT, floor 1, map# 4	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2055
228	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF 1-2, floor 1, map# 5	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3124
229	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OPEN AREA, floor 1, map# 6	11	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
238	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OPEN OFF, floor upper bldg, map# 4	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
240	YES	Covington Multisite (Biggs ECE & Support Buildings?)	HALL, floor 1, map# 7	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2704.1
242	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF 1, floor 1, map# 10	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
243	YES	Covington Multisite (Biggs ECE & Support Buildings?)	COPY 2, floor 1, map# 12	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
244	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF 3 4, floor 1, map# 14	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
245	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF 3 4, floor 1, map# 16	2	TRXLTB-T82/8X32X2XXXXX	LTB-T823X-7/40	3124
246	YES	Covington Multisite (Biggs ECE & Support Buildings?)	6 KIT, floor 1, map# 17	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2055
248	YES	Covington Multisite (Biggs ECE & Support Buildings?)	LOUNGE, floor 1, map# 19	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
250	YES	Covington Multisite (Biggs ECE & Support Buildings?)	EXIT HALL, floor 1, map# 22	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3863
251	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF 9, floor 1, map# 23	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3124
252	YES	Covington Multisite (Biggs ECE & Support Buildings?)		12	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
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254	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF 7, floor 1, map# 27	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
255	YES	Covington Multisite (Biggs ECE & Support Buildings?)	RR, floor 1, map# 29	1	TRXLTB-T82/8X32X2XXXXX	LTB-T823X-7/40	2284
256	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF 5, floor 1, map# 30	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
258	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF 4, floor 1, map# 33	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
259	YES	Covington Multisite (Biggs ECE & Support Buildings?)	BETTY OFF, floor 1, map# 35	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3124
260	YES	Covington Multisite (Biggs ECE & Support Buildings?)	BETTY OFF, floor 1, map# 36	2	TRXLTB-T82/8X32X2XXXXX	LTB-T823X-7/40	3124
262	YES	Covington Multisite (Biggs ECE & Support Buildings?)	RR LOBBY, floor 1, map# 38	2	TRXLTB-T82/8X32X2XXXXX	LTB-T823X-7/40	2284
263	YES	Covington Multisite (Biggs ECE & Support Buildings?)	HALL, floor 1, map# 39	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2704.1
265	YES	Covington Multisite (Biggs ECE & Support Buildings?)	STOR 13, floor 1, map# 42	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
269	YES	Covington Multisite (Biggs ECE & Support Buildings?)	BIO HAZ, floor 1, map# 46	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
271	YES	Covington Multisite (Biggs ECE & Support Buildings?)	KIT, floor 1, map# 48	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2055
272	YES	Covington Multisite (Biggs ECE & Support Buildings?)	COPY , floor 1, map# 49	1	TRXLTB-T82/8X32X2XXXXX	LTB-T823X-7/40	3124
273	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF 12, floor 1, map# 50	1	SSSMLTB-T82/8X21X2XXXXX	LTB-T822X-7/40	3124
274	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF 14, floor 1, map# 51	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3124
275	YES	Covington Multisite (Biggs ECE & Support Buildings?)	OFF 15, floor 1, map# 52	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3124
276	YES	Covington Multisite (Biggs ECE & Support Buildings?)	TUNNEL, floor 1, map# 53	5	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2704.1
278	YES	Covington Multisite (Biggs ECE & Support Buildings?)	CLASS RM, floor lower bld, map# 56	8	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
282	YES	Covington Multisite (Biggs ECE & Support Buildings?)		8	TRXLTB-T82/8X32X2XXXXX	LTB-T823X-7/40	2704.1
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284	YES	Covington Multisite (Biggs ECE & Support Buildings?)	KIT, floor 1, map# 63	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2055
285	YES	Covington Multisite (Biggs ECE & Support Buildings?)	KIT, floor 1, map# 64	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2055
287	YES	Covington Multisite (Biggs ECE & Support Buildings?)	RR, floor 1, map# 66	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1598.8
289	YES	Covington Multisite (Biggs ECE & Support Buildings?)	RR, floor 1, map# 69	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1598.8
291	YES	Covington Multisite (Biggs ECE & Support Buildings?)	RM 5, floor 1, map# 72	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
295	YES	Covington Multisite (Biggs ECE & Support Buildings?)	10, floor 1, map# 77	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
297	YES	Covington Multisite (Biggs ECE & Support Buildings?)	9, floor 1, map# 79	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
298	YES	Covington Multisite (Biggs ECE & Support Buildings?)	8 COMP RM, floor , map# 81	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
301	YES	Glen O. Swing Elementary	BASEMENT, floor , map# 2	10	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
304	YES	Glen O. Swing Elementary	STAIRS, floor , map# 5	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3094
306	YES	Glen O. Swing Elementary	STAGE, floor , map# 7	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
310	YES	Glen O. Swing Elementary	GIRLS/BOYS, floor , map# 11	10	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1295
313	YES	Glen O. Swing Elementary	JANITOR, floor , map# 14	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
314	YES	Glen O. Swing Elementary	NURSE, floor , map# 15	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
315	YES	Glen O. Swing Elementary	NURSE, floor , map# 16	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
316	YES	Glen O. Swing Elementary	RESTROOM, floor , map# 18	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
317	YES	Glen O. Swing Elementary	2, floor , map# 19	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
319	YES	Glen O. Swing Elementary	1-26 EXCEPT FOR 2, floor , map# 21	225	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
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322	YES	Glen O. Swing Elementary	COMPUTER LAB, floor , map# 24	16	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
324	YES	Glen O. Swing Elementary	LIBRARY, floor , map# 26	23	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1295
326	YES	Glen O. Swing Elementary	OFFICE, floor , map# 29	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
327	YES	Glen O. Swing Elementary	HALL, floor , map# 31	20	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2165.8
329	YES	Glen O. Swing Elementary	GIRLS/BOYS, floor , map# 34	10	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1295
332	YES	Glen O. Swing Elementary	JANITOR, floor , map# 37	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
333	YES	Glen O. Swing Elementary	MECHANICAL, floor , map# 38	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
334	YES	Glen O. Swing Elementary	HALLWAY, floor , map# 39	13	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3094
336	YES	Glen O. Swing Elementary	CUSTODIAL, floor , map# 41	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
338	YES	Glen O. Swing Elementary	HALLWAY, floor , map# 43	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2165.8
340	YES	Glen O. Swing Elementary	MECHANICAL, floor , map# 46	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
342	YES	Glen O. Swing Elementary	KITCHEN OFFICES, floor , map# 48	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
345	YES	Glen O. Swing Elementary	KITCHEN , floor , map# 52	19	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
348	YES	Glen O. Swing Elementary	DRY STORAGE, floor , map# 55	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
351	YES	Glen O. Swing Elementary	SERVICE LINE, floor , map# 58	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
354	YES	Glen O. Swing Elementary	DISHWASHER, floor , map# 61	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
355	YES	Glen O. Swing Elementary	OFFICE, floor , map# 63	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
356	YES	Glen O. Swing Elementary	CAFETERIA, floor , map# 65	36	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2165.8
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358	YES	Glen O. Swing Elementary	STORAGE, floor , map# 68	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
359	YES	Glen O. Swing Elementary	CONFERENCE, floor , map# 69	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
360	YES	Glen O. Swing Elementary	OFFICE, floor , map# 71	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
362	YES	Glen O. Swing Elementary	OFFICE, floor , map# 74	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2502
363	YES	Glen O. Swing Elementary	PRINTER ROOM, floor , map# 75	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
364	YES	Glen O. Swing Elementary	OFFICE, floor , map# 77	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
365	YES	Glen O. Swing Elementary	SPEECH, floor , map# 79	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
367	YES	Glen O. Swing Elementary	HALLWAY, floor , map# 81	11	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2165.8
369	YES	Glen O. Swing Elementary	HALLWAY, floor , map# 84	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2165.8
381	YES	Adminstration Building	HALLWAY, floor 3, map# 1	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2704.1
385	YES	Adminstration Building	RESTROOM, floor 3, map# 5	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
386	YES	Adminstration Building	RESTROOM, floor 3, map# 6	1	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	2284
387	YES	Adminstration Building	2305/2307, floor 3, map# 7	18	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
390	YES	Adminstration Building	2303/2302/LOUNGE, floor 3, map# 10	18	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
391	YES	Adminstration Building	2303/2302/LOUNGE, floor 3, map# 11	9	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
394	YES	Adminstration Building	HALLWAY, floor 3, map# 14	6	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2704.1
395	YES	Adminstration Building	HALLWAY, floor 3, map# 15	1	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	2704.1
397	YES	Adminstration Building	ELEVATOR, floor EL, map# 17	2	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	8760
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398	YES	Adminstration Building	STAIRWAY, floor 3, map# 18	10	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2704.1
400	YES	Adminstration Building	STAIRWAY, floor 3, map# 20	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
401	YES	Adminstration Building	2300, floor 3, map# 21	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
402	YES	Adminstration Building	2300, floor 3, map# 22	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
406	YES	Adminstration Building	YEARBOOK ROOM, floor 3, map# 26	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
407	YES	Adminstration Building	YEARBOOK ROOM, floor 3, map# 27	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
409	YES	Adminstration Building	HALLWAY, floor 2, map# 30	10	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2704.1
413	YES	Adminstration Building	HALLWAY, floor 2, map# 34	26	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	2704.1
414	YES	Adminstration Building	MEN, floor 2, map# 35	3	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	2284
415	YES	Adminstration Building	2200, floor 2, map# 36	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
416	YES	Adminstration Building	2200, floor 2, map# 37	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
420	YES	Adminstration Building	2201, floor 2, map# 41	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
421	YES	Adminstration Building	2201, floor 2, map# 42	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
424	YES	Adminstration Building	2602, floor 2, map# 46	7	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
426	YES	Adminstration Building	WOMENS, floor 2, map# 48	3	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	2284
427	YES	Adminstration Building	LOUNGE, floor 2, map# 49	6	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	2187
430	YES	Adminstration Building	NURSE, floor 2, map# 50	9	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	2187
431	YES	Adminstration Building	NURSE, floor 2, map# 51	5	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2187
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432	YES	Adminstration Building	2203, floor 2, map# 52	10	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1599
435	YES	Adminstration Building	HALLWAY, floor 1, map#55	12	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2704.1
438	YES	Adminstration Building	HALLWAY, floor 1, map# 58	5	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2704.1
439	YES	Adminstration Building	HALLWAY, floor 1, map# 59	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2704.1
440	YES	Adminstration Building	HALLWAY, floor 1, map# 60	1	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	2704.1
441	YES	Adminstration Building	FOOD SERVICE, floor 1, map# 61	10	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1599
442	YES	Adminstration Building	FOOD SERVICE, floor 1, map# 62	1	SSSMLTB-T82/8X41X2XXXXX	LTB-T824X-7/40	1599
443	YES	Adminstration Building	FOOD SERVICE, floor 1, map# 63	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1599
444	YES	Adminstration Building	FOOD SERVICE, floor 1, map# 64	6	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1599
445	YES	Adminstration Building	KITCHEN, floor 1, map# 65	30	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1599
449	YES	Adminstration Building	OFFICE, floor 1, map# 69	2	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	2187
450	YES	Adminstration Building	DRY STORAGE, floor 1, map# 70	2	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	546
451	YES	Adminstration Building	KITCHEN STAIRS, floor 1, map# 71	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3863
453	YES	Adminstration Building	CAFETERIA, floor 1, map# 73	6	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2704
454	YES	Adminstration Building	CAFETERIA, floor 1, map# 74	26	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2704
455	YES	Adminstration Building	2100/2102, floor 1, map# 75	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2187
456	YES	Adminstration Building	2100/2102, floor 1, map# 76	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2187
457	YES	Adminstration Building	2100/2102, floor 1, map# 77	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
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458	YES	Adminstration Building	ENTRY, floor 1, map# 78	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
460	YES	Adminstration Building	RESTROOM, floor 1, map# 80	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1598
461	YES	Adminstration Building	JANITOR, floor 1, map# 81	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	546
463	YES	Adminstration Building	STORAGE, floor 1, map# 83	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	546
464	YES	Adminstration Building	HALLWAY, floor 1, map# 84	24	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	2704.1
468	YES	Adminstration Building	HALLWAY, floor 1, map# 88	5	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	2704.1
469	YES	Adminstration Building	HALLWAY, floor LL, map# 89	21	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2704.1
471	YES	Adminstration Building	HALLWAY, floor LL, map# 91	14	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2704.1
474	YES	Adminstration Building	BOOKROOM STORAGE, floor LL, map# 94	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
475	YES	Adminstration Building	BOOKROOM STORAGE, floor LL, map# 95	5	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
476	YES	Adminstration Building	RESTROOM, floor LL, map# 96	3	TRXLTB-T82/8X32X2XXXXX	LTB-T823X-7/40	2284
477	YES	Adminstration Building	2000, floor LL, map# 97	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
478	YES	Adminstration Building	2000, floor LL, map# 98	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
481	YES	Adminstration Building	2000 STORAGE, floor LL, map# 101	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
482	YES	Adminstration Building	2000 STORAGE, floor LL, map# 102	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
483	YES	Adminstration Building	2001, floor LL, map# 103	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
484	YES	Adminstration Building	2001, floor LL, map# 104	6	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
485	YES	Adminstration Building	2001, floor LL, map# 105	8	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
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489	YES	Adminstration Building	2004, floor LL, map# 109	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
490	YES	Adminstration Building	2004, floor LL, map# 110	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
491	YES	Adminstration Building	2004, floor LL, map# 111	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
494	YES	Adminstration Building	2003, floor LL, map# 114	8	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
497	YES	Adminstration Building	2003, floor LL, map# 117	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
498	YES	Adminstration Building	2001 MAINTENANCE, floor LL, map# 118	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
499	YES	Adminstration Building	2001 MAINTENANCE, floor LL, map# 119	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
500	YES	Adminstration Building	2001 MAINTENANCE, floor LL, map# 120	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
503	YES	Adminstration Building	2005, floor LL, map# 123	6	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
505	YES	Adminstration Building	2006, floor LL, map# 125	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
506	YES	Adminstration Building	RESOURCE OFFICER, floor LL, map# 127	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
507	YES	Chapman Vocational Education Center	HALLWAY, floor 3, map# 1	18	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2704.1
510	YES	Chapman Vocational Education Center	5316, floor 3, map# 5	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
511	YES	Chapman Vocational Education Center	5316, floor 3, map# 6	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
512	YES	Chapman Vocational Education Center	5316, floor 3, map# 7	5	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
516	YES	Chapman Vocational Education Center	5318, floor 3, map# 11	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
518	YES	Chapman Vocational Education Center	MEN/WOMEN, floor 3, map# 13	6	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1598.8
520	YES	Chapman Vocational Education Center	5328, floor 3, map# 16	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
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521	YES	Chapman Vocational Education Center	5328, floor 3, map# 17	12	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
522	YES	Chapman Vocational Education Center	5328, floor 3, map# 18	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
526	YES	Chapman Vocational Education Center	5330, floor 3, map# 22	10	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
528	YES	Chapman Vocational Education Center	5332 LAB, floor 3, map# 24	4	SSSMLTB-T82/8X21X2XXXXX	LTB-T822X-7/40	2284
529	YES	Chapman Vocational Education Center	5332 LAB, floor 3, map# 25	16	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
533	YES	Chapman Vocational Education Center	5341, floor 3, map# 29	48	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
534	YES	Chapman Vocational Education Center	5341, floor 3, map# 30	9	SSSMLTB-T82/8X21X2XXXXX	LTB-T822X-7/40	2284
540	YES	Chapman Vocational Education Center	5324, floor 3, map# 36	25	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
543	YES	Chapman Vocational Education Center	OFFICE, floor 3, map# 39	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
544	YES	Chapman Vocational Education Center	5322, floor 3, map# 41	10	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
547	YES	Chapman Vocational Education Center	OFFICE, floor 3, map# 44	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
548	YES	Chapman Vocational Education Center	5321, floor 3, map# 45	12	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
551	YES	Chapman Vocational Education Center	OFFICE, floor 3, map# 48	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
552	YES	Chapman Vocational Education Center	OFFICE, floor 3, map# 50	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
553	YES	Chapman Vocational Education Center	ELEVATOR, floor EL, map# 52	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	8760
554	YES	Chapman Vocational Education Center	CLOSET, floor 3, map# 53	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
556	YES	Chapman Vocational Education Center	HALLWAY, floor 3, map# 55	5	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
557	YES	Chapman Vocational Education Center	STAIRWAY, floor 3, map# 56	11	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
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558	YES	Chapman Vocational Education Center	STAIRWAY, floor 3, map# 57	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
559	YES	Chapman Vocational Education Center	HALLWAY, floor 3, map# 58	14	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2704.1
561	YES	Chapman Vocational Education Center	MAIN OFFICE, floor 3, map# 61	8	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
562	YES	Chapman Vocational Education Center	MAIN OFFICE, floor 3, map# 62	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
564	YES	Chapman Vocational Education Center	OFFICE, floor 3, map# 65	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
565	YES	Chapman Vocational Education Center	OFFICE, floor 3, map# 66	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
566	YES	Chapman Vocational Education Center	ASST PRINCIPAL, floor 3, map# 68	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
567	YES	Chapman Vocational Education Center	BREAK AREA, floor 3, map# 70	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2704.1
569	YES	Chapman Vocational Education Center	OFFICE, floor 3, map# 72	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
570	YES	Chapman Vocational Education Center	MEN/WOMEN, floor 3, map# 74	6	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1599
571	YES	Chapman Vocational Education Center	STAFF RESTROOMS, floor 3, map# 75	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
572	YES	Chapman Vocational Education Center	JANITOR, floor 3, map# 76	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
573	YES	Chapman Vocational Education Center	5210, floor 3, map# 77	8	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
577	YES	Chapman Vocational Education Center	5236, floor 3, map# 81	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
578	YES	Chapman Vocational Education Center	5236, floor 3, map# 82	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
581	YES	Chapman Vocational Education Center	SUPPLY, floor 3, map# 85	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
582	YES	Chapman Vocational Education Center	SUPPLY, floor 3, map# 86	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
583	YES	Chapman Vocational Education Center	OFFICE, floor 3, map# 87	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
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585	YES	Chapman Vocational Education Center	STAIRS, floor 3, map# 90	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
590	YES	Chapman Vocational Education Center	OFFICE, floor 3, map# 95	7	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
591	YES	Chapman Vocational Education Center	5223, floor 3, map# 97	7	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
592	YES	Chapman Vocational Education Center	B PRACTICE, floor 3, map# 98	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
593	YES	Chapman Vocational Education Center	OFFICE, floor 3, map# 100	15	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
594	YES	Chapman Vocational Education Center	OFFICE, floor 3, map# 101	16	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
595	YES	Chapman Vocational Education Center	TROPHY CASE, floor 2, map# 102	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3863
596	YES	Chapman Vocational Education Center	5221, floor 2, map# 103	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
597	YES	Chapman Vocational Education Center	5221, floor 2, map# 104	7	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
599	YES	Chapman Vocational Education Center	5221, floor 2, map# 106	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
600	YES	Chapman Vocational Education Center	5221, floor 2, map# 107	6	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	2284
602	YES	Chapman Vocational Education Center	HALLWAY, floor 2, map# 109	16	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2704.1
604	YES	Chapman Vocational Education Center	CUSTODIAL, floor 2, map# 112	5	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
605	YES	Chapman Vocational Education Center	BOYS/GIRLS, floor 2, map# 113	10	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
606	YES	Chapman Vocational Education Center	5119, floor 2, map# 114	8	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
608	YES	Chapman Vocational Education Center	5123, floor 2, map# 116	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
611	YES	Chapman Vocational Education Center	5123, floor 2, map# 119	5	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
612	YES	Chapman Vocational Education Center	5123, floor 2, map# 120	7	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
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615	YES	Chapman Vocational Education Center	STORAGE, floor 2, map# 123	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
617	YES	Chapman Vocational Education Center	5120, floor 2, map# 125	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
618	YES	Chapman Vocational Education Center	5120, floor 2, map# 126	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
624	YES	Chapman Vocational Education Center	5112, floor 2, map# 132	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
627	YES	Chapman Vocational Education Center	TOOL ROOM, floor 2, map# 135	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
628	YES	Chapman Vocational Education Center	5108, floor 2, map# 136	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
630	YES	Chapman Vocational Education Center	5108, floor 2, map# 138	12	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
631	YES	Chapman Vocational Education Center	5108, floor 2, map# 139	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
632	YES	Chapman Vocational Education Center	5108, floor 2, map# 140	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
635	YES	Science Building & Fieldhouse	STAIRWAY, floor 3, map# 1	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
636	YES	Science Building & Fieldhouse	STAIRWAY, floor , map# 2	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
637	YES	Science Building & Fieldhouse	HALLWAY, floor , map# 3	19	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2704
638	YES	Science Building & Fieldhouse	HALLWAY, floor , map# 4	3	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	2704
639	YES	Science Building & Fieldhouse	LIBRARY, floor , map# 5	60	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2187
640	YES	Science Building & Fieldhouse	LIBRARY, floor , map# 6	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2187
642	YES	Science Building & Fieldhouse	TROPHY CASE, floor , map# 8	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
643	YES	Science Building & Fieldhouse	ELEVATOR, floor , map# 9	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	8760
644	YES	Science Building & Fieldhouse	BOYS/GIRLS, floor , map# 10	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
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645	YES	Science Building & Fieldhouse	BOYS/GIRLS, floor , map# 11	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
646	YES	Science Building & Fieldhouse	LOBBY, floor , map# 12	8	SSSMLTB-T82/8X21X2XXXXX	LTB-T822X-7/40	3863
648	YES	Science Building & Fieldhouse	HALLWAY, floor , map# 14	8	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2704.1
652	YES	Science Building & Fieldhouse	4303, floor , map# 18	8	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1598.8
655	YES	Science Building & Fieldhouse	STAIRWAY, floor , map# 21	9	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
656	YES	Science Building & Fieldhouse	ENTRY, floor , map# 22	15	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3863
658	YES	Science Building & Fieldhouse	TROPHY CASE, floor , map# 25	5	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	3863
659	YES	Science Building & Fieldhouse	OFFICE, floor , map# 26	2	TRXLTB-T82/8X32X2XXXXX	LTB-T823X-7/40	2186.8
660	YES	Science Building & Fieldhouse	RESTROOMS, floor , map# 28	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1598.8
661	YES	Science Building & Fieldhouse	RESTROOMS, floor , map# 29	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1598.8
664	YES	Science Building & Fieldhouse	4201/4202/4203, floor , map# 32	39	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	2284
667	YES	Science Building & Fieldhouse	CONNECTOR ROOM, floor , map# 35	1	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	780
669	YES	Science Building & Fieldhouse	CLOSETS, floor , map# 37	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
670	YES	Science Building & Fieldhouse	4200, floor , map# 38	17	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	2284
673	YES	Science Building & Fieldhouse	4202, floor , map# 41	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
674	YES	Science Building & Fieldhouse	HALLWAY, floor , map# 42	9	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2704.1
676	YES	Science Building & Fieldhouse	HALLWAY, floor , map# 45	6	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2704.1
678	YES	Science Building & Fieldhouse	4100/4101, floor , map# 48	32	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	2284
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681	YES	Science Building & Fieldhouse	CONNECTOR ROOM, floor , map# 51	3	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	780
683	YES	Science Building & Fieldhouse	CLOSETS, floor , map# 53	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
685	YES	Science Building & Fieldhouse	STAFF RESTROOM, floor , map# 55	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
686	YES	Science Building & Fieldhouse	4102, floor , map# 56	12	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	2284
689	YES	Science Building & Fieldhouse	4103, floor , map# 59	6	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	2284
691	YES	Science Building & Fieldhouse	LOBBY, floor , map# 61	15	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	2704.1
692	YES	Science Building & Fieldhouse	LOBBY, floor , map# 62	6	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	2704.1
694	YES	Science Building & Fieldhouse	TROPHY CASE, floor , map# 65	8	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
695	YES	Science Building & Fieldhouse	JANITOR, floor , map# 66	1	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	780
696	YES	Science Building & Fieldhouse	MENS/WOMENS, floor , map# 67	6	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1598.8
697	YES	Science Building & Fieldhouse	MENS/WOMENS, floor , map# 68	4	SSSMLTB-T82/8X21X2XXXXX	LTB-T822X-7/40	1598.8
699	YES	Science Building & Fieldhouse	CONCESSION, floor , map# 71	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2284
701	YES	Science Building & Fieldhouse	MECHANICAL, floor , map# 73	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
702	YES	Science Building & Fieldhouse	HARTMAN CENTER, floor , map# 74	14	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	2186.8
705	YES	Science Building & Fieldhouse	STORAGE, floor , map# 78	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
707	YES	Science Building & Fieldhouse	HALLWAY, floor , map# 80	7	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
709	YES	Science Building & Fieldhouse	TROPHY CASE, floor , map# 83	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
710	YES	Science Building & Fieldhouse	STAIRWAY, floor , map# 84	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
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711	YES	Science Building & Fieldhouse	HALLWAY, floor , map# 85	9	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
717	YES	Science Building & Fieldhouse	OFFICIAL LOCKER ROOM, floor , map# 91	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1610
719	YES	Science Building & Fieldhouse	PE OFFICE, floor , map# 94	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
720	YES	Science Building & Fieldhouse	VISITOR LOCKER ROOM, floor , map# 96	11	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1610
721	YES	Science Building & Fieldhouse	VISITOR LOCKER ROOM, floor , map# 97	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2300
722	YES	Science Building & Fieldhouse	VISITOR LOCKER ROOM, floor , map# 98	1	SSSMLTB-T82/8X21X2XXXXX	LTB-T822X-7/40	2300
725	YES	Science Building & Fieldhouse	EQUIPMENT ROOM, floor , map# 102	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
727	YES	Science Building & Fieldhouse	OFFICE, floor , map# 104	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
729	YES	Science Building & Fieldhouse	SOCCER ROOM, floor , map# 107	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
731	YES	Science Building & Fieldhouse	CLOSETS, floor , map# 109	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
732	YES	Science Building & Fieldhouse	OFFICE, floor , map# 110	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
733	YES	Science Building & Fieldhouse	BASKETBALL, floor , map# 112	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
734	YES	Science Building & Fieldhouse	TRAINING, floor , map# 114	9	SSSMLTB-T82/8X21X2XXXXX	LTB-T822X-7/40	1610
735	YES	Science Building & Fieldhouse	HALLWAY, floor , map# 116	3	SSSMLTB-T82/8X21X2XXXXX	LTB-T822X-7/40	2704.1
736	YES	Science Building & Fieldhouse	HALLWAY, floor , map# 117	9	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
738	YES	Science Building & Fieldhouse	LOCKER ROOM, floor , map# 120	8	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1610
740	YES	Science Building & Fieldhouse	LOCKER ROOM, floor , map# 123	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2300
741	YES	Science Building & Fieldhouse	LOCKER ROOM, floor , map# 124	6	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1610

744	YES	Science Building & Fieldhouse	LOCKER ROOM, floor , map# 127	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1610
745	YES	Science Building & Fieldhouse	VOLLEYBALL, floor , map# 128	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
747	YES	Science Building & Fieldhouse	LAUNDRY, floor , map# 131	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
748	YES	Science Building & Fieldhouse	LAUNDRY, floor , map# 132	6	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
749	YES	Science Building & Fieldhouse	LOCKER ROOM, floor , map# 134	9	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1610
752	YES	Science Building & Fieldhouse	COACH OFFICE, floor , map# 137	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
753	YES	Science Building & Fieldhouse	EQUIPMENT ROOM, floor , map# 139	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
754	YES	Science Building & Fieldhouse	SHOWER, floor , map# 140	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1610
756	YES	Science Building & Fieldhouse	STAIRWAY, floor , map# 143	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
757	YES	Science Building & Fieldhouse	STAIRWAY, floor , map# 144	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
758	YES	Science Building & Fieldhouse	HALLWAY, floor , map# 145	11	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2704.1
760	YES	Science Building & Fieldhouse	TROPHY CASE, floor , map# 148	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
761	YES	Science Building & Fieldhouse	TICKET BOOTH, floor , map# 149	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
768	YES	Science Building & Fieldhouse	PRACTICE ROOM, floor , map# 157	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
769	YES	Science Building & Fieldhouse	PRACTICE ROOM, floor , map# 158	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
771	YES	Science Building & Fieldhouse	STAIRWAY, floor , map# 161	8	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
773	YES	Science Building & Fieldhouse	FIELD HOUSE, floor , map# 163	20	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3500
776	YES	Holmes High School	STAIRS, floor 3, map# 1	18	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3863
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779	YES	Holmes High School	HALL, floor 3, map# 4	11	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2704.1
783	YES	Holmes High School	3302, floor 3, map# 9	6	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
784	YES	Holmes High School	3302, floor 3, map# 10	2	SSSMLTB-T84/15X21X4XXXXX	LTB-T842X-14.5/40	1598.8
787	YES	Holmes High School	3304 3308 3327 , floor 3, map# 13	18	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
790	YES	Holmes High School	3306, floor 3, map# 16	4	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
793	YES	Holmes High School	COPY RM, floor 3, map# 20	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
797	YES	Holmes High School	3312 3314 , floor 3, map# 24	12	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
801	YES	Holmes High School	3318 3322 3323, floor 3, map# 28	24	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
804	YES	Holmes High School	3326, floor 3, map# 31	3	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2186.8
805	YES	Holmes High School	3326, floor 3, map# 33	1	SSSMLTB-T84/15X21X4XXXXX	LTB-T842X-14.5/40	3124
807	YES	Holmes High School	M/RR, floor 3, map# 35	8	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
808	YES	Holmes High School	KILN, floor 3, map# 36	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	546
810	YES	Holmes High School	ELEV ENTRY, floor 3, map# 38	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
811	YES	Holmes High School	ELEV , floor 3, map# 39	3	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	8760
812	YES	Holmes High School	3309, floor 3, map# 40	21	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
822	YES	Holmes High School	PROJ RM, floor 3, map# 50	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3124
823	YES	Holmes High School	3202 3224 3227, floor 2ND, map# 51	24	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
826	YES	Holmes High School	3204 3206 3208 3216 3222, floor 2, map# 54	20	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
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827	YES	Holmes High School	3204 3206 3208 3216 3222, floor 2, map# 55	10	SSSMLTB-T84/15X21X4XXXXX	LTB-T842X-14.5/40	1598.8
830	YES	Holmes High School	3210, floor 2, map# 58	6	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
833	YES	Holmes High School	3212 3214 3218 3220, floor 2, map# 61	20	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
836	YES	Holmes High School	3223, floor 2, map# 64	8	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
837	YES	Holmes High School	3223, floor 2, map# 65	2	SSSMLTB-T84/15X21X4XXXXX	LTB-T842X-14.5/40	1598.8
842	YES	Holmes High School	RR, floor 2, map# 70	8	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
843	YES	Holmes High School	RR, floor 2, map# 71	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1598.8
844	YES	Holmes High School	ELEV HALL, floor 2, map# 73	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
845	YES	Holmes High School	3217, floor 2, map# 74	13	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
848	YES	Holmes High School	BACK RM, floor 2, map# 77	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1598.8
850	YES	Holmes High School	COMP RM, floor 2, map# 79	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1598.8
853	YES	Holmes High School	OFFICE, floor 2, map# 82	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
854	YES	Holmes High School	3213, floor 2, map# 84	6	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
857	YES	Holmes High School	3211, floor 2, map# 87	12	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
858	YES	Holmes High School	3211, floor 2, map# 88	4	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
861	YES	Holmes High School	HALL, floor 2, map# 91	13	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2704.1
864	YES	Holmes High School	HALL, floor 2, map# 94	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3863
866	YES	Holmes High School	HALL, floor 1ST, map# 97	13	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2704.1

878	YES	Holmes High School	RR, floor 1, map# 110	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
879	YES	Holmes High School	RR, floor 1, map# 111	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
882	YES	Holmes High School	ELEV HALL, floor 1, map# 114	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
883	YES	Holmes High School	RR, floor 1, map# 115	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
884	YES	Holmes High School	3121 3120, floor 1, map# 116	12	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
885	YES	Holmes High School	3121 3120, floor 1, map# 117	4	SSSMLTB-T84/15X21X4XXXXX	LTB-T842X-14.5/40	1598.8
888	YES	Holmes High School	3119, floor 1, map# 120	9	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
889	YES	Holmes High School	3119, floor 1, map# 121	3	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
893	YES	Holmes High School	OFFICE, floor 1, map# 125	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3124
894	YES	Holmes High School	ADMIN OFFICES, floor 1, map# 126	11	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2187
895	YES	Holmes High School	ADMIN OFFICES, floor 1, map# 127	5	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2187
896	YES	Holmes High School	ADMIN OFFICES, floor 1, map# 128	6	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2187
897	YES	Holmes High School	ADMIN OFFICES, floor 1, map# 129	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2187
898	YES	Holmes High School	ADMIN OFFICES, floor 1, map# 130	6	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	2187
899	YES	Holmes High School	FOYER, floor 1, map# 131	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2187
900	YES	Holmes High School	3108, floor 1, map# 132	4	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
903	YES	Holmes High School	3106, floor 1, map# 135	4	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1598.8
904	YES	Holmes High School	3106, floor 1, map# 136	2	SSSMLTB-T84/15X21X4XXXXX	LTB-T842X-14.5/40	1598.8
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907	YES	Holmes High School	NORDHEIM GALLERY, floor 1, map# 139	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2186.8
910	YES	Holmes High School	LINCOLN RM, floor 1, map# 143	4	TRXLTB-T82/8X32X2XXXXX	LTB-T823X-7/40	3124
911	YES	Holmes High School	3102, floor 1, map# 144	8	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2186.8
914	YES	Holmes High School	MECH OFFICE, floor B, map# 149	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2186.8
915	YES	Holmes High School	STAIRS, floor B, map# 151	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
916	YES	Holmes High School	MECH AREA, floor B, map# 152	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
918	YES	Holmes High School	MECH AREA, floor B, map# 154	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
919	YES	Holmes High School	MECH AREA, floor B, map# 155	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
920	YES	Holmes High School	MECH AREA, floor B, map# 156	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
923	YES	Holmes High School	STAIR TO SENIOR GYM, floor B, map# 159	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
924	YES	Holmes High School	STAIR TO SENIOR GYM, floor B, map# 160	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
926	YES	Holmes High School	LOCKERS /STOR, floor B, map# 162	9	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2300
927	YES	Holmes High School	LOCKERS /STOR, floor B, map# 163	10	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2300
931	YES	Holmes High School	WGHT RM, floor B, map# 167	10	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2300
933	YES	Holmes High School	WGHT RM, floor B, map# 169	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2300
935	YES	Holmes High School	WGHT RM, floor B, map# 171	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2300
939	YES	Holmes High School	HALL, floor B, map# 175	1	SSSMLTB-T82/8X21X2XXXXX	LTB-T822X-7/40	3863
940	YES	Holmes High School	ELEV HALL, floor B, map# 176	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863

941	YES	Holmes High School	ELEV HALL, floor B, map# 177	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
943	YES	Holmes High School	WATER CLOSET, floor B, map# 179	1	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	780
944	YES	Holmes High School	RR, floor B, map# 180	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2284
945	YES	Holmes High School	COACH OFFICE, floor , map# 181	5	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3124
946	YES	Holmes High School	ENTRY, floor , map# 182	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3863
949	YES	Holmes High School	GARAGE, floor , map# 185	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
951	YES	Holmes High School	HALL, floor , map# 187	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3863
952	YES	Holmes High School	HALL, floor , map# 188	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3863
955	YES	Holmes High School	LOCKERS, floor , map# 191	7	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2300
957	YES	Holmes High School	LOCKERS, floor , map# 193	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2300
958	YES	Holmes High School	LOCKERS, floor , map# 194	8	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1610
970	YES	Holmes High School	ENTRY VOC BLD, floor , map# 10	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	4380
975	YES	Holmes Middle School	CAFETERIA ENTRY, floor 2ND, map# 1	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2406.6
978	YES	Holmes Middle School	STOR LK, floor 2, map# 4	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
979	YES	Holmes Middle School	STOR LK, floor 2, map# 5	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
980	YES	Holmes Middle School	SERV AREA, floor 2, map# 6	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2055
982	YES	Holmes Middle School	CAFETERIA , floor 2, map# 8	20	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1461.6
983	YES	Holmes Middle School	CAFETERIA, floor 2, map# 9	5	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1461.6
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985	YES	Holmes Middle School	1324 1326, floor 3RD, map# 12	12	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
988	YES	Holmes Middle School	1328, floor 3, map# 15	8	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
989	YES	Holmes Middle School	STAIR, floor 3, map# 16	1	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	3438
991	YES	Holmes Middle School	STAIR, floor 3, map# 18	5	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	3438
992	YES	Holmes Middle School	RR, floor 3, map# 19	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	205
993	YES	Holmes Middle School	RR, floor 3, map# 20	9	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2055
995	YES	Holmes Middle School	RR, floor 3, map# 22	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2055
997	YES	Holmes Middle School	STAIR, floor 3, map# 24	5	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3438
998	YES	Holmes Middle School	1302, floor 3, map# 25	6	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
1001	YES	Holmes Middle School	1304 1306 1310, floor 3, map# 28	12	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
1002	YES	Holmes Middle School	1304 1306 1310, floor 3, map# 29	6	SSSMLTB-T84/15X21X4XXXXX	LTB-T842X-14.5/40	2055
1005	YES	Holmes Middle School	STAIR, floor 3, map# 32	8	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3438
1007	YES	Holmes Middle School	1308 1312 1314, floor 3, map# 34	18	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
1010	YES	Holmes Middle School	STAIR, floor 3, map# 37	12	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3438
1012	YES	Holmes Middle School	STAIR, floor 3, map# 39	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3438
1013	YES	Holmes Middle School	STAIR, floor 3, map# 40	1	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	3438
1014	YES	Holmes Middle School	STAIR, floor 3, map# 41	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3438
1015	YES	Holmes Middle School	STAIR, floor 3, map# 42	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3438
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1017	YES	Holmes Middle School	1318, floor 3, map# 44	8	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
1020	YES	Holmes Middle School	1320, floor 3, map# 47	7	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
1023	YES	Holmes Middle School	HALL, floor 3, map# 50	13	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2406.6
1026	YES	Holmes Middle School	HALL, floor 3, map# 53	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2406.6
1028	YES	Holmes Middle School	1316, floor 3, map# 56	10	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
1031	YES	Holmes Middle School	MEDIA RM, floor 2ND, map# 59	27	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2055
1034	YES	Holmes Middle School	RR, floor 2, map# 62	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2055
1035	YES	Holmes Middle School	RR, floor 2, map# 63	10	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2055
1037	YES	Holmes Middle School	JAN, floor 2, map# 65	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1038	YES	Holmes Middle School	1209 LK, floor 2, map# 66	20	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
1041	YES	Holmes Middle School	1228, floor 2, map# 69	8	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
1042	YES	Holmes Middle School	A 1226 1224 1220 1218 1216 1214 1212 1210, floor 2, map# 70	48	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
1045	YES	Holmes Middle School	B 1222 1208, floor 2, map# 73	12	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2055
1046	YES	Holmes Middle School	B 1222 1208, floor 2, map# 74	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2055
1049	YES	Holmes Middle School	HALL, floor 2, map# 77	10	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3438
1052	YES	Holmes Middle School	MAIN HALL, floor 1ST, map# 80	8	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2406.6
1053	YES	Holmes Middle School	MAIN HALL, floor 1, map# 81	10	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2406.6
1056	YES	Holmes Middle School	TROPHY CASE, floor 1, map# 85	8	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3438
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1057	YES	Holmes Middle School	1116, floor 1, map# 86	6	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
1060	YES	Holmes Middle School	C 1118 1120 1124 1126, floor 1, map# 89	24	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2055
1063	YES	Holmes Middle School	1122, floor 1, map# 92	6	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
1064	YES	Holmes Middle School	1122, floor 1, map# 93	2	SSSMLTB-T84/15X21X4XXXXX	LTB-T842X-14.5/40	2055
1067	YES	Holmes Middle School	1128, floor 1, map# 96	8	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
1068	YES	Holmes Middle School	RR, floor 1, map# 97	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2055
1069	YES	Holmes Middle School	RR, floor 1, map# 98	8	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1438.5
1073	YES	Holmes Middle School	D 1102 1104 1106, floor 1, map# 102	12	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2055
1074	YES	Holmes Middle School	D 1102 1104 1106, floor 1, map# 103	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2055
1077	YES	Holmes Middle School	1108 OFFICES, floor 1, map# 106	6	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	1946
1078	YES	Holmes Middle School	ADMIN AREA, floor 1, map# 107	6	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2780
1079	YES	Holmes Middle School	ADMIN AREA, floor 1, map# 108	11	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1946
1081	YES	Holmes Middle School	ADMIN AREA, floor 1, map# 110	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1946
1082	YES	Holmes Middle School	ADMIN AREA, floor 1, map# 111	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2780
1083	YES	Holmes Middle School	HALL, floor LL, map# 112	13	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3438
1086	YES	Holmes Middle School	HALL, floor LL, map# 115	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3438
1087	YES	Holmes Middle School	1016 1020, floor LL, map# 116	18	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
1091	YES	Holmes Middle School	1022, floor LL, map# 120	6	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
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1092	YES	Holmes Middle School	1022, floor LL, map# 121	2	SSSMLTB-T84/15X21X4XXXXX	LTB-T842X-14.5/40	2055
1099	YES	Holmes Middle School	HALL, floor LL, map# 128	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3438
1101	YES	Holmes Middle School	RR, floor LL, map# 130	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1438.5
1102	YES	Holmes Middle School	RR, floor LL, map# 131	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1438.5
1103	YES	Holmes Middle School	RR, floor LL, map# 132	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1438.5
1104	YES	Holmes Middle School	HALL, floor LL, map# 134	11	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3438
1106	YES	Holmes Middle School	HALL, floor LL, map# 136	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3438
1108	YES	Holmes Middle School	1005, floor LL, map# 138	11	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
1109	YES	Holmes Middle School	1005, floor LL, map# 139	1	SSSMLTB-T84/15X21X4XXXXX	LTB-T842X-14.5/40	2055
1112	YES	Holmes Middle School	1001, floor LL, map# 142	1	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
1113	YES	Holmes Middle School	1002 1008, floor LL, map# 143	12	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
1116	YES	Holmes Middle School	1006, floor LL, map# 146	7	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
1117	YES	Holmes Middle School	1006, floor LL, map# 147	2	SSSMLTB-T84/15X21X4XXXXX	LTB-T842X-14.5/40	2055
1121	YES	Holmes Middle School	1010 1012, floor LL, map# 151	18	SSSMLTB-T84/15X41X4XXXXX	LTB-T844X-14.5/40	2055
1122	YES	Holmes Middle School	1010 1012, floor LL, map# 152	2	SSSMLTB-T84/15X21X4XXXXX	LTB-T842X-14.5/40	2055
1136	YES	John G. Carlisle Elementary School	STAIRS, floor 2ND, map# 12	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3094
1139	YES	John G. Carlisle Elementary School	HALL, floor 2, map# 15	33	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2165.8
1143	YES	John G. Carlisle Elementary School	209, floor 2, map# 21	8	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850

1145	YES	John G. Carlisle Elementary School	209, floor 2, map# 22	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1148	YES	John G. Carlisle Elementary School	209, floor 2, map# 25	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1751.4
1149	YES	John G. Carlisle Elementary School	ELEV, floor 2, map# 27	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	8760
1150	YES	John G. Carlisle Elementary School	211 213 215 214 212 210 206 204 202, floor 2, map# 28	81	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1151	YES	John G. Carlisle Elementary School	211, floor 2, map# 29	9	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1155	YES	John G. Carlisle Elementary School	STAIRS, floor 2, map# 33	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3094
1157	YES	John G. Carlisle Elementary School	ELEC RM, floor 2, map# 35	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1158	YES	John G. Carlisle Elementary School	219, floor 2, map# 36	12	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1161	YES	John G. Carlisle Elementary School	JAN, floor 2, map# 39	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1163	YES	John G. Carlisle Elementary School	RR, floor 2, map# 41	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1295
1166	YES	John G. Carlisle Elementary School	218, floor 2, map# 45	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1170	YES	John G. Carlisle Elementary School	MEDIA, floor 2, map# 49	32	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1850
1175	YES	John G. Carlisle Elementary School	EMER STAIR LK, floor 2, map# 54	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3094
1177	YES	John G. Carlisle Elementary School	OFF LK, floor 2, map# 56	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1178	YES	John G. Carlisle Elementary School	PROD RM & OFF, floor 2, map#58	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1179	YES	John G. Carlisle Elementary School	216, floor 2, map# 59	10	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1850
1182	YES	John G. Carlisle Elementary School	216, floor 2, map# 62	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1183	YES	John G. Carlisle Elementary School	RR, floor 2, map# 63	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
Dec	winters and Confidential		1				22

1184	YES	John G. Carlisle Elementary School	RR, floor 2, map# 64	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1295
1186	YES	John G. Carlisle Elementary School	208, floor 2, map# 67	9	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1191	YES	John G. Carlisle Elementary School	201, floor 2, map# 72	7	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1193	YES	John G. Carlisle Elementary School	203 205 207 , floor 2, map# 76	27	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1198	YES	John G. Carlisle Elementary School	MAIN ENT, floor 1, map# 81	20	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3094
1201	YES	John G. Carlisle Elementary School	BOOK RM LK, floor 1, map# 84	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1203	YES	John G. Carlisle Elementary School	109 111 113LK 112 110 108, floor 1, map# 86	54	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1204	YES	John G. Carlisle Elementary School	109, floor 1, map# 87	18	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1208	YES	John G. Carlisle Elementary School	HALL, floor 1, map# 91	13	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2165.8
1211	YES	John G. Carlisle Elementary School	MECH, floor 1, map# 95	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1212	YES	John G. Carlisle Elementary School	MECH, floor 1, map# 96	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1214	YES	John G. Carlisle Elementary School	RR, floor 1, map# 98	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1216	YES	John G. Carlisle Elementary School	RR, floor 1, map# 100	6	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1295
1218	YES	John G. Carlisle Elementary School	STOR, floor 1, map# 103	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1220	YES	John G. Carlisle Elementary School	HALL, floor 1, map# 105	12	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2165.8
1222	YES	John G. Carlisle Elementary School	ATH OFF, floor 1, map# 109	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2502
1224	YES	John G. Carlisle Elementary School	STOR, floor 1, map# 111	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1227	YES	John G. Carlisle Elementary School	JAN OFF, floor 1, map# 114	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1751.4
Dunamintan	and Cambidantial		1				24

1228	YES	John G. Carlisle Elementary School	CAFÉ, floor 1, map# 116	33	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	2165.8
1231	YES	John G. Carlisle Elementary School	KIT STOR, floor 1, map# 120	6	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1234	YES	John G. Carlisle Elementary School	KIT , floor 1, map# 123	28	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1236	YES	John G. Carlisle Elementary School	PANTRY LK, floor 1, map# 125	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1238	YES	John G. Carlisle Elementary School	FAM REC CTR, floor 1, map# 127	4	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1751.4
1239	YES	John G. Carlisle Elementary School	106 104 102 103 105 107, floor 1, map# 129	48	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1240	YES	John G. Carlisle Elementary School	106, floor 1, map# 130	12	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1243	YES	John G. Carlisle Elementary School	101, floor 1, map# 133	5	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1244	YES	John G. Carlisle Elementary School	101, floor 1, map# 134	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1247	YES	John G. Carlisle Elementary School	HALL, floor 1, map# 137	14	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2165.8
1251	YES	John G. Carlisle Elementary School	PRIN OFF 1-2, floor 1, map# 143	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1252	YES	John G. Carlisle Elementary School	STOR LK, floor 1, map# 145	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1253	YES	John G. Carlisle Elementary School	TEACH LG, floor 1, map# 146	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1256	YES	John G. Carlisle Elementary School	LOUNGE, floor 1, map# 150	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1257	YES	John G. Carlisle Elementary School	OFF LK, floor 1, map# 152	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2502
1258	YES	John G. Carlisle Elementary School	RECORDS, floor 1, map# 153	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1260	YES	John G. Carlisle Elementary School	CONF, floor 1, map# 155	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1261	YES	John G. Carlisle Elementary School	COPY RM, floor 1, map# 157	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
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1266	YES	Latonia Elementary School	LAUNDRY, floor 1, map# 4	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2502
1268	YES	Latonia Elementary School	HALLWAY, floor , map# 6	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3094
1270	YES	Latonia Elementary School	JANITOR, floor , map# 8	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1271	YES	Latonia Elementary School	RESTROOM, floor , map# 9	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1275	YES	Latonia Elementary School	OFFICE, floor , map# 13	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2502
1277	YES	Latonia Elementary School	STORAGE, floor , map# 15	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1278	YES	Latonia Elementary School	STORAGE, floor , map# 16	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1280	YES	Latonia Elementary School	KITCHEN, floor , map# 18	8	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1281	YES	Latonia Elementary School	KITCHEN, floor , map# 19	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1285	YES	Latonia Elementary School	FOOD SERVICE, floor , map# 23	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1286	YES	Latonia Elementary School	FOOD SERVICE, floor , map# 24	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1287	YES	Latonia Elementary School	FOOD SERVICE, floor , map# 25	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1292	YES	Latonia Elementary School	STORAGE, floor , map# 30	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1293	YES	Latonia Elementary School	STORAGE, floor , map# 31	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1295	YES	Latonia Elementary School	CAFETERIA, floor , map# 33	34	SSSMLTB-T84/13X41X4XXXXX-DL	LTB-T842X-9.5/40	3094
1296	YES	Latonia Elementary School	CAFETERIA, floor , map# 34	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3094
1299	YES	Latonia Elementary School	SPEECH, floor , map# 37	2	SSSMLTB-T84/13X41X4XXXXX-DL	LTB-T842X-9.5/40	2502
1301	YES	Latonia Elementary School	JANITOR OFFICE, floor , map# 39	1	SSSMLTB-T84/13X41X4XXXXX-DL	LTB-T842X-9.5/40	2502
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1304	YES	Latonia Elementary School	101/102, floor , map# 42	14	SSSMLTB-T84/13X41X4XXXXX-DL	LTB-T842X-9.5/40	1850
1305	YES	Latonia Elementary School	101/102, floor , map# 43	2	SSSMLTB-T84/13X62X4XXXXX-DL	LTB-T844X-9.5/40	1850
1306	YES	Latonia Elementary School	101/102, floor , map# 44	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1309	YES	Latonia Elementary School	HALLWAY, floor , map# 47	11	SSSMLTB-T84/13X41X4XXXXX-DL	LTB-T842X-9.5/40	3094
1312	YES	Latonia Elementary School	103, floor , map# 50	9	SSSMLTB-T84/13X41X4XXXXX-DL	LTB-T842X-9.5/40	1850
1314	YES	Latonia Elementary School	104, floor , map# 52	7	SSSMLTB-T84/13X41X4XXXXX-DL	LTB-T842X-9.5/40	1850
1315	YES	Latonia Elementary School	104, floor , map# 53	5	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1318	YES	Latonia Elementary School	RESTROOM, floor , map# 56	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1319	YES	Latonia Elementary School	RESTROOM, floor , map# 57	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1323	YES	Latonia Elementary School	HALLWAY, floor , map# 61	8	SSSMLTB-T84/13X41X4XXXXX-DL	LTB-T842X-9.5/40	3094
1324	YES	Latonia Elementary School	HALLWAY, floor , map# 62	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3094
1325	YES	Latonia Elementary School	HALLWAY, floor , map# 63	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3094
1328	YES	Latonia Elementary School	JANITOR, floor , map# 66	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1329	YES	Latonia Elementary School	GIRLS, floor , map# 67	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1333	YES	Latonia Elementary School	105/106/107.108, floor , map# 71	30	SSSMLTB-T84/13X41X4XXXXX-DL	LTB-T842X-9.5/40	1850
1334	YES	Latonia Elementary School	105/106/107.108, floor , map# 72	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1337	YES	Latonia Elementary School	HALLWAY, floor , map# 75	9	SSSMLTB-T84/13X41X4XXXXX-DL	LTB-T842X-9.5/40	3094
1344	YES	Latonia Elementary School	BASEMENT STAIRS, floor , map# 82	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3094
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1345	YES	Latonia Elementary School	BASEMENT STAIRS, floor , map# 83	6	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1347	YES	Latonia Elementary School	109/118, floor , map# 85	18	SSSMLTB-T84/13X41X4XXXXX-DL	LTB-T842X-9.5/40	1850
1350	YES	Latonia Elementary School	111/112, floor , map# 88	16	SSSMLTB-T84/13X41X4XXXXX-DL	LTB-T842X-9.5/40	1850
1351	YES	Latonia Elementary School	111/112, floor , map# 89	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1354	YES	Latonia Elementary School	STORAGE, floor , map# 92	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1356	YES	Latonia Elementary School	113 MUSIC, floor , map# 94	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1357	YES	Latonia Elementary School	113 MUSIC, floor , map# 95	15	SSSMLTB-T84/13X41X4XXXXX-DL	LTB-T842X-9.5/40	1850
1360	YES	Latonia Elementary School	OFFICES, floor , map# 98	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2502
1363	YES	Latonia Elementary School	STORAGE, floor , map# 101	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1365	YES	Latonia Elementary School	ENTRY, floor , map# 103	4	SSSMLTB-T84/13X41X4XXXXX-DL	LTB-T842X-9.5/40	3094
1368	YES	Latonia Elementary School	TROPHY CASE, floor , map# 106	2	SSSMLTB-T82/8X11X2XXXXX	LTB-T821X-7/40	3094
1369	YES	Latonia Elementary School	LOBBY, floor , map# 107	4	SSSMLTB-T84/13X41X4XXXXX-DL	LTB-T842X-9.5/40	3094
1372	YES	Latonia Elementary School	CONFERENCCE, floor , map# 110	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2502
1374	YES	Latonia Elementary School	PRINCIPAL, floor , map# 112	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2502
1376	YES	Latonia Elementary School	ASST PRINCIPAL, floor , map# 114	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2502
1378	YES	Latonia Elementary School	OFFICE, floor , map# 116	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2502
1380	YES	Latonia Elementary School	LOUNGE, floor , map# 118	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2502
1384	YES	Latonia Elementary School	STORAGE, floor , map# 120	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780

1385	YES	Latonia Elementary School	STORAGE, floor , map# 121	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1386	YES	Latonia Elementary School	STORAGE, floor , map# 122	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1388	YES	Latonia Elementary School	HALLWAY, floor , map# 124	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3094
1390	YES	Latonia Elementary School	STAIRWAY, floor , map# 126	8	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3094
1391	YES	Latonia Elementary School	STAIRWAY, floor , map# 127	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3094
1392	YES	Latonia Elementary School	HALLWAY, floor , map# 128	12	SSSMLTB-T84/13X62X4XXXXX-DL	LTB-T844X-9.5/40	3094
1395	YES	Latonia Elementary School	201/202, floor , map# 131	13	SSSMLTB-T84/13X62X4XXXXX-DL	LTB-T844X-9.5/40	1850
1396	YES	Latonia Elementary School	201/202, floor , map# 132	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1399	YES	Latonia Elementary School	CLOSET, floor , map# 135	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1400	YES	Latonia Elementary School	CLOSET, floor , map# 136	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1401	YES	Latonia Elementary School	RESTROOM, floor , map# 137	18	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1402	YES	Latonia Elementary School	RESTROOM, floor , map# 138	8	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1406	YES	Latonia Elementary School	203-212, floor , map# 142	84	SSSMLTB-T84/13X62X4XXXXX-DL	LTB-T844X-9.5/40	1850
1407	YES	Latonia Elementary School	203-212, floor , map# 143	12	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1410	YES	Latonia Elementary School	COPYROOM, floor , map# 146	2	SSSMLTB-T84/13X41X4XXXXX-DL	LTB-T842X-9.5/40	2502
1413	YES	Latonia Elementary School	CLOSET, floor , map# 149	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1414	YES	Latonia Elementary School	IT ROOM, floor , map# 150	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1415	YES	Latonia Elementary School	HALLWAY, floor , map# 151	8	SSSMLTB-T84/13X62X4XXXXX-DL	LTB-T844X-9.5/40	3094
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1416	YES	Latonia Elementary School	HALLWAY, floor , map# 152	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3094
1419	YES	Latonia Elementary School	213/214, floor , map# 155	28	SSSMLTB-T84/13X62X4XXXXX-DL	LTB-T844X-9.5/40	1850
1420	YES	Latonia Elementary School	213/214, floor , map# 156	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1423	YES	Latonia Elementary School	200, floor , map# 159	12	SSSMLTB-T84/13X62X4XXXXX-DL	LTB-T844X-9.5/40	1850
1424	YES	Latonia Elementary School	200, floor , map# 160	9	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1425	YES	Latonia Elementary School	STORAGE, floor , map# 161	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1429	YES	Latonia Elementary School	HALLWAY, floor , map# 165	11	SSSMLTB-T84/13X62X4XXXXX-DL	LTB-T844X-9.5/40	3094
1432	YES	Latonia Elementary School	221-224, floor , map# 168	40	SSSMLTB-T84/13X62X4XXXXX-DL	LTB-T844X-9.5/40	1850
1433	YES	Latonia Elementary School	221-224, floor , map# 169	5	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1436	YES	Latonia Elementary School	PSYCHOLOGIST, floor , map# 172	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2502
1438	YES	Latonia Elementary School	CONFERENCCE, floor , map# 174	2	SSSMLTB-T84/13X41X4XXXXX-DL	LTB-T842X-9.5/40	2502
1440	YES	Latonia Elementary School	HALLWAY, floor , map# 176	10	SSSMLTB-T84/13X62X4XXXXX-DL	LTB-T844X-9.5/40	3094
1443	YES	Latonia Elementary School	217-220, floor , map# 179	32	SSSMLTB-T84/13X62X4XXXXX-DL	LTB-T844X-9.5/40	1850
1444	YES	Latonia Elementary School	217-220, floor , map# 180	8	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1447	YES	Latonia Elementary School	OE, floor , map# 183	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2502
1453	YES	Ninth District Elementary School	LIBRARY, floor , map# 5	9	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1454	YES	Ninth District Elementary School	LIBRARY, floor , map# 6	5	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1457	YES	Ninth District Elementary School	110-121 & 210-221, floor , map# 9	216	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
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1461	YES	Ninth District Elementary School	CAFETERIA, floor , map# 13	21	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2165.8
1462	YES	Ninth District Elementary School	CAFETERIA, floor , map# 14	6	TRXLTB-T82/8X32X2XXXXX	LTB-T823X-7/40	2165.8
1465	YES	Ninth District Elementary School	KITCHEN, floor , map# 17	8	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1466	YES	Ninth District Elementary School	KITCHEN, floor , map# 18	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1470	YES	Ninth District Elementary School	OFFICE, floor , map# 22	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2502
1472	YES	Ninth District Elementary School	FREEZER ROOM, floor , map# 24	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1478	YES	Ninth District Elementary School	STAGE, floor , map# 30	5	SSSMLTB-T84/13X62X4XXXXX	LTB-T846X-9.5/40	1751
1479	YES	Ninth District Elementary School	ELEVATOR, floor , map# 31	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	8760
1480	YES	Ninth District Elementary School	209, floor , map# 32	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1482	YES	Ninth District Elementary School	HALLWAY, floor , map# 34	20	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2165.8
1483	YES	Ninth District Elementary School	HALLWAY, floor , map# 35	1	TRXLTB-T82/8X32X2XXXXX	LTB-T823X-7/40	2165.8
1486	YES	Ninth District Elementary School	NURSE, floor , map# 38	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1489	YES	Ninth District Elementary School	STAIRS A, floor , map# 42	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3094
1490	YES	Ninth District Elementary School	STAIRS A, floor , map# 43	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3094
1491	YES	Ninth District Elementary School	STAIRS B, floor , map# 44	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3094
1492	YES	Ninth District Elementary School	STAIRS B, floor , map# 45	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3094
1495	YES	Ninth District Elementary School	NURSE, floor , map# 48	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1497	YES	Ninth District Elementary School	CONFERENCE ROOM, floor , map# 51	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4

1498	YES	Ninth District Elementary School	FRONT OFFICE, floor , map# 53	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1499	YES	Ninth District Elementary School	FRONT OFFICE, floor , map# 54	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1502	YES	Ninth District Elementary School	STORAGE, floor , map# 57	4	SSSMLTB-T82/8X21X2XXXXX	LTB-T822X-7/40	780
1505	YES	Ninth District Elementary School	OFFICE, floor , map# 60	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1506	YES	Ninth District Elementary School	PRINCIPAL, floor , map# 62	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1509	YES	Ninth District Elementary School	GIRLS/BOYS, floor , map# 66	2	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	1850
1511	YES	Ninth District Elementary School	ENTRY, floor , map# 68	10	SSSMLTB-T82/8X21X2XXXXX	LTB-T822X-7/40	2165.8
1516	YES	Ninth District Elementary School	HALLWAY, floor , map# 73	22	TRXLTB-T82/8X32X2XXXXX	LTB-T823X-7/40	2165.8
1520	YES	Ninth District Elementary School	22A, floor , map# 77	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1523	YES	Ninth District Elementary School	22B, floor , map# 80	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1524	YES	Ninth District Elementary School	18-20, floor , map# 81	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1528	YES	Ninth District Elementary School	14-16, floor , map# 85	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1531	YES	Ninth District Elementary School	OPEN AREA, floor , map# 88	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2502
1532	YES	Ninth District Elementary School	LOUNGE, floor , map# 89	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1537	YES	Ninth District Elementary School	CUSTODIAL, floor , map# 92	1	TRXLTB-T82/8X32X2XXXXX	LTB-T823X-7/40	780
1538	YES	Ninth District Elementary School	CUSTODIAL, floor , map# 93	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1547	YES	Ninth District Elementary School	MECHANICAL, floor , map# 102	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1551	YES	Ninth District Elementary School	GAS METER, floor , map# 106	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
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1553	YES	Ninth District Elementary School	17, floor , map# 108	11	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1557	YES	Ninth District Elementary School	GIRLS/BOYS, floor , map# 112	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1295
1561	YES	Ninth District Elementary School	19-21, floor , map# 117	18	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1565	YES	Ninth District Elementary School	HALLWAY, floor , map# 121	18	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2165.8
1568	YES	Ninth District Elementary School	BASEMENT, floor , map# 124	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1570	YES	Ninth District Elementary School	BASEMENT, floor , map# 126	2	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	780
1573	YES	Ninth District Elementary School	BASEMENT, floor , map# 129	15	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1575	YES	Sixth District Elementary School	STAIR, floor 3RD, map# 1	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3094
1576	YES	Sixth District Elementary School	LIBRARY, floor 3, map# 2	24	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1577	YES	Sixth District Elementary School	LIBRARY, floor 3, map# 3	31	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1578	YES	Sixth District Elementary School	LIBRARY, floor 3, map# 4	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1579	YES	Sixth District Elementary School	LIBRARY, floor 3, map# 5	2	SSSMLTB-T84/13X62X4XXXXX	LTB-T846X-9.5/40	1850
1580	YES	Sixth District Elementary School	LIBRARY, floor 3, map# 6	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1582	YES	Sixth District Elementary School	MECH, floor 3, map# 9	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1583	YES	Sixth District Elementary School	MECH, floor 3, map# 10	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1584	YES	Sixth District Elementary School	RR, floor 3, map# 11	2	SSSMLTB-T82/8X21X2XXXXX	LTB-T822X-7/40	1295
1586	YES	Sixth District Elementary School	RR, floor 3, map# 13	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1295
1587	YES	Sixth District Elementary School	MECH, floor 3, map# 15	16	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780

1589	YES	Sixth District Elementary School	READ RM, floor 3, map# 17	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1751.4
1591	YES	Sixth District Elementary School	TECH RM, floor 3, map# 20	7	SSSMLTB-T84/13X62X4XXXXX	LTB-T846X-9.5/40	1751.4
1592	YES	Sixth District Elementary School	TECH RM, floor 3, map# 21	4	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1751.4
1594	YES	Sixth District Elementary School	STAIR, floor 3, map# 24	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3094
1596	YES	Sixth District Elementary School	INTERV, floor 3, map# 26	5	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1751.4
1597	YES	Sixth District Elementary School	OFF CUBBIE, floor 3, map# 28	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1598	YES	Sixth District Elementary School	OFF 1&4, floor 3, map# 30	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1751.4
1599	YES	Sixth District Elementary School	OFF 2&3, floor 3, map# 32	3	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1751.4
1600	YES	Sixth District Elementary School	BIG OFF, floor 3, map# 34	5	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1751.4
1602	YES	Sixth District Elementary School	STAIR, floor 2ND, map# 37	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3094
1603	YES	Sixth District Elementary School	STAIR, floor 3, map# 38	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3094
1604	YES	Sixth District Elementary School	STAIR, floor 2, map# 39	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	3094
1605	YES	Sixth District Elementary School	13 14 15 16 17 18 19, floor 2, map# 40	63	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1606	YES	Sixth District Elementary School	13 14 15 16 17 18 19, floor 2, map# 41	7	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1609	YES	Sixth District Elementary School	CONF RM, floor 2, map# 44	2	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1751.4
1611	YES	Sixth District Elementary School	INTRV OFF, floor 2, map# 46	2	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1751.4
1612	YES	Sixth District Elementary School	NURSE, floor 2, map# 48	1	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1751.4
1613	YES	Sixth District Elementary School	NURSE, floor 2, map# 49	2	SSSMLTB-T84/13X62X4XXXXX	LTB-T846X-9.5/40	1751.4

1614	YES	Sixth District Elementary School	NURSE, floor 2, map# 50	1	SSSMLTB-T82/8X21X2XXXXX	LTB-T822X-7/40	1751.4
1615	YES	Sixth District Elementary School	ASST OFF, floor 2, map# 52	2	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1751.4
1616	YES	Sixth District Elementary School	STOR, floor 2, map# 54	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1617	YES	Sixth District Elementary School	SPEECH OFF, floor 2, map# 55	2	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1751.4
1618	YES	Sixth District Elementary School	TEACH LG, floor 2, map# 57	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1619	YES	Sixth District Elementary School	TEACH LG, floor 2, map# 58	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1622	YES	Sixth District Elementary School	RR, floor 2, map# 62	2	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	1850
1623	YES	Sixth District Elementary School	ELEV, floor 2, map# 63	2	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	8760
1624	YES	Sixth District Elementary School	RR, floor 2, map# 64	5	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1295
1626	YES	Sixth District Elementary School	HALL, floor 2, map# 67	11	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2165.8
1629	YES	Sixth District Elementary School	HALL, floor 2, map# 70	2	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	3094
1630	YES	Sixth District Elementary School	HALL, floor 2, map# 71	26	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	2165.8
1631	YES	Sixth District Elementary School	HALL, floor 2, map# 72	20	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	2165.8
1633	YES	Sixth District Elementary School	JAN, floor 2, map# 75	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1634	YES	Sixth District Elementary School	RR, floor 2, map# 76	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1295
1635	YES	Sixth District Elementary School	RR, floor 2, map# 77	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1295
1636	YES	Sixth District Elementary School	RR, floor 2, map# 78	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1295
1639	YES	Sixth District Elementary School	20, floor 2, map# 81	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
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1640	YES	Sixth District Elementary School	20, floor 2, map# 82	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1295
1643	YES	Sixth District Elementary School	MECH LK, floor 2, map# 85	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1645	YES	Sixth District Elementary School	21 22 23 24 25 26 , floor 2, map# 87	54	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1649	YES	Sixth District Elementary School	7 8 9 10 11 12, floor 1ST, map# 91	54	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1650	YES	Sixth District Elementary School	7 8 9 10 11 12 , floor 1, map# 92	6	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1653	YES	Sixth District Elementary School	MAIN OFFICE, floor 1, map# 95	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2502
1654	YES	Sixth District Elementary School	PRIN OFF, floor 1, map# 97	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1655	YES	Sixth District Elementary School	MAIL, floor 1, map# 99	3	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2502
1657	YES	Sixth District Elementary School	OFF, floor 1, map# 102	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1658	YES	Sixth District Elementary School	RR, floor 1, map# 104	4	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1659	YES	Sixth District Elementary School	RR, floor 1, map# 105	8	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1295
1662	YES	Sixth District Elementary School	HALL, floor 1, map# 108	24	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2165.8
1663	YES	Sixth District Elementary School	HALL, floor 1, map# 109	9	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2165.8
1667	YES	Sixth District Elementary School	JAN, floor 1, map# 113	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	3094
1668	YES	Sixth District Elementary School	JAN, floor 1, map# 114	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1674	YES	Sixth District Elementary School	STAIR, floor 1, map# 121	1	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	3094
1675	YES	Sixth District Elementary School	RR, floor 1, map# 122	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1295
1680	YES	Sixth District Elementary School	PTA, floor 1, map# 128	2	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
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1683	YES	Sixth District Elementary School	STAGE, floor 1, map# 131	3	SSSMLTB-T84/13X62X4XXXXX	LTB-T846X-9.5/40	1850
1684	YES	Sixth District Elementary School	HALL, floor 1, map# 132	2	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	2165.8
1685	YES	Sixth District Elementary School	HALL, floor 1, map# 133	3	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	2165.8
1687	YES	Sixth District Elementary School	CAFÉ, floor 1, map# 136	44	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	3094
1688	YES	Sixth District Elementary School	CAFÉ, floor 1, map# 137	5	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	2165.8
1692	YES	Sixth District Elementary School	KIT, floor 1, map# 141	28	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1850
1695	YES	Sixth District Elementary School	OFF, floor 1, map# 144	1	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	2502
1696	YES	Sixth District Elementary School	DRY STOCK LK, floor 1, map# 145	2	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	780
1698	YES	Sixth District Elementary School	SPRINKLER RM LK, floor 1, map# 147	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1699	YES	Sixth District Elementary School	RR, floor 1, map# 148	1	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	1850
1700	YES	Sixth District Elementary School	FRC LOUNGE, floor 1, map# 149	5	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1751.4
1704	YES	Sixth District Elementary School	STOR, floor 1, map# 154	2	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	780
1707	YES	Sixth District Elementary School	RR, floor 1, map# 157	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1708	YES	Sixth District Elementary School	OFF, floor 1, map# 158	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1751.4
1711	YES	Sixth District Elementary School	COPY RM, floor 1, map# 162	3	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1751.4
1712	YES	Sixth District Elementary School	STAIR, floor LL, map# 164	1	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	3094
1713	YES	Sixth District Elementary School	HALL, floor LL, map# 165	8	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	2165.8
1714	YES	Sixth District Elementary School	HALL, floor LL, map# 166	1	SSSMLTB-T84/13X11X4XXXXX	LTB-T841X-9.5/40	2165.8

1715	YES	Sixth District Elementary School	HALL, floor LL, map# 167	3	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2165.8
1716	YES	Sixth District Elementary School	HALL, floor LL, map# 169	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	2165.8
1717	YES	Sixth District Elementary School	HALL, floor LL, map# 171	7	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	2165.8
1719	YES	Sixth District Elementary School	5 4, floor LL, map# 174	9	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1295
1720	YES	Sixth District Elementary School	5, floor LL, map# 175	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1724	YES	Sixth District Elementary School	3, floor LL, map# 179	9	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1725	YES	Sixth District Elementary School	3, floor LL, map# 180	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1295
1726	YES	Sixth District Elementary School	3, floor LL, map# 181	1	SSSMLTB-T82/8X11X2XXXXX	LTB-T821X-7/40	1850
1731	YES	Sixth District Elementary School	MECH, floor LL, map# 186	4	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1732	YES	Sixth District Elementary School	MECH, floor LL, map# 187	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1733	YES	Sixth District Elementary School	MECH, floor LL, map# 188	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	780
1734	YES	Sixth District Elementary School	MECH, floor LL, map# 189	1	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1735	YES	Sixth District Elementary School	BOILER RM, floor LL, map# 190	5	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	780
1737	YES	Sixth District Elementary School	RR, floor LL, map# 192	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1295
1738	YES	Sixth District Elementary School	RR, floor LL, map# 193	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1295
1741	YES	Sixth District Elementary School	2, floor LL, map# 196	9	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1742	YES	Sixth District Elementary School	2, floor LL, map# 197	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1295
1747	YES	Sixth District Elementary School	1 6, floor LL, map# 202	18	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
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1748	YES	Sixth District Elementary School	1 6, floor LL, map# 203	2	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	1850
1751	YES	Sixth District Elementary School	6B, floor LL, map# 206	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1754	YES	Sixth District Elementary School	AC LAB ART LK, floor LL, map# 209	16	SSSMLTB-T84/13X31X4XXXXX	LTB-T843X-9.5/40	1850
1755	YES	Sixth District Elementary School	AC LAB ART LK, floor LL, map# 210	6	SSSMLTB-T84/13X41X4XXXXX	LTB-T844X-9.5/40	1850
1766	YES	Sixth District Elementary School	ENTRY, floor , map# 6	1	SSSMLTB-T84/13X21X4XXXXX	LTB-T842X-9.5/40	4380

Savings from Replacing Windows with More Efficie	Savings from Replacing Windows with More Efficient Windows - Glenn O. Swing							
Term	Value	Units						
Inputs	·							
Proposed Insulation Area	3,072	ft^2						
Effective Exterior Convection Coefficient	5.0	Btu/hr*ft^2*F						
Indoor Air Temperature	65	°F						
Current Thermal Resistance	0.91	hr-ft2-F/Btu						
Proposed Thermal Resistance	1.60	hr-ft2-F/Btu						
Efficiency of Heating System	82%							
Efficiency of Cooling System	1.16	kW/ton						
Electricity Savings Rate	\$ 0.072	\$/kWh						
Natural Gas Savings Rate	\$ 1.00	\$/therms						
Calculation								
Annual Electricity Savings	3,805	kWh						
Annual Elec \$ Savings	\$ 274							
Annual Natural Gas Savings	2,298	therms						
Annual NG \$ Savings	\$ 2,288							
Total Savings per Year (St = Se + Sng)	\$ 2,561	\$/year						

Savings from Replacing Exterior Doors with More Ef	ficient Doors - Glenn O. Sw	ing
Term	Value	Units
Inputs		
Proposed Insulation Area	161	ft^2
Effective Exterior Convection Coefficient	5.0	Btu/hr*ft^2*F
Indoor Air Temperature	65	°F
Current Thermal Resistance	1.00	hr-ft2-F/Btu
Proposed Thermal Resistance	1.85	hr-ft2-F/Btu
Efficiency of Heating System	82%	
Efficiency of Cooling System	1.16	kW/ton
Electricity Savings Rate	\$ 0.072	\$/kWh
Natural Gas Savings Rate	\$ 1.00	\$/therms
Calculation		
Annual Electricity Savings	193	kWh
Annual Elec \$ Savings	\$ 14	
Annual Natural Gas Savings	117	therms
Annual NG \$ Savings	\$ 116	
Total Savings per Year	\$ 130	\$/year

Savings from Replacing Exterior Doors with More Efficient Doors - Ninth District							
Term	Value	Units					
Parameters							
Proposed Insulation Area	286	ft^2					
Surface Radiation Absorptivity Fraction (α)	0.00						
Effective Exterior Convection Coefficient	5.0	Btu/hr*ft^2*F					
Indoor Air Temperature	65	°F					
Current Thermal Resistance	1.00	hr-ft2-F/Btu					
Proposed Thermal Resistance	1.85	hr-ft2-F/Btu					
Efficiency of Heating System	85%						
Efficiency of Cooling System	1.14	kW/ton					
Electricity Savings Rate	\$ 0.060	\$/kWh					
Natural Gas Savings Rate	\$ 0.93	\$/therms					
Calculations							
Annual Electricity Savings	338	kWh					
Annual Elec \$ Savings	\$ 20						
Annual Natural Gas Savings	200	therms					
Annual NG \$ Savings	\$ 187						
Total Savings per Year	\$ 207	\$/year					



# **Calculated Savings Summary**

Project Name:	Covington Independent School District	Date:	4/12/2022
Client:		Version:	3

Performance

		111/		ectric Savings	ic Savings		
Facility	Include	kW (Peak) Reduction	kWh	kW \$	kWh \$	Total Elec \$	
Carlisle ES	1	1.79	15,697	\$0	\$1,413	\$1,413	
Covington HS	0	0.00	0	\$0	\$0	\$0	
Science Building	1	1.32	11,519	\$0	\$1,037	\$1,037	
Vocational Center	1	0.68	5,979	\$0	\$538	\$538	
	Totals	3.79	33,194	\$0	\$2,987	\$2,987	



## The ESP Calculator ™

Energy Savings Payback Calculator

Building / Faciity:ENERGY COST(s)Carlisle ESLAUSD?kWh rate\$0.0900Date:4/12/2022NoDemand rate (\$/kW/mo)\$0.00Version:3Energy Cost Escalation (above inflation)3.0%

	version:	3		Energy Cost Escalation	on (above	imiation)			3.0%					
		at far right for addition straints and Potential C		ding Comments,						Adj	Adjustments			
Transformer Count	Tag Number	Location ID or Room #	Transformer Designation	Proposed Powersmiths OPAL Transformer	Baseline kVA	Replacement kVA	Replace	Bseline % Load During Normal Operating Hours	Baseline % Load Outside Operating Hours	Powersmiths % Load During Normal Operating Hours	Powersmiths % Load Outside Operating Hours	Equipment Operating hrs/ day	Equipment Operating days/yr	A/C System Performance (kW/ton)
1	82011	Main Elec	XFMR 1	E-Saver-80R	112.5	112.5	1	8.9%	5.1%	8.9%	5.1%	8	200	0
2	82012	2nd Flr Elec Rm	LPLVD	E-Saver-80R	75	75	1	8.3%	4.3%	8.3%	4.3%	8	200	0
							2							

		В	aseline	Transfori	mer Loss	ses					Powe	ersmith	s Transf	ormer L	osses		
Baseline Transformer kW Losses (Normal Operation)	Baseline Transformer kW Losses (Outside Op. hrs)	Baseline Annual kWh Losses from Transformers	Baseline Annual Cost of Transformer Peak Demand KW Losses	Baseline Annual Cost of Transformer KWh Losses	Baseline Annual kW Losses from A/C (Peak)	Baseline Annual kWh from A/C	Baseline Annual Cost of Associated A/C kW Losses	Baseline Annual Cost of Associated A/C kWh Losses	Powersmiths Transformer kW Losses (Normal Operation)	Powersmiths Transformer kW Losses (Outside Op. hrs)	Powersmiths Annual kWh Losses from Transformers	Powersmiths Annual Cost of Transformer Peak Demand KW Losses	Powersmiths Annual Cost of Transformer KWh Losses	Powersmiths Annual kW Losses from A/C (Peak)	Powersmiths Annual kWh from A/C	Powersmiths Annual Cost of Associated A/C kW Losses	Powersmiths Annual Cost of Associated A/C kWh Losses
1.224	1.208	10,608	\$0	\$955	0.00	0	\$0	\$0	0.189	0.172	1,535	\$0	\$138	0.00	0	\$0	\$0
0.884	0.872	7,655	\$0	\$689	0.00	0	\$0	\$0	0.128	0.115	1,031	\$0	\$93	0.00	0	\$0	\$0
2.11	2.08	18,263	\$0	\$1,644	0.00	0	\$0	\$0	0.32	0.29	2,566	\$0	\$231	0.00	0	\$0	\$0

Baseline Transformer and A/C Annual kWh Losses	18,263	Powersmiths Transformer and A/C Annual kWh Losse	2,566
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			Annual Savings with Powersmiths										
Baseline Total Annual Operating Cost	Powersmiths Total Annual Operating Cost	Total kW Reduction During Normal Op. Hrs. (Peak)	Total kW Dollar Savings	Total kWh Savings	Total kWh Dollar Savings	Total Elec Dollar Savings							
\$955	\$138	1.04	\$0	9,073	\$817	\$817							
\$689	\$93	0.76	\$0	6,624	\$596	\$596							
\$1,644	\$231	1.79	<b>\$0</b>	15,697	\$1,413	\$1,413							

Operational kW Reduction 1.79

1.79 Non-Operational kW Reduction



## The ESP Calculator ™

Energy Savings Payback Calculator

Building / Faciity:			ENERGY COST(s)					
Science	Building	LAUSD?	kWh rate	\$0.0900				
Date:	4/12/2022	No	Demand rate (\$/kW/mo)	\$0.00				
Version:	3		Energy Cost Escalation (above inflation)	3.0%				

	See the colums a Installation Cons						Adj	justme	nts					
Transformer Count	Tag Number	Location ID or Room #	Transformer Designation	Proposed Powersmiths OPAL Transformer	Baseline kVA	Replacement kVA	Replace	Bseline % Load During Normal Operating Hours	Baseline % Load Outside Operating Hours	Powersmiths % Load During Normal Operating Hours	Powersmiths % Load Outside Operating Hours	Equipment Operating hrs/ day	Equipment Operating days/yr	A/C System Performance (kW/ton)
1	82007	Elec Rm By 4203	XFMR 1	E-Saver-80R	150	150	1	8.8%	4.7%	8.8%	4.7%	8	200	0

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Science Building Proprietary and Confidential Page 1 of 3

	Baseline Transformer Losses									Pow	ersmith	s Transf	ormer L	osses			
Baseline Transformer kW Losses (Normal Operation)	Baseline Transformer kW Losses (Outside Op. hrs)	Baseline Annual kWh Losses from Transformers	Baseline Annual Cost of Transformer Peak Demand KW Losses	Baseline Annual Cost of Transformer KWh Losses	Baseline Annual kW Losses from A/C (Peak)	Baseline Annual kWh from A/C	Baseline Annual Cost of Associated A/C kW Losses	Baseline Annual Cost of Associated A/C kWh Losses	Powersmiths Transformer kW Losses (Normal Operation)	Powersmiths Transformer kW Losses (Outside Op. hrs)	Powersmiths Annual kWh Losses from Transformers	Powersmiths Annual Cost of Transformer Peak Demand KW Losses	Powersmiths Annual Cost of Transformer KWh Losses	Powersmiths Annual kW Losses from A/C (Peak)	Powersmiths Annual kWh from A/C	Powersmiths Annual Cost of Associated A/C kW Losses	Powersmiths Annual Cost of Associated A/C kWh Losses
1.548	1.526	13,403	\$0	\$1,206	0.00	0	\$0	\$0	0.232	0.211	1,884	\$0	\$170	0.00	0	\$0	\$0
1.55	1.53	13,403	\$0	\$1,206	0.00	0	\$0	\$0	0.23	0.21	1,884	\$0	\$170	0.00	0	\$0	\$0

Baseline Transformer and A/C Annual kWh	Losses	13,403	Powersmiths Transformer and A/C Annual kWh Losse 1,884	
Baseline Total Operational kW Losses	1.55	]	Baseline Total Operational kW Losses 0.23	
Baseline Total Non-Operational kW Losses	1.53	]	Baseline Total Non-Operational kW Losses 0.21	

			Annua	l Savings	with Powe	ersmiths
Baseline Total Annual Operating Cost	Powersmiths Total Annual Operating Cost	Total kW Reduction During Normal Op. Hrs. (Peak)	Total kW Dollar Savings	Total kWh Savings	Total kWh Dollar Savings	Total Elec Dollar Savings
\$1,206	\$170	1.32	\$0	11,519	\$1,037	\$1,037
\$1,206	\$170	1.32	\$0	11,519	\$1,037	\$1,037

Operational kW Reduction 1.32

1.31 Non-Operational kW Reduction



# The ESP Calculator ™

Energy Savings Payback Calculator

Building / Faciity:			ENERGY COST(s)				
Vocation	nal Center	LAUSD?	kWh rate	\$0.0900			
Date:	4/12/2022	No	Demand rate (\$/kW/mo)	\$0.00			
Version:	3		Energy Cost Escalation (above inflation)	3.0%			

	version:	3	Energy Cost Escalation (above initation)						3.0%					
		nt far right for additionation and research traints and Potential C		ding Comments,						Adj	justme	nts		
Transformer Count	Tag Number	Location ID or Room #	Transformer Designation	Proposed Powersmiths OPAL Transformer	Baseline kVA	Replacement kVA	Replace	Bseline % Load During Normal Operating Hours	Baseline % Load Outside Operating Hours	Powersmiths % Load During Normal Operating Hours	Powersmiths % Load Outside Operating Hours	Equipment Operating hrs/ day	Equipment Operating days/yr	A/C System Performance (kW/ton)
1	82008	Welding Shop	DPF	E-Saver-80R	15	15	0	13.8%	4.0%	13.8%	4.0%	12	200	0.75
2	82009	Wrestling Rm	ТМ	E-Saver-80R	45	45	1	9.2%	5.2%	9.2%	5.2%	12	200	0.75
3	82010	Auto Body Shop	PL	E-Saver-80R	15	15	0	13.8%	4.0%	13.8%	4.0%	12	200	0.75
							1							

		В	aseline	Transfor	mer Los	ses					Pow	ersmith	ns Transf	ormer L	osses		
Baseline Transformer kW Losses (Normal Operation)	Baseline Transformer kW Losses (Outside Op. hrs)	Baseline Annual kWh Losses from Transformers	Baseline Annual Cost of Transformer Peak Demand KW Losses	Baseline Annual Cost of Transformer KWh Losses	Baseline Annual kW Losses from A/C (Peak)	Baseline Annual kWh from A/C	Baseline Annual Cost of Associated A/C kW Losses	Baseline Annual Cost of Associated A/C kWh Losses	Powersmiths Transformer kW Losses (Normal Operation)	Powersmiths Transformer kW Losses (Outside Op. hrs)	Powersmiths Annual kWh Losses from Transformers	Powersmiths Annual Cost of Transformer Peak Demand KW Losses	Powersmiths Annual Cost of Transformer KWh Losses	Powersmiths Annual kW Losses from A/C (Peak)	Powersmiths Annual kWh from A/C	Powersmiths Annual Cost of Associated A/C kW Losses	Powersmiths Annual Cost of Associated A/C kWh Losses
0.000	0.000	0	\$0	\$0	0.00	0	\$0	\$0	0.000	0.000	0	\$0	\$0	0.00	0	\$0	\$0
0.654	0.645	5,674	\$0	\$511	0.14	1,209	\$0	\$109	0.092	0.082	745	\$0	\$67	0.02	159	\$0	\$14
0.000	0.000	0	\$0	\$0	0.00	0	\$0	\$0	0.000	0.000	0	\$0	\$0	0.00	0	\$0	\$0
0.65	0.65	5,674	\$0	\$511	0.14	1,209	\$0	\$109	0.09	0.08	745	\$0	\$67	0.02	159	\$0	\$14

Baseline Transformer and A/C Annual kWh Losses	6,883
--	-------

Baseline Total Operational kW Losses	0.79
Baseline Total Non-Operational kW Losses	0.78

# Powersmiths Transformer and A/C Annual kWh Losse 904

Baseline Total Operational kW Losses	0.11
	_
Baseline Total Non-Operational kW Losses	0.10

			Annua	l Savings	with Powe	ersmiths
Baseline Total Annual Operating Cost	Powersmiths Total Annual Operating Cost	Total kW Reduction During Normal Op. Hrs. (Peak)	Total kW Dollar Savings	Total kWh Savings	Total kWh Dollar Savings	Total Elec Dollar Savings
\$0	\$0	0.00	\$0	0	\$0	\$0
\$619	\$81	0.68	\$0	5,979	\$538	\$538
\$0	\$0	0.00	\$0	0	\$0	\$0
\$619	\$81	0.68	<b>\$0</b>	5,979	\$538	\$538

Operational kW Reduction 0.68

0.68 Non-Operational kW Reduction

#### Holmes Science, Gym, and Bridge

#### **Energy Cost and Savings**

ECM #	Description	Annual Ene	rgy Savings	Elec \$	Nat Gas \$	Annual \$
ECIVI #	Description	kWh	Therms	Elec 3	Nat Gas \$	Savings
1	Corefill	32,103	11,221	\$851	\$5,437	\$6,288
2	SPF	16,484	3,611	\$967	\$1,749	\$2,716
3	Gasketing of Doors	2,622	471	\$179	\$228	\$407
	Total:	51,209	15,303	\$1,997	\$7,414	\$9,412

0.484

#### **Sixth District Elementary School**

# **Energy Cost and Savings**

ECM #	Description	Annual Ene	rgy Savings	Elec Ś	Nat Gas \$	Annual \$
ECIVI #	Description	kWh	Therms	Elec 3	Nat Gas 5	Savings
1	SPF roof (Details A+B)	23,640	5,920	\$960	\$8,135	\$9,096
2	SPF Roof (Detail-C)	6,097	1,205	\$329	\$1,656	\$1,986
	Total:	29,737	7,126	\$1,290	\$9,792	\$11,081

#### John G. Carlisle Elementary School

#### **Energy Cost and Savings**

ECM#	Description	Annual Ene	rgy Savings	Elec \$	Nat Gas \$	Annual \$
	Description	kWh	Therms	Elec \$	Nat Gas \$	Savings
1	Insulate and air-seal per scope drawing.	1,887	582	\$58	\$817	\$876
2	Gasketing of Doors	1,661	258	\$129	\$362	\$490
	Total:	3,548	840	\$187	\$1,179	\$1,366

# **Glenn O. Swing Elementary School**

#### **Energy Cost and Savings**

ECM #	Description	Annual Ene	rgy Savings	Elec \$	Nat Gas \$	Annual \$
ECIVI #	Description	kWh	Therms	Elec 3	Nat Gas 3	Savings
1	SPF	13,074	3,347	\$802	\$4,489	\$5,291
	Total:	13,074	3,347	\$802	\$4,489	\$5,291

#### **Levassor Building**

#### **Energy Cost and Savings**

ECM#	Description	Annual Ene	rgy Savings	Elec \$	Nat Gas \$	Annual \$
ECIVI #	Description	kWh	Therms	Elec 3	Nat Gas 3	Savings
1	Corefill & SPF	5,387	3,598	\$882	\$4,389	\$5,271
2	Gasketing of Doors	347	93	\$57	\$113	\$170
	Total:	5,734	3,690	\$939	\$4,502	\$5,441

The undersigned agent, being duly sworn, states that neither he (financial or through kinship) to:	e/she nor his/her firm has any relationship
Any school board member or the superintendent;	
<ul> <li>Any or all prime contractors or material suppliers will method of construction.</li> </ul>	hen using the construction management
The undersigned further states that he/she has not entered in person relative to the price bid by anyone nor has he/she attebidding.	nto any agreement or collusion with any empted to induce anyone to refrain from
Explain below any kinship or financial relationship you may have this project.	ve to any parties as mentioned above on
This affidavit is subject to KRS 45A.455 prohibition against kickbacks.	conflict of interest, and gratuities and
Christoph Rainey	V.P. ENGINEER ING
Name	Title
Performance Services, Inc.	
Name of Company	
Subscribed and Sworn to Me this	
2nd day of May,	
20_22	DANA M. KRATZ  Notary Public, State of Indiana  Marion County
Doma m Watz Notary Signature	SEAL ** Commission # 712773 My Commission Expires May 27, 2026
My Commission expires:  May 27, 2024.	Notary Seal

Contract Number: 10100347-GESC-2018R1

#### AGREEMENT BETWEEN THE

# KENTUCKY EDUCATIONAL DEVELOPMENT CORPORATION

#### AND

#### PERFORMANCE SERVICES, INC.

This agreement is made and entered into the 21st day of September. 2020, by and between the Kentucky Educational Development Corporation (KEDC), 904 Rose Road, Ashland, KY 41102-7104, and Performance Services. Inc., 1051 Floyd Drive. Suite 170. Lexington. KY 40505. KEDC is an educational cooperative organized under the Interlocal Cooperation Act and providing various services to its member school districts. KEDC is also acting as fiscal agent for all KPC members including the following similarly organized Kentucky educational cooperatives that offer bidding services:

- Central Kentucky Educational Cooperative (CKEC)
- Green River Regional Educational Cooperative (GRREC)
- Northern Kentucky Cooperative for Educational Services (NKCES)
- Ohio Valley Educational Cooperative (OVEC)
- Southeast/South-Central Educational Cooperative (SESC)
- West Kentucky Educational Cooperative (WKEC)

This agreement commences on September 18. 2018 and will expire on September 20. 2020, with KEDC reserving the right for two-year extensions as permitted by Kentucky Model Procurement Code (KRS Chapter 45A). This agreement represents the 1st extension for an additional term of two (2) years from October 1, 2020 to September 30, 2022. This agreement incorporates the Guaranteed Energy Savings Performance Contract RFP Terms and Conditions and Performance Services Inc.'s Response by reference. Upon the signature of an authorized officer of KEDC and an authorized representative of the above named company or corporation, this agreement is hereby executed.

#### KENTUCKY EDUCATIONAL DEVELOPMENT CORPORATION

Many Mutcherison	9/24/20
KEDC Chief Executive Officer Signature	Date
Nancy L. Hutchinson	
Printed Name	
PERFORMANCE SERVICES, INC.	
South Beginn	17500 2000
Signature	Date
SCOTT J. ZIGNIOND	
Printed Name	
VP, SALES + MARKETING	
Title	

#### KENTUCKY DEPARTMENT OF EDUCATION

Cooperative Purchasing Affidavit – 2015

Required Affidavit for School Facilities Project Using Cooperative Purchase Agreement KRS 45A.420

As the authorized designee of the local public agency under which the following cooperative purchase agreement was solicited, I swear and affirm under penalty of perjury that:

- 1. I understand that the contract(s) being utilized was awarded in accordance with KRS 45A.365.
- 2. I understand that <u>KRS 162.160</u> requires that the Chief State School Officer shall examine or cause to be examined all plans and specifications for public school buildings in accordance with administrative regulations promulgated by the Kentucky Board of Education.
- 3. I understand the regulatory requirements contained in <u>702 KAR 4:160</u> Capital Construction Process, and will be in full compliance with such.
- 4. I understand that this affidavit is subject to <a href="KRS 45A.455">KRS 45A.455</a> prohibition against conflict of interest, and gratuities and kickbacks.
- It is my informed knowledge and belief that all aspects of this cooperative purchase agreement fully comply with Kentucky law including but not limited to the specific statutes and regulations mentioned above.

I understand and acknowledge that, as the duly authorized designee of the local public agency under which the cooperative purchase agreement was solicited, I have fully informed myself regarding the accuracy of the statements made in this affidavit and acknowledge that the Chief State School Officer and the Kentucky Department of Education are reasonably relying upon these statements in making a decision for approval of this project and any failure to accurately disclose such information may result in future consequences, including being prohibited from participating in future projects.

Cooperative Purchasing Agreement Number 10100347-GESC-2018						
Description of Materials included in Cooperative Purchasing Agreement						
Name of Local Public Agency Kentucky Educ	Name of Local Public Agency Kentucky Educational Development Corporation					
I.D Number 10100347 Solicitation Number	GESC-2018	Expiration Date 09/20/2020				
Int o	Samuel Atkins	Chief Development Officer				
Signature	Printed Name	Title				
Subscribed and Sworn to me this	_20	Tarnmy D. Vonderheide Notery Public, ID No. 607603 State at Large, Kentucky My Commission Expires on Sept. 5, 2022				
January D. Vonderhide						
Notary Signature		5 32.3				
My Commission expires:						
September 5	, 20 <u>22</u> .	Notary Seal				

Page 1 of 1

BG#

BG# 20-088 Date Submitt		ate Submitted	2022-05-02	Delivery Method				PO Certification Statement Phase		
District Code	134	_	District Name	Covington Independent		] GC	X	GESC	Initial Statement	Final Statement
School Code	Multiple	_	Facility Name	Multiple Sites	. L	СМ			Change Order Stmt.	
Contractor Name	PO Number	Bid. Pack. #	Specification Section No.	Purchase Order Description	Vendor Name	Initial PO A	mount	Change Order Amount To Date	Reason For Change	Final PO Amount
Corken Steel	TBD 1	1	23 52 16	Boilers	Corken Steel Products Co.		5,145.00			175,145.00
Koch Air	TBD 2	2	23 64 23	Chillers	Koch Air, LLC		1,217.00			141,217.00
Koch Air	TBD 2	3	23 74 16	Roof Top Units	Koch Air, LLC		4,835.00			474,835.00
Koch Air	TBD 2	4	23 82 23	Unit Ventilators	Koch Air, LLC		2,044.00			122,044.00
Koch Air	TBD 2	5	23 82 19	Fan Coil Units	Koch Air, LLC		5,788.00			45,788.00
Koch Air	TBD 2	6	23 74 16	Make Up Air Unit	Koch Air, LLC		6,840.00			26,840.00
										-
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All signatures be statement phase			upon the appro	priate PO certification	Initial PO Total	\$ 98	5,869.00	\$ -	Final PO Total	\$ 985,869.00
	ny knowledge, I	certify tha		isted within this document will 702 KAR 4:160.			f my know	vledge, I certify that a	all materials listed within this of the control of	locument have been
Owner's Signa	ture			Date		Owner's Sig	nature			Date
General Contractor's / Construction Manager's Sigr Date				General Co	ntractor's	/ Construction Mar	nager's Signature	Date		
Architect's Sign	nature			Date		Architect's S	Signature			Date

# ADDENDUM

THIS ADDENDUM TO THE AIA A141-2004 STANDARD FORM OF AGREEMENT BETWEEN OWNER AND DESIGN-BUILDER AS MODIFIED AND THE AIA A141-2004 EXHIBIT A TERMS AND CONDITIONS AS MODIFIED ("Addendum") is made and entered into this \_\_\_ day of May, 2022, by and between Covington Independent Board of Education (hereinafter referred to as ("Owner") and Performance Services, Inc. (hereinafter referred to as "Qualified Provider"), which Addendum shall be attached to and made a part of the contract between Owner and Qualified Provider, being the AIA A141-2004 Standard Form of Agreement Between Owner and Design-Builder, as modified, and the AIA A141-2004 Exhibit A Terms and Conditions, as modified, dated the \_\_\_ day of May, 2022, for the Covington Independent Schools District-wide GESC (the "Project").

Change No.	Changes to A141-2004 Standard Form of Agreement Between Owner and Design-Builder, as modified
1	Identify Exhibits G and H as NOT USED as listed in the AIA/KDE A141-2004 Section 8.1.2
2	Identify a new Exhibit "J" titled "Energy Savings Program" Identify a new Exhibit "K" titled "KDE Non-Collusion Affidavit" Identify a new Exhibit "L" titled "KEDC Contract for GESCs – PSI – 2018" Identify a new Exhibit "M" titled "KEDC Affidavit – PSI – 2018" Identify a new Exhibit "N" titled "KDE PO Summary Form"
3	Add a new 1.4 at the end of Article I as follows:  1.4 Qualified Provider submitted a proposal dated September 13, 2021, in response to the Owner's Request for Proposal. Qualified Provider has made an assessment of the energy consumption characteristics of the premises, and Qualified Provider has prepared the complete Technical Energy Audit and Analysis of the premises as set forth in the Proposal which has been accepted by the owner (the "Proposal"). Owner has furnished (or released its energy suppliers to furnish) to the Qualified Provider, upon its request, all of its records and complete data concerning energy usage and energy-related maintenance for the premises, for the most current twelve (12) month period, including utility records, occupancy information, occupancy schedules, description of any changes in the building structure or its heating, cooling, lighting or other systems or energy requirements, descriptions of all energy consuming or saving equipment on the premises, bills and records relating to maintenance of the energy-related equipment, and a description of energy management procedures presently utilized. Owner acknowledges Qualified Provider

	has developed the Proposal and the savings calculations based on the information provided by the Owner.
4	Add a new paragraph 2.2 at the end of Article 2 as follows:
	2.2 The Qualified Provider is furnishing a performance guarantee as set forth in the Performance Guarantee Agreement (the "Guarantee") which is attached hereto as Exhibit E. The Guarantee shall not commence or become effective until final payment is received by the Qualified Provider.
5	Add a new paragraph 5.1.8 at the end of 5.1 as follows:
	All payments made by Owner to Qualified Provider shall be made via wire transfer. Within ten (10) days of execution of the Contract, Owner shall pay to Qualified Provider five percent (5%) of the Contract Price as a mobilization fee and one hundred percent (100%) of the engineering for the Project, as specified in the Proposal. Thereafter, the balance of the Contract Price shall be paid pursuant to Section 5.2 below.
	Changes to A141-2004 Exhibit A Terms and Conditions as modified
	Changes to A141-2004 Exhibit A Terms and Conditions as modified
6	Delete A.10.1.1 and replace as follows:  A.10.1.1 The Qualified Provider shall be responsible for initiating and maintaining safety precautions and programs in connection with Qualified Provider's performance of the Guaranteed Energy Savings Contract.
	Delete A.10.2.1.1 and replace as follows:
	A10.2.1.1 Qualified Provider's employees on the Work;
	Add A.10.2.1.4 as follows:
	A10.2.1.4 Qualified Provider's responsibility for safety under this Section is not intended in any way to relieve any of Qualified Provider's subcontractors, suppliers or second or third tier subcontractors and suppliers of their own legal obligations and responsibility for complying with any applicable laws, ordinances, rules, regulations, and lawful orders of public authorities related to safety of persons or property, and for taking all necessary measures to implement and monitor reasonable safety precautions and programs to guard against injury, losses, damages or accidents resulting from their performance of the Work.
	A 11 d
7	Add three new paragraphs at the end of A.11.5 as follows:

The Qualified Provider shall also furnish to Owner an Energy Savings Performance Bond not less than 30 days of closing final acceptance of and 100% payment of the Contract Sum plus Owner-direct Purchase Orders if utilized. The Energy Savings Performance Bond shall assure the faithful performance of the annual Guaranteed Savings Amount ("GSA") as provided in the Performance Guarantee Agreement (the "Guarantee") attached hereto as Exhibit E. The Energy Savings Performance Bond shall only be required to cover a two year portion of the GSA, provided, however, the Qualified Provider shall be responsible to have an Energy Savings Performance Bond in place throughout the Guarantee, subject to the terms and conditions of the Guarantee.

Qualified Provider shall place sufficient monies into an interest bearing escrow account for the purpose of paying the premiums for the Energy Savings Performance Bond through the last year of the Guarantee. Escrow account funds shall only be used for the purpose of paying said premiums while the Guarantee is in effect. If the escrow becomes depleted of funds prior to the last Energy Savings Performance Bond being executed, Qualified Provider shall provide additional funding to the escrow account as required. After the Guarantee has been fully satisfied, any funds remaining in the escrow account shall revert to Qualified Provider.

Performance Services shall not share security in the performance guarantee with anyone other than the Owner.

Add Article A.15 MISCELLANEOUS and two new paragraphs as A.15.1 and A.15.2 as follows:

> A.15.1 Assistance With Federal Programs. The Internal Revenue Code allows various tax benefits to companies that implement energy efficiency and renewable energy projects with public entities in some situations. Owner agrees to assist Qualified Provider in applying for these federal programs, should any be applicable due to the execution of this Contract and the performance of the Work. Qualified Provider agrees to reimburse the Owner for any labor or other costs incurred by Owner in helping Qualified Provider complete applications for these programs.

> A.15.2 Software Upgrades And Compatibility; Remote Access. It is understood that from time to time operating software that may be an inherent part of Owner's facilities and/or the Project improvements will be upgraded and/or transitioned to new platform by the developer of such software, outside of the control of Qualified Provider. Owner shall be responsible for all costs associated with any and all software upgrades and/or compatibility requirements. In addition, during the Contract Time

8

and the period of the Guarantee, Owner agrees to grant Qualified Provider
remote access as follows:
1 A to O to INVACto VDNIti
.1 Access to Owner's HVAC system via VPN connection;
.2 Access to relay emails from the HVAC devices for alarm notification and energy reporting;
.3 Access to the HVAC devices for retrieval of weather data, time sync and other necessary functions;
.4 Access for use in commissioning HVAC devices.
.5 Owner understands and acknowledges that the building automation system for the Project will be uploading telemetry and building control system operating data to a centralized online repository for
ease of management and reporting. Owner agrees to allow unrestricted outbound internet access as appropriate to facilitate communications from the equipment installed by Qualified Provider.