## **Guaranteed Energy Savings Contract**

Between

Hardin County Board of Education

and

Trane U.S. Inc.

Dated as of May 16, 2024

Hardin County Schools GESC – BG # 24-193 Trane Project No. 7680317







May 16, 2024

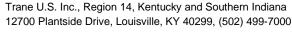
Ms. Teresa Morgan, Superintendent Hardin County Board of Education 65 W.A. Jenkins Road Elizabethtown, KY 42701

Dear Ms. Morgan:

Trane is pleased to present to Hardin County Board of Education the final contract for the implementation of a performance-based, guaranteed energy savings project. The contract is a result of a multi-step process and study that Trane conducted in collaboration with Hardin County Schools' administrative team over the last year.

Our final contract addresses major facilities' needs throughout the district by implementing a variety of energy and maintenance savings techniques and technologies. The guaranteed savings program allows Hardin County Schools to defer capital monies by generating savings from the operating budget and using those savings to pay for the improvements. The table below summarizes the improvements to be made by Trane.

	Project Scope Summary
Lakewood Elementary School HVAC & Controls Renovation	<ul> <li>Convert existing water source heat pump system (cooling tower/boiler) to geothermal system</li> <li>New classroom WSHP units</li> <li>New variable flow pumping system</li> <li>New web-based control system</li> <li>Rebuild existing ventilation units for improved indoor air quality</li> </ul>
New Highland Elementary School HVAC & Controls Renovation	<ul> <li>Convert existing hybrid water source heat pump system (cooling tower/boiler) / geothermal system to full geothermal</li> <li>New classroom WSHP units</li> <li>New variable flow pumping system</li> <li>New web-based control system</li> <li>Rebuild existing ventilation units for improved indoor air quality</li> </ul>
Multiple Facilities	LED Lighting Upgrades
Multiple Facilities	Solar Array Photovoltaic





Ms. Teresa Morgan, Superintendent May 16, 2024 Page 2

The total cost of construction is \$14,475,700. Project costs will be funded from bond proceeds of a 20-year bond issue. The financing will be facilitated by Baird. The implementation of all energy conservation measures will generate first-year savings of \$376,067. Trane applies safety factors to the calculated savings to ensure a successful program (see the ECM Savings Summary in the Project Financial Information section – Tab 2).

The following table summarizes first-year savings:

Electric/Gas Savings	\$280,963
Maintenance/Operational Savings	\$95,104
Total Savings	\$376,067

This comprehensive approach to fulfilling these needs provides a number of benefits to Hardin County Schools by balancing two critical issues:

- Comfort, reliability and student well-being
- Fiscal management

Based on approval by the Hardin County Board of Education and the subsequent document submittals to the Kentucky Department of Education, mobilization will begin after financing has been secured by Baird.

Trane is very excited about this program and looks forward to expanding our mutually beneficial partnership.

Sincerely,

Chris Jaggers

K-12 Market Leader

**Ernie Tacogue** 

K-12 Market Leader

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# Hardin County Schools Guaranteed Energy Savings Contract - Final Contract Cash Flow Model with Estimated Debt Service Schedule May 16, 2024

Fiscal Year	Es	stimated Debt Service (Total P+I)	leasurment & Verification	Total Cost	E	nergy Savings	Operational Savings	1	Fotal Savings	Capital Cost Avoidance General Fund)	To	otal Revenue
1	\$	914,052	\$ 3,985	\$ 918,037	\$	280,963	\$ 95,104	\$	376,067	\$ 541,970	\$	918,037
2	\$	934,333	\$ 4,144	\$ 938,477	\$	293,606	\$ 98,908	\$	392,514	\$ 545,964	\$	938,478
3	\$	950,196	\$ 4,310	\$ 954,506	\$	306,819	\$ 102,864	\$	409,683	\$ 544,823	\$	954,506
4	\$	965,575	\$ 4,483	\$ 970,058	\$	320,625	\$ 106,979	\$	427,605	\$ 542,454	\$	970,058
5	\$	985,263	\$ 4,662	\$ 989,925	\$	335,054	\$ 111,258	\$	446,312	\$ 543,613	\$	989,925
6	\$	1,004,424	\$ 4,848	\$ 1,009,272	\$	350,131	\$ 115,709	\$	465,840	\$ 543,433	\$	1,009,272
7	\$	1,022,406	\$ 5,042	\$ 1,027,448	\$	365,887	\$ 120,337	\$	486,224	\$ 541,224	\$	1,027,448
8	\$	1,044,208	\$ 5,244	\$ 1,049,451	\$	382,352	\$ 125,150	\$	507,502	\$ 541,950	\$	1,049,452
9	\$	1,069,662	\$ 5,454	\$ 1,075,115	\$	399,558	\$ 130,156	\$	529,714	\$ 545,401	\$	1,075,115
10	\$	1,093,287	\$ 5,672	\$ 1,098,958	\$	417,538	\$ 135,363	\$	552,900	\$ 546,059	\$	1,098,959
11	\$	1,115,306	\$ 5,899	\$ 1,121,204	\$	436,327	\$ 140,777	\$	577,104	\$ 544,101	\$	1,121,205
12	\$	1,140,066	\$ 6,135	\$ 1,146,201	\$	455,962	\$ 146,408	\$	602,370	\$ 543,831	\$	1,146,201
13	\$	1,166,532	\$ 6,380	\$ 1,172,912	\$	476,480	\$ 152,265	\$	628,745	\$ 544,168	\$	1,172,912
14	\$	1,190,946	\$ 6,635	\$ 1,197,581	\$	497,922	\$ 158,355	\$	656,277	\$ 541,305	\$	1,197,581
15	\$	1,222,521	\$ 6,901	\$ 1,229,421	\$	520,328	\$ 164,689	\$	685,017	\$ 544,404	\$	1,229,422
16	\$	1,249,451	\$ 7,177	\$ 1,256,627	\$	543,743	\$ 171,277	\$	715,020	\$ 541,608	\$	1,256,628
17	\$	1,283,748	\$ 7,464	\$ 1,291,212	\$	568,211	\$ 178,128	\$	746,339	\$ 544,873	\$	1,291,212
18	\$	1,314,036	\$ 7,762	\$ 1,321,798	\$	593,781	\$ 185,253	\$	779,034	\$ 542,765	\$	1,321,799
19	\$	1,350,295	\$ 8,073	\$ 1,358,368	\$	620,501	\$ 192,663	\$	813,164	\$ 545,205	\$	1,358,369
20	\$	1,381,975	\$ 8,396	\$ 1,390,371	\$	648,423	\$ 200,370	\$	848,793	\$ 541,578	\$	1,390,371
Total	\$	22,398,277	\$ 118,666	\$ 22,516,942	\$	8,814,209	\$ 2,832,014	\$	11,646,223	\$ 10,870,730	\$	22,516,954

Total Project Costs	\$ 14,475,700	Energy Escalation Rate	4.5%
Bond Issuance Costs	\$ 409,300	First Year Operational Savings	\$ 95,104
Cash Contribution	\$ -	Operational Savings Escalation Rate	4.0%
Financing Amount	\$ 14,885,000	Average Capital Cost Avoidance	\$ 543,537
First Year Measurement & Verification Cost	\$ 3,985	Contract Term in Years	20
Measurement & Verification Escalation Rate	4.0%	True Interest Cost	4.16%
First Year Projected Energy Savings	\$ 280,963		

#### Notes

- 1. Preliminary debt service schedule provided by Baird.
- 2. Bond sale scheduled for May 23, 2024.
- 3. Investment Tax Credit (ITC) estimated to be in the \$3.0M to \$3.5M range.



# ECM SAVINGS SUMMARY Hardin County Schools GESC Elizabethtown, KY BG #: 24-193

May 16, 2024

							May 16, 2	2024								
Building	ECM	Calculated Dollar Savings	Safety Factor (%)	Guaranteed Dollar Savings	% Total Util. Cost	Guaranteed kWh Saved	Guaranteed kW Saved	Guaranteed Therms Saved	Guaranteed kGal Saved	Building Area (ft2)	Baseline Utility Cost	Baseline BTU/ft2	Baseline \$/ft2	Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$ Guaranteed
John Hardin HS	Baseline									230,000	\$260,114	36,247	\$1.13	\$0.90	28,724	20.6%
John Hardin HS	Lighting Upgrades Solar PV	\$40,020 \$19,522	10.0% 10.0%	\$36,018 \$47,560	13.8% 6.8%	313,217	1,381	0 0	0							
John Hardin HS Total	Solal PV	\$59,542	10.0%	\$17,569 \$53,587	20.6%	193,911 507,128	106 1,487	0	0							
Building	ECM	Calculated Dollar Savings	Safety Factor (%)	Guaranteed Dollar Savings	% Total Util.	Guaranteed kWh Saved	Guaranteed kW Saved	Guaranteed Therms Saved	Guaranteed kGal Saved	(ft2)	Cost	Baseline BTU/ft2	•	Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$ Guaranteed
North Hardin HS	Baseline									198,533	\$208,841	35,062	\$1.05	\$0.93	31,346	11.9%
North Hardin HS	Lighting Upgrades	\$27,515	10.0%	\$24,763	11.9%	216,191	937	0	0							
Total		\$27,515		\$24,763	11.9%	216,191	937	0	0							
Building	ECM	Calculated Dollar Savings	Safety Factor (%)	Guaranteed Dollar Savings	% Total Util. Cost	Guaranteed kWh Saved	Guaranteed kW Saved	Guaranteed Therms Saved	Guaranteed kGal Saved	(ft2)	Cost	Baseline B10/ft2		Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$ Guaranteed
Bluegrass MS	Baseline									70,406	\$83,532	34,097	\$1.19	\$0.98	28,107	17.6%
Bluegrass MS	Lighting Upgrades	\$16,335	10.0%	\$14,702	17.6%	123,599	626	0	0							
Total		\$16,335		\$14,702	17.6%	123,599	626	0	0							
Building	ECM	Calculated Dollar Savings	Safety Factor (%)	Guaranteed Dollar Savings	% Total Util. Cost	Guaranteed kWh Saved	Guaranteed kW Saved	Guaranteed Therms Saved	Guaranteed kGal Saved	Building Area (ft2)	Baseline Utility Cost	Baseline BTU/ft2	Baseline \$/ft2	Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$ Guaranteed
North MS	Baseline									73,400	\$94,029	37,506	\$1.28	\$1.07	31,240	16.3%
North MS	Lighting Upgrades	\$11,161	10.0%	\$10,045	10.7%	87,749	464	0	0							
North MS Total	Solar PV	\$5,820 \$16,981	10.0%	\$5,238 \$15,283	5.6% 16.3%	47,062 134,811	42 507	0	0							
Building	ECM	Calculated Dollar Savings	Safety Factor (%)	Guaranteed Dollar Savings	% Total Util.	Guaranteed kWh Saved	Guaranteed kW Saved	Guaranteed Therms Saved	<u> </u>	Building Area (ft2)	Baseline Utility	Baseline BTU/ft2	Baseline \$/ft2	Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$ Guaranteed
Creekside ES	Baseline									67,036	\$67,027	29,012	\$1.00	\$0.74	21,001	26.2%
Creekside ES	Lighting Upgrades	\$13,399	10.0%	\$12,059	18.0%	105,345	536	0	0	67,036	Φ07,027	29,012	\$1.00	φυ./4	21,001	20.2%
Creekside ES	Solar PV	\$6,128	10.0%	\$5,515	8.2%	52,046	25	0	0							
Total		\$19,527		\$17,574	26.2%	157,391	562	0	0							
Building	ECM	Calculated Dollar Savings	Safety Factor (%)	Guaranteed Dollar Savings	% Total Util. Cost	Guaranteed kWh Saved	Guaranteed kW Saved	Guaranteed Therms Saved	Guaranteed kGal Saved	Building Area (ft2)	Baseline Utility Cost	Baseline BTU/ft2	Baseline \$/ft2	Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$ Guaranteed
GC Burkhead ES	Baseline									84,007	\$85,841	29,846	\$1.02	\$0.80	22,723	21.5%
GC Burkhead ES	Lighting Upgrades	\$15,304	10.0%	\$13,773	16.0%	123,964	500	0	0							
GC Burkhead ES	Solar PV	\$5,195	10.0%	\$4,676	5.4%	51,422	33	0	0							
Total		\$20,499		\$18,449	21.5%	175,386	533	0	0							
Building	ЕСМ	Calculated Dollar Savings	Safety Factor (%)	Guaranteed Dollar Savings	% Total Util. Cost	Guaranteed kWh Saved	Guaranteed kW Saved	Guaranteed Therms Saved	Guaranteed kGal Saved	Building Area (ft2)	Baseline Utility Cost	Baseline BTU/ft2	Baseline \$/ft2	Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$ Guaranteed
Heartland ES	Baseline									72,617	\$80,253	31,772	\$1.11	\$0.92	25,953	16.4%
Heartland ES	Lighting Upgrades	\$9,459 \$5,486	10.0%	\$8,513 \$4,669	10.6%	72,485	369	0	0							
Heartland ES Total	Solar PV	\$5,186 \$14,645	10.0%	\$4,668 \$13,181	5.8% 16.4%	51,362 123,847	33 402	0	0							
Building	ECM	Calculated Dollar Savings	Safety Factor (%)	Guaranteed Dollar Savings	% Total Util.	Guaranteed kWh Saved	Guaranteed kW Saved	Guaranteed Therms Saved	Guaranteed kGal Saved	Building Area (ft2)	Baseline Utility Cost	Baseline BTU/ft2	Baseline \$/ft2	Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$ Guaranteed
Lakewood ES	Baseline									67,036	\$88,254	40,349	\$1.32	\$0.82	25,114	37.7%
Lakewood ES	Lighting Upgrades	\$3,261	10.0%	\$2,935	3.3%	26,385	159	0	0							
Lakewood ES	Geothermal HVAC Upgrades	\$28,720	30.0%	\$20,104	22.8%	180,735	2,070	0	0							
Lakewood ES	Variable Pump Flow	\$6,748	30.0%	\$4,724	5.4%	42,468	104	0	0							
Lakewood ES	Solar PV	\$6,090	10.0%	\$5,481	6.2%	49,747	25	0	0							
Total Building	ECM	\$44,819  Calculated  Dollar Savings	Safety Factor (%)	\$33,243  Guaranteed Dollar Savings	37.7% % Total Util. Cost	299,335  Guaranteed kWh Saved	2,358  Guaranteed kW Saved	0 Guaranteed Therms Saved	Guaranteed kGal Saved	Building Area (ft2)	Baseline Utility Cost	Baseline BTU/ft2	Baseline \$/ft2	Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$
		Donai Savings		Javillys	COST	KWII Saveu	Javeu	merms Saveu	KGai Gaveu	` '						
Lincoln Trail ES Lincoln Trail ES	Baseline Solar PV	\$4,966	10.0%	<b>]</b> \$4,469	7.00/	50,269	27	0	0	77,597	\$61,875	22,905	\$0.80	\$0.74	20,695	7.2%
	Julai F V	\$4,966	10.0%	\$4,469 \$4,469	7.2% 7.2%	50,269	27	0	0							
Total		φ4,900		φ4,409	1.470	50,209	۷1	U	U							

Building	ECM	Calculated Dollar Savings	Safety Factor (%)	Guaranteed Dollar Savings	% Total Util. Cost	Guaranteed kWh Saved	Guaranteed kW Saved	Guaranteed Therms Saved	Guaranteed kGal Saved	Building Area (ft2)	Baseline Utility	Baseline BTU/ft2	Baseline \$/ft2	Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$ Guaranteed
New Highland ES	Baseline									56,410	\$63,793	33,933	\$1.13	\$0.88	23,973	22.1%
New Highland ES	Lighting Upgrades	\$9,539	10.0%	\$8,585	13.5%	74,342	334	0	0							
New Highland ES	Geothermal HVAC Upgrades (B	\$810	10.0%	\$729	1.1%	0	0	1,283	0							
New Highland ES	Solar PV	\$5,343	10.0%	\$4,809	7.5%	52,744	25	0	0							
Total		\$15,692		\$14,123	22.1%	127,085	359	1,283	0							
Building	ECM	Calculated Dollar Savings	Safety Factor (%)	Guaranteed Dollar Savings	% Total Util. Cost	Guaranteed kWh Saved	Guaranteed kW Saved	Guaranteed Therms Saved	Guaranteed kGal Saved	Building Area (ft2)	Baseline Utility Cost	Baseline BTU/ft2	Baseline \$/ft2	Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$ Guaranteed
North Park ES	Baseline									71,525	\$76,281	37,267	\$1.07	\$0.86	31,281	19.2%
North Park ES	Lighting Upgrades	\$16,285	10.0%	\$14,656	19.2%	125,488	590	0	0		•					
Total	0 0 10	\$16,285		\$14,656	19.2%	125,488	590	0	0							
Building	ECM	Calculated Dollar Savings	Safety Factor (%)	Guaranteed Dollar Savings	% Total Util. Cost	Guaranteed kWh Saved	Guaranteed kW Saved	Guaranteed Therms Saved	Guaranteed kGal Saved	Building Area (ft2)	Baseline Utility Cost	Baseline BTU/ft2	Baseline \$/ft2	Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$ Guaranteed
Radcliff ES	Baseline									78,947	\$81,993	30,253	\$1.04	\$0.96	27,784	8.0%
Radcliff ES	Lighting Upgrades	\$7,266	10.0%	\$6,539	8.0%	57,126	267	0	0							
Total		\$7,266		\$6,539	8.0%	57,126	267	0	0							
Building	ЕСМ	Calculated Dollar Savings	Safety Factor (%)	Guaranteed Dollar Savings	% Total Util. Cost	Guaranteed kWh Saved	Guaranteed kW Saved	Guaranteed Therms Saved	Guaranteed kGal Saved	Building Area (ft2)	Baseline Utility Cost	Baseline BTU/ft2	Baseline \$/ft2	Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$ Guaranteed
Rineyville ES	Baseline									85,978	\$67,643	23,493	\$0.79	\$0.58	16,782	26.9%
Rineyville ES	Lighting Upgrades	\$14,515	10.0%	\$13,063	19.3%	117,439	551	0	0	···-	•	•				
Rineyville ES	Solar PV	\$5,707	10.0%	\$5,137	7.6%	51,684	25	0	0							
Total		\$20,222		\$18,200	26.9%	169,123	576	0	0							
Building	ECM	Calculated Dollar Savings	Safety Factor (%)	Guaranteed Dollar Savings	% Total Util. Cost	Guaranteed kWh Saved	Guaranteed kW Saved	Guaranteed Therms Saved	Guaranteed kGal Saved	Building Area (ft2)	Baseline Utility Cost	Baseline BTU/ft2	Baseline \$/ft2	Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$ Guaranteed
Vine Grove ES	Baseline									55,386	\$71,667	32,139	\$1.29	\$1.01	24,887	21.9%
Vine Grove ES	Lighting Upgrades	\$10,218	10.0%	\$9,196	12.8%	67,233	340	0	0		•	·	· · · · · · · · · · · · · · · · · · ·	•	·	
Vine Grove ES	Solar PV	\$7,260	10.0%	\$6,534	9.1%	50,483	25	0	0							
Total		\$17,478		\$15,730	21.9%	117,716	365	0	0							
Building	ЕСМ	Calculated Dollar Savings	Safety Factor (%)	Guarantood Dollar		Guaranteed kWh Saved	Guaranteed kW Saved	Guaranteed Therms Saved	Guaranteed kGal Saved	Building Area (ft2)	Baseline Utility	Baseline BTU/ft2	Baseline \$/ft2	Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$ Guaranteed
Woodland ES	Baseline									63,142	\$71,332	31,433	\$1.13	\$1.06	28,862	6.2%
Woodland ES	Solar PV	\$4,892	10.0%	\$4,403	6.2%	47,586	33	0	0	·	•	·	·	·	,	
Total		\$4,892		\$4,403	6.2%	47,586	33	0	0							
Building	ECM	Calculated Dollar Savings	Safety Factor (%)	Guaranteed Dollar	% Total Util. Cost	Guaranteed kWh Saved	Guaranteed kW Saved	Guaranteed Therms Saved	Guaranteed kGal Saved	Building Area (ft2)	Baseline Utility Cost	Baseline BTU/ft2	Baseline \$/ft2	Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$ Guaranteed
Bus Garage	Baseline									27,950	\$20,216	16,638	\$0.72	\$0.56	12,188	22.7%
Bus Garage	Lighting Upgrades	\$2,586	10.0%	\$2,327	11.5%	17,511	40	0	0							
Bus Garage	Solar PV	\$2,512	10.0%	\$2,261	11.2%	18,946	8	0	0							
Total		\$5,098		\$4,588	22.7%	36,457	48	0	0							
Building	ECM	Calculated Dollar Savings	Safety Factor (%)	Guaranteed Dollar Savings	% Total Util. Cost	Guaranteed kWh Saved	Guaranteed kW Saved	Guaranteed Therms Saved	Guaranteed kGal Saved	Building Area (ft2)	Baseline Utility Cost	Baseline BTU/ft2	Baseline \$/ft2	Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$ Guaranteed
Central Office	Baseline									25,583	\$25,178	34,249	\$0.98	\$0.78	29,367	20.3%
Central Office	Lighting Upgrades	\$5,668	10.0%	\$5,102	20.3%	36,609	201	0	0		· ·	•	·	·	·	
Total	0 0 10	\$5,668	-	\$5,102	20.3%	36,609	201	0	0							
Building	ECM	Calculated Dollar Savings	Safety Factor (%)	Guaranteed Dollar	% Total Util. Cost	Guaranteed kWh Saved	Guaranteed kW Saved	Guaranteed Therms Saved	Guaranteed kGal Saved	(ft2)	Baseline Utility Cost	Baseline B1U/ft2		Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$ Guaranteed
IT-TV Bldg	Baseline									12,000	\$35,215	100,733	\$2.93	\$2.74	96,722	6.7%
IT-TV Bldg	Lighting Upgrades	\$2,633	10.0%	\$2,370	6.7%	14,105	70	0	0							
Total		\$2,633		\$2,370	6.7%	14,105	70	0	0							
Building	ЕСМ	Calculated Dollar Savings	Safety Factor (%)	Guaranteed Dollar Savings	% Total Util. Cost	Guaranteed kWh Saved	Guaranteed kW Saved	Guaranteed Therms Saved	Guaranteed kGal Saved	Building Area (ft2)	Baseline Utility Cost	Baseline BTU/ft2	Baseline \$/ft2	Guaranteed \$/ft2	Guaranteed Btu/ft2	% of Base \$ Guaranteed
PROJECT TOTALS	ALL	\$320,063	12%	\$280,963	18%	2,519,253	9,947	1,283	0	1,417,553	\$1,543,085	46,549	\$1.09	\$0.89	26,999	21.7%
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# 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 **№** AIA Document A141<sup>™</sup> – 2004

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

AGREEMENT made as of the 16th day of May in the year 2024 (In words, indicate day, month and year.)

BETWEEN the Owner:

(Name, legal status, address and other information)
Hardin County Board of Education
65 W. A. Jenkins Road
Elizabethtown, KY 42701

and the Qualified Provider:
(Name, legal status, address and other information)
Trane U.S. Inc.
12700 Plantside Drive
Louisville, KY 40299

for the following Project:
(Name, location and detailed description)
Hardin County Schools GESC
65 W. A. Jenkins Road, Elizabethtown, KY 42701

COOP Quote Number: P3-ce8AAC-24-001 COOP & Federal Contract ID: OMNIA Region 4 R2215

Lakewood Elementary - HVAC and Controls Replacement New Highland Elementary - HVAC and Controls Replacement

Mutliple Facilties - LED Lighting Upgrades

Multiple Facilities - Photovoltaic Solar Arrays

(Scope detail provided in Exhibit D of this agreement.)



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

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

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

The Owner and Qualified Provider agree as follows.

#### **TABLE OF ARTICLES**

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

#### **TABLE OF EXHIBITS**

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

#### ARTICLE 1 THE CONTRACT DOCUMENTS

§ 1.1 The Contract Documents form the Guaranteed Energy Savings Contract. The Contract Documents consist of this Agreement between Owner and Qualified Provider (hereinafter, the "Agreement") and its attached Exhibits, including Owner's direct Purchase Orders, if any; Supplementary and other Conditions; Addenda issued prior to execution of the Agreement; the Project Criteria, including changes to the Project Criteria proposed by the Qualified Provider and accepted by the Owner, if any; the Qualified Provider's Proposal and written modifications to the Proposal accepted by the Owner, if any; other documents listed in this Agreement; and Modifications issued after execution of this Agreement. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Architect and Owner, (2) between the Owner and a Contractor or Subcontractor, or (3) between any persons or entities other than the Owner and Qualified Provider, including but not limited to any consultant retained by the Owner to prepare or review the Project Criteria. An enumeration of the Contract Documents, other than Modifications, appears in Article 8.

- § 1.2 The Guaranteed Energy Savings Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral.
- § 1.3 The Guaranteed Energy Savings Contract may be amended or modified only by a Modification. A Modification is (1) a written amendment to the Guaranteed Energy Savings Contract signed by both parties.

#### ARTICLE 2 THE WORK OF THE GUARANTEED ENERGY SAVINGS CONTRACT

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

#### ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

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

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

See Addendum No. 1

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.)

See Addendum No. 1

§ 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 zero dollars and zero cents (\$0.00) not as a penalty, but as fixed, agreed and liquidated damages for each calendar day of delay until the Work is substantially completed as defined in Exhibit A, Section A.9.8. The Owner shall have the right to deduct liquidated damages from money in hand otherwise due, or to become due, to the Qualified Provider, or to sue and recover compensation for damages for failure to substantially complete the Work within the time stipulated herein. Said liquidated damages shall cease to accrue from the date of Substantial Completion.

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

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

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

Portion of Work

**Substantial Completion Date** 

Project Substantial Completion described in Exhibit D.1 of this Agreement

#### ARTICLE 4 CONTRACT SUM

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

§ 4.2 Stipulated Sum

§ 4.2.1 The Stipulated Sum shall be thirteen million eight hundred eighty-three thousand four hundred nine dollars (\$13,883,409.00), 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.)

Amount

	Ame	ount
Total Construction Cost	\$	14,475,700.00
Sum of Owner's direct Purchase Orders	\$	592,291.00
Contract Sum (total construction cost less Owner direct Purchase Orders)	\$	13,883,409.00

§ 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:

#### ARTICLE 5 PAYMENTS

§ 5.1 Progress Payments

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

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

§ 5.1.3 Provided that an Application for Payment is received not later than the

Owner shall make payment to the Qualified Provider not later than the

In the day of month, the

Owner shall make payment to the Qualified Provider not later than the

In the last 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.

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

§ 5.1.4 (Not Used)

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

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

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

#### § 5.2 Progress Payments—Stipulated Sum

§ 5.2.1 Applications for Payment where the Contract Sum is based upon a Stipulated Sum shall indicate the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.2.2 Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

- .1 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Contract Sum allocated to that portion of the Work in the schedule of values, less retainage of ten percent ( 10 %) on the Work, other than services provided by design professionals and other consultants retained directly by the Qualified Provider.
- .2 Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage of ten percent (10%);
- .3 Subtract the aggregate of previous payments made by the Owner; and
- .4 Subtract amounts, if any, for which the Owner has withheld payment from or nullified an Application for Payment as provided in Section A.9.5 of Exhibit A, Terms and Conditions.
- § 5.2.3 The progress payment amount determined in accordance with Section 5.2.2 shall be further modified under the following circumstances:
  - .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:
  - 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.)

Conditions, the (If the parties	arties do not resolve their dispute through mediation pursuant to Section A.4.3 of Exhibit A, Terms and the method of binding dispute resolution shall be the following:  If 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.)

		Relationship to Qualified	
Name and Address	License Number	Provider	Other Information

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

Name and Address	License Number	Responsibilities to Owner	Other Information
John Newman, PE, President	16925	Subcontractor	Engineer of Record
N3D Group			
1204 Winchester Road			
Lexington, KY 40505			
Ron Steinhart, PE, Principal	20054	Subcontractor	Engineer of Record
Hafer Associates			
21 SE Third Street, Suite 800			
Evansville, IN 47708			

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

Responsibilities

Name and Address License Number to Owner Other Information

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

Ms. Teresa Morgan, Superintendent Hardin County Board of Education 65 W.A. Jenkins Road Elizabethtown, KY 42071 § 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.)

Mr. Chuck Bowers, Area General Manager Trane U.S. Inc. 12700 Plantside Drive Louisville, KY 40299

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

#### § 7.7 Other provisions:

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

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

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

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

#### ARTICLE 8 ENUMERATION OF THE CONTRACT DOCUMENTS

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

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

Document	Title	Pages
Exhibit A	Terms and Conditions	26
Exhibit B (Not Used)		
Exhibit C	Insurance and Bonds	2
Exhibit D	Scope of Services and Energy Conservation Measures.	25
Exhibit E	Energy Savings Guarantee	59
Exhibit F	Annual Reconciliation Statement	2
Exhibit G	Support Services	10
Exhibit H	BG-1 Form and Method and Cost of Financing	4
Addendum No. 1	Addendum No. 1 to AIA A141-2004	10
Attachment A	Sample Appliction and Certificate of Payment	2
Attachment B	Purchase Orders and Equipment Proposals	28
Attachment C	Description of the Premises	2
Attachment D	Notice to Proceed	_1
Attachment E	Hazardous Materials	1

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

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

Title Date
Exhibit D of this Agreement

Scope of Services and Energy Conservation Measures

§ 8.1.4 The Qualified Provid consists of the following: (Either list applicable documents)	ler's Proposal, dated nents below or refer to an exhibit attached to	this Agreement.)
	Qualified Provider's Proposal, if any, are as f nents below or refer to an exhibit attached to	
§ 8.1.6 The Addenda, if any, (Either list applicable document Addendum No. 1 to AlA Al	nents below or refer to an exhibit attached to	o this Agreement.)
Number	Date	Pages
	ute terms and conditions other than those conta	ained in AIA Document A141–2004, Exhibit A, ions and attach to this Agreement as Exhibit A.)

§ 8.1.8 (Not Used)

§ 8.1.9 Exhibit C, Insurance and Bonds, if applicable.

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

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

- Kentucky Department of Education FACPAC Purchase Order Form
- Trane Equipment Proposal

This Agreement ente		

OWNER (Signature)	QUALIFIED PROVIDER (Signature)	
Ms. Teresa Morgan, Superintendent	Mr. Chuck Bowers, Area General Manager	
(Printed name and title)	(Printed name and title)	

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

#### Terms and Conditions

#### for the following PROJECT:

(Name and location or address)
Hardin County Schools GESC
65 W. A. Jenkins Road, Elizabethtown, KY 42701

#### THE OWNER:

(Name, legal status and address)
Hardin County Board of Education
65 W. A. Jenkins Road
Elizabethtown, KY 42701

#### THE QUALIFIED PROVIDER:

(Name, legal status and address)
Trane U.S. Inc.
12700 Plantside Drive
Louisville, KY 40299

#### TABLE OF ARTICLES

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



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

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

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

#### ARTICLE A.1 GENERAL PROVISIONS

§ A.1.1 Basic Definitions

#### § A.1.1.1 The GUARANTEED ENERGY SAVINGS CONTRACT Documents

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

#### § A.1.1.2 Project Criteria

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

#### § A.1.1.3 Architect

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

#### § A.1.1.4 Contractor

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

#### § A.1.1.5 Subcontractor

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

#### § A.1.1.6 The Work

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

#### § A.1.1.7 The Project

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

#### § A.1.1.8 Neutral

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

#### § A.1.2 Compliance with Applicable Laws

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

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

#### § A.1.3 Capitalization

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

§ A.1.4 Interpretation

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

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

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

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

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

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

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

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

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

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

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

#### ARTICLE A.2 OWNER

#### § A.2.1 General

- § A.2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Owner" means the Owner or the Owner's authorized representative. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all Project matters requiring the Owner's approval or authorization. The Owner shall render decisions in a timely manner and in accordance with the Qualified Provider's schedule submitted to the Owner.
- § A.2.1.2 The Owner shall furnish to the Qualified Provider within 15 days after receipt of a written request information necessary and relevant for the Qualified Provider to evaluate, give notice of or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.

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

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

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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.

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

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

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

#### § A.2.4 Owner's Right to Stop Work

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

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

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

#### ARTICLE A.3 QUALIFIED PROVIDER

#### § A.3.1 General

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

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

#### § A.3.2 Design Services and Responsibilities

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

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

- § A.3.2.3 The Qualified Provider shall be responsible to the Owner for acts and omissions of the Qualified Provider's employees, Architect, Contractors, Subcontractors and their agents and employees, and other persons or entities, including the Architect and other design professionals, performing any portion of the Qualified Provider's obligations under the Contract Documents.
- § A.3.2.4 The Qualified Provider shall carefully study and compare the documents, plans, materials and other information provided by the Owner pursuant to Section A.2.2, shall take field measurements of any existing conditions related to the Work, shall observe any conditions at the site affecting the Work, and report promptly to the Owner any errors, inconsistencies or omissions discovered.
- § A.3.2.5 The Qualified Provider shall provide to the Owner for Owner's written approval design documents sufficient to establish the size, quality and character of the Project; its architectural, structural, mechanical and electrical systems; and the materials and such other elements of the Project to the extent required by the Contract Documents. Deviations, if any, from the Contract Documents shall be disclosed in writing.
- § A.3.2.6 Upon the Owner's written approval of the design documents submitted by the Qualified Provider, the Qualified Provider shall provide construction documents for review and written approval by the Owner. The construction documents shall set forth in detail the requirements for construction of the Project. The construction documents shall include drawings and specifications that establish the quality levels of materials and systems required. Deviations, if any, from the Contract Documents shall be disclosed in writing. Construction documents may include drawings, specifications, and other documents and electronic data setting forth in detail the requirements for construction of the Work, and shall
  - .1 be consistent with the approved design documents;
  - .2 provide information for the use of those in the building trades; and
  - .3 include documents customarily required for regulatory agency approvals.
- § A.3.2.7 The Qualified Provider shall meet with the Owner periodically to review progress of the design and construction documents.
- § A.3.2.8 Upon the Owner's written approval of construction documents, the Qualified Provider, with the assistance of the Owner, shall prepare and file documents required to obtain necessary approvals of governmental authorities having jurisdiction over the Project. The Owner's approval of construction documents shall be by Board Order.
- § A.3.2.9 The Qualified Provider shall obtain from each of the Qualified Provider's professionals and furnish to the Owner certifications with respect to the documents and services provided by such professionals (a) that, to the best of their knowledge, information and belief, the documents or services to which such certifications relate (i) are consistent with the Project Criteria set forth in the Contract Documents, except to the extent specifically identified in such certificate, (ii) comply with applicable professional practice standards, and (iii) comply with applicable laws, ordinances, codes, rules and regulations governing the design of the Project; and (b) that the Owner and its consultants shall be entitled to rely upon the accuracy of the representations and statements contained in such certifications.
- § A.3.2.10 If the Owner requests the Qualified Provider, the Architect or the Qualified Provider's other design professionals to execute certificates other than those required by Section A.3.2.9, the proposed language of such certificates shall be submitted to the Qualified Provider, or the Architect and such design professionals through the Qualified Provider, for review and negotiation at least 14 days prior to the requested dates of execution. Neither the Qualified Provider, the Architect nor such other design professionals shall be required to execute certificates that would require knowledge, services or responsibilities beyond the scope of their respective agreements with the Owner or Qualified Provider.

#### § A.3.3 Construction

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

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

- § A.3.3.3 The Qualified Provider shall direct specific attention, in writing or on resubmitted design and construction documents or other submittals such as Shop Drawings, Product Data, Samples or similar submittals, to revisions other than those requested by the Owner on previous submittals. In the absence of such written notice, the Owner's approval of a resubmission shall not apply to such revisions.
- § A.3.4 When the Contract Documents require that a Contractor provide professional design services or certifications related to systems, materials or equipment, or when the Qualified Provider in its discretion provides such design services or certifications through a Contractor, the Qualified Provider shall cause professional design services or certifications to be provided by a properly licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professionals, if prepared by others, shall bear such design professional's written approval. The Owner shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals.
- § A.3.3.5 The Qualified Provider shall be solely responsible for and have control over all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Design-Build Documents.
- § A.3.3.6 The Qualified Provider shall keep the Owner informed of the progress and quality of the Work.
- § A.3.3.7 The Qualified Provider shall be responsible for the supervision and direction of the Work, using the Qualified Provider's best skill and attention. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Qualified Provider shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures. If the Qualified Provider determines that such means, methods, techniques, sequences or procedures may not be safe, the Qualified Provider shall give timely written notice to the Owner and shall not proceed with that portion of the Work without further written instructions from the Owner. If the Qualified Provider is then instructed to proceed with the required means, methods, techniques, sequences or procedures without acceptance of changes proposed by the Qualified Provider, the Owner shall be solely responsible for any resulting loss or damage.
- § A.3.3.8 The Qualified Provider shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

#### § A.3.4 Labor and Materials

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

#### § A.3.5 Warranty

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

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

#### § A.3.6 Taxes

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

#### § A.3.7 Permits, Fees and Notices

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

#### § A.3.8 (Not Used)

#### § A.3.9 Qualified Provider's Schedule

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

#### § A.3.9.2 (Not Used)

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

#### § A.3.10 Documents and Samples at the Site

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

#### § A.3.11 Shop Drawings, Product Data and Samples

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

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

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

#### § A.3.12 Use of Site

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

#### § A.3.13 Cutting and Patching

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

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

#### § A.3.14 Cleaning Up

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

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

#### § A.3.15 Access to Work

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

#### § A.3.16 Royalties, Patents and Copyrights

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

#### § A.3.17 Indemnification

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

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

#### ARTICLE A.4 DISPUTE RESOLUTION

#### § A.4.1 Claims and Disputes

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

#### § A.4.1.7 Claims for Additional Time

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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

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

#### § A.4.1.9 (Not Used)

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

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

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

#### § A.4.2 Resolution of Claims and Disputes

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

#### § A.4.3 Mediation

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

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

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

#### § A.4.4 Arbitration

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

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

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

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

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

#### ARTICLE A.5 AWARD OF CONTRACTS

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

§ A.5.2 (Not Used)

§ A.5.3 (Not Used)

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

§ A.5.5 Contingent Assignment of Contracts

§ 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;

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

- .6 Reasonable evidence that the Work will not be completed within the Contract Time and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 Persistent failure to carry out the Work in accordance with the Contract Documents.

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

#### § A.9.6 Progress Payments

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

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

- § A.9.6.3 The Qualified Provider shall promptly pay each Contractor, upon receipt of payment from the Owner, out of the amount paid to the Qualified Provider on account of such Contractor's portion of the Work, the amount to which said Contractor is entitled, reflecting percentages actually retained from payments to the Qualified Provider on account of the Contractor's portion of the Work. The Qualified Provider shall, by appropriate agreement with each Contractor, require each Contractor to make payments to Subcontractors in a similar manner.
- § A.9.6.4 The Owner shall have no obligation to pay or to see to the payment of money to a Contractor except as may otherwise be required by law.
- § A.9.6.5 Payment to material suppliers shall be treated in a manner similar to that provided in Sections A.9.6.3 and A.9.6.4.
- § A.9.6.6 A progress payment, or partial or entire use or occupancy of the Project by the Owner, shall not constitute acceptance of Work not in accordance with the Contract Documents.

#### § A.9.7 Failure of Payment

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

#### § A.9.8 Substantial Completion

- § A.9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or use the Work or a portion thereof for its intended use. The ability to occupy and utilize the Work or designated portion thereof may require an occupancy permit issued by the Kentucky Department of Housing, Building, and Construction and other other agencies having statutory authority and approval requirements.
- § A.9.8.2 When the Qualified Provider considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Qualified Provider shall prepare and submit to the Owner a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Qualified Provider to complete all Work in accordance with the Contract Documents.
- § A.9.8.3 Upon receipt of the Qualified Provider's list, the Owner shall make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Owner's inspection discloses any item, whether or not included on the Qualified Provider's list, which is not substantially complete, the Qualified Provider shall complete or correct such item. In such case, the Qualified Provider shall then submit a request for another inspection by the Owner to determine whether the Qualified Provider's Work is substantially complete.
- § A.9.8.4 In the event of a dispute regarding whether the Qualified Provider's Work is substantially complete, the dispute shall be resolved pursuant to Article A.4.
- § A.9.8.5 When the Work or designated portion thereof is substantially complete, the Qualified Provider shall prepare for the Owner's signature an Acknowledgement of Substantial Completion which, when signed by the Owner, shall establish (1) the date of Substantial Completion of the Work, (2) responsibilities between the Owner and Qualified Provider for security, maintenance, heat, utilities, damage to the Work and insurance, and (3) the time within which the Qualified Provider shall finish all items on the list accompanying the Acknowledgement. When the Owner's inspection discloses that the Work or a designated portion thereof is substantially complete, the Owner shall sign the Acknowledgement of Substantial Completion. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Acknowledgement of Substantial Completion.
- § A.9.8.6 Upon execution of the Acknowledgement of Substantial Completion and consent of surety the Owner shall make payment of retainage applying to such Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

#### § A.9.9 Partial Occupancy or Use

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

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

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

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

#### § A.9.10 Final Completion and Final Payment

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

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

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

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

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

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

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

#### ARTICLE A.10 PROTECTION OF PERSONS AND PROPERTY

## § A.10.1 Safety Precautions and Programs

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

## § A.10.2 Safety of Persons and Property

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

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site or under the care, custody or control of the Qualified Provider or the Qualified Provider's Contractors or Subcontractors; and
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- § A.10.2.2 The Qualified Provider shall give notices and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.
- § A.10.2.3 The Qualified Provider shall erect and maintain, as required by existing conditions and performance of the Contract Documents, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities.
- § A.10.2.4 When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Qualified Provider shall notify the Owner in writing ten (10) days in advance of such action and exercise utmost care and carry on such activities under supervision of properly qualified personnel.
- § A.10.2.5 The Qualified Provider shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections A.10.2.1.2 and A.10.2.1.3 caused in whole or in part by the Qualified Provider, the Architect, a Contractor, a Subcontractor, or anyone directly or indirectly employed by any of them or by anyone for whose acts they may be liable and for which the Qualified Provider is responsible under Sections A.10.2.1.2 and A.10.2.1.3, except damage or loss attributable to acts or omissions of the Owner or anyone directly or indirectly employed by the Owner, or by anyone for whose acts the Owner may be liable, and not attributable to the fault or negligence of the Qualified Provider. The foregoing obligations of the Qualified Provider are in addition to the Qualified Provider's obligations under Section A.3.17.
- § A.10.2.6 The Qualified Provider shall designate in writing to the Owner a responsible individual whose duty shall be the prevention of accidents.
- § A.10.2.7 The Qualified Provider shall not load or permit any part of the construction or site to be loaded so as to endanger its safety.

#### § A.10.3 Hazardous Materials

- § A.10.3.1 If reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Qualified Provider, the Qualified Provider shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Owner.
- § A.10.3.2 Unless there is a hazardous materials survey on record, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Qualified Provider and, in the event such material or substance is found to be present, to verify that it has been rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Qualified Provider the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of such material or substance or who are to perform the task of removal or safe containment of such material or substance. The Qualified Provider shall promptly reply to the Owner in writing stating whether or not the Qualified Provider has reasonable objection to the persons or entities proposed by the Owner. If the Qualified Provider has an objection to a person or

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

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

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

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

## § A.10.6 Emergencies

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

## ARTICLE A.11 INSURANCE AND BONDS

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

## § A.11.2 Qualified Provider's Liability Insurance

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

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

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

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

## § A.11.3 Owner's Liability Insurance

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

## § A.11.4 Property Insurance

- § A.11.4.1 Unless otherwise provided, the Owner shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance written on a builder's risk, "all-risk" or equivalent policy form in the amount of the initial Contract Sum (and Owner-direct Purchase Orders if utilized), plus the value of subsequent Design-Build Contract modifications and cost of materials supplied or installed by others, comprising total value for the entire Project at the site on a replacement cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in Section A.9.10 or until no person or entity other than the Owner has an insurable interest in the property required by this Section A.11.4 to be covered, whichever is later. This insurance shall include interests of the Owner, Qualified Provider, Contractors and Subcontractors in the Project.
- § A.11.4.1.1 Property insurance shall be on an "all-risk" or equivalent policy form and shall include, without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, falsework, testing and startup, temporary buildings and debris removal, including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Qualified Provider's services and expenses required as a result of such insured loss.
- § A.11.4.1.2 If the Owner does not intend to purchase such property insurance required by the Guaranteed Energy Savings Contract and with all of the coverages in the amount described above, the Owner shall so inform the Qualified Provider in writing prior to commencement of the Work. The Qualified Provider may then effect insurance that will protect the interests of the Qualified Provider, Contractors and Subcontractors in the Work, and, by appropriate Modification to the Contract, the cost thereof shall be charged to the Owner. If the Qualified Provider is damaged by the failure or neglect of the Owner to purchase or maintain insurance as described above without so notifying the Qualified Provider in writing, then the Owner shall bear all reasonable costs properly attributable thereto.
- § A.11.4.1.3 If the property insurance requires deductibles, the Owner shall pay costs not covered because of such deductibles.
- § A.11.4.1.4 This property insurance shall cover portions of the Work stored off the site and also portions of the Work in transit.
- § A.11.4.1.5 Partial occupancy or use in accordance with Section A.9.9 shall not commence until the insurance company or companies providing property insurance have consented to such partial occupancy or use, by endorsement or otherwise. The Owner and the Qualified Provider shall take reasonable steps to obtain consent of the insurance company or companies and shall, without mutual written consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of insurance.
- § A.11.4.2 Boiler and Machinery Insurance. The Owner shall purchase and maintain boiler and machinery insurance required by the Contract Documents or by law, which shall specifically cover such insured objects during installation and until final acceptance by the Owner; this insurance shall include interests of the Owner, Qualified Provider, Contractors and Subcontractors in the Work, and the Owner and Qualified Provider shall be named insureds.
- § A.11.4.3 Loss of Use Insurance. The Owner, at the Owner's option, may purchase and maintain such insurance as will insure the Owner against loss of use of the Owner's property due to fire or other hazards, however caused. The Owner waives all rights of action against the Qualified Provider, Architect, the Qualified Provider's other design professionals,

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

- § A.11.4.4 If the Qualified Provider requests in writing that insurance for risks other than those described herein or other special causes of loss be included in the property insurance policy, the Owner shall, if possible, include such insurance, and the cost thereof shall be charged to the Qualified Provider by appropriate Modification to the Contract.
- § A.11.4.5 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, the Owner shall waive all rights in accordance with the terms of Section A.11.4.7 for damages caused by fire or other causes of loss covered by this separate property insurance. All separate policies shall provide this waiver of subrogation by endorsement or otherwise.
- § A.11.4.6 Before an exposure to loss may occur, the Owner shall file with the Qualified Provider a copy of each policy that includes insurance coverages required by this Section A.11.4. Each policy shall contain all generally applicable conditions, definitions, exclusions and endorsements related to this Project. Each policy shall contain a provision that the policy will not be canceled or allowed to expire and that its limits will not be reduced until at least 30 days' prior written notice has been given to the Qualified Provider.
- § A.11.4.7 Waivers of Subrogation. The Owner and Qualified Provider waive all rights against each other and any of their consultants, separate contractors described in Section A.6.1, if any, Contractors, Subcontractors, agents and employees, each of the other, and any of their contractors, subcontractors, agents and employees, for damages caused by fire or other causes of loss to the extent covered by property insurance obtained pursuant to this Section A.11.4 or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by the Owner as fiduciary. The Owner or Qualified Provider, as appropriate, shall require of the separate contractors described in Section A.6.1, if any, and the Contractors, Subcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, even though the person or entity did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.
- § A.11.4.8 A loss insured under Owner's property insurance shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section A.11.4.10. The Qualified Provider shall pay Contractors their just shares of insurance proceeds received by the Qualified Provider, and, by appropriate agreements, written where legally required for validity, shall require Contractors to make payments to their Subcontractors in similar manner.
- § A.11.4.9 If required in writing by a party in interest, the Owner as fiduciary shall, upon occurrence of an insured loss, give bond for proper performance of the Owner's duties. The cost of required bonds shall be charged against proceeds received as fiduciary. The Owner shall deposit in a separate account proceeds so received, which the Owner shall distribute in accordance with such agreement as the parties in interest may reach. If after such loss no other special agreement is made and unless the Owner terminates the Guaranteed Energy Savings Contract for convenience, replacement of damaged property shall be performed by the Qualified Provider after a Modification to the Contract.
- § A.11.4.10 The Owner as fiduciary shall have power to adjust and settle a loss with insurers unless one of the parties in interest shall object in writing within five days after occurrence of loss to the Owner's exercise of this power.; The Owner as fiduciary shall, in the case of a decision or award, make settlement with insurers in accordance with directions of a decision or award. If distribution of insurance proceeds by arbitration is required, the arbitrators will direct such distribution.

## § A.11.5 Performance Bond and Payment Bond

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

#### ARTICLE A.12 UNCOVERING AND CORRECTION OF WORK

§ A.12.1 Uncovering of Work

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

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

## § A.12.2 Correction of Work

§ A.12.2.1 Before or After Substantial Completion

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

§ A.12.2.2 After Substantial Completion

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

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

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

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

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

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

### § A.12.3 Acceptance of Nonconforming Work

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

#### ARTICLE A.13 MISCELLANEOUS PROVISIONS

#### § A.13.1 Governing Law

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

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

## § A.13.2 Successors and Assigns

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

#### § A.13.3 Written Notice

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

## § A.13.4 Rights and Remedies

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

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

#### § A.13.5 Tests and Inspections

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

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

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

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

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

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

## § A.13.6 Commencement of Statutory Limitation Period

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

.1 Before Substantial Completion. As to acts or failures to act occurring prior to the relevant date of Substantial Completion, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than such date of Substantial Completion;

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

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

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

- .1 Issuance of an order of a court or other public authority having jurisdiction which requires all Work to be stopped:
- .2 An act of government, such as a declaration of national emergency which requires all Work to be stopped;
- .3 The Owner has failed to make payment to the Qualified Provider in accordance with the Contract Documents; or
- .4 The Owner has failed to furnish to the Qualified Provider promptly, upon the Qualified Provider's request, reasonable evidence as required by Section A.2.2.8.
- § A.14.1.2 The Qualified Provider may terminate the Contract if, through no act or fault of the Qualified Provider or a Contractor, Subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Qualified Provider, repeated suspensions, delays or interruptions of the entire Work by the Owner, as described in Section A.14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.
- § A.14.1.3 If one of the reasons described in Sections A.14.1.1 or A.14.1.2 exists, the Qualified Provider may, upon seven days' written notice to the Owner, terminate the Contract and recover from the Owner payment for Work executed and for proven loss with respect to materials, equipment, tools, and construction equipment and machinery, including reasonable overhead, profit and damages.
- § A.14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Qualified Provider or a Contractor or their agents or employees or any other persons performing portions of the Work under a direct or indirect contract with the Qualified Provider because the Owner has persistently failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Qualified Provider may, upon seven additional days' written notice to the Owner, terminate the Contract and recover from the Owner as provided in Section A.14.1.3.

#### § A.14.2 Termination by the Owner For Cause

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

- .1 persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- 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)
Hardin County Schools GESC
65 W. A. Jenkins Road, Elizabethtown, KY 42701

#### THE OWNER:

(Name, legal status and address)
Hardin County Board of Education
65 W. A. Jenkins Road
Elizabethtown, KY 42701

### THE QUALIFIED PROVIDER:

(Name, legal status and address)
Trane U.S. Inc.
12700 Plantside Drive
Louisville, KY 40299

#### ARTICLE C.1

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

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

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

.1 Worker's Compensation:

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

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

a. General Aggregate (except Products-Completed \$1,000,000 Operations)
 b. Products-Completed Operations Aggregate \$1,000,000

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

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

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



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

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

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

.3 Contractual Liability:

a. General Aggregate \$1,000,000

b. Each Occurrence (Bodily Injury and Property Damage) \$1,000,000

.4 Automobile Liability:

a. Bodily Injury \$500,000 each person

\$1,000,000 each accident

b. Property Damage \$500,000 each accident, or a combined single limit of \$1,000,000

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

.6 Excess Liability Umbrella Form:

a. General Aggregate \$1,000,000

**b.** Each Occurrence \$1,000,000

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

#### ARTICLE C.2

The Qualified Provider shall provide surety bonds as follows:

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

#### Type

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

## Penal Sum (\$0.00)

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

§ C.2.1 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Agreement, the Qualified Provider shall promptly furnish a copy of the bonds or shall permit a copy to be made.

# EXHIBIT D Scope of Services and Energy Conservation Measures

The Services are defined as the following:

As more fully set forth in the tables and figures set forth in this Exhibit D with respect to each facility making up the Premises:

## **Lakewood Elementary School**

#### Overview

This energy conservation measure (ECM) involves mechanical renovations at Lakewood Elementary School. The scope includes a new HVAC system and controls per new engineered drawings. Existing water source heat pump units will be removed and replaced with new Trane water source heat pump units in areas indicated on new mechanical drawings. The existing ductwork and water source heat pump condenser water loop piping infrastructures in most areas will remain and be reused. The existing (5) ventilation energy recovery serving most of the school will be refurbished in place. The existing water source heat pump condenser water loop distribution pumps will be removed and replaced with new appropriately sized pumping systems. All new pump motors will be equipped with new variable frequency drives and will operate in conjunction with the new water source heat pump modulation valves to create a variable flow system. The existing fluid cooler and electric boiler will be removed. New geothermal wells will be drilled and piped to the mechanical room. Piping in the main mechanical room will be modified for pump replacements per N3D engineered drawings.

## **HVAC Upgrades**

- Disconnect power from existing equipment and components to be replaced.
- Remove (45) existing water source heat pump units.
- Remove (1) existing electric boiler.
- Remove (1) existing fluid cooler.
- Remove (2) existing water source loop pumps
- Provide and install (45) new water source heat pump units.
- Refurbish (5) existing ERV units. This scope will include new energy recovery wheel, new supply and exhaust fan motors and new damper actuators.
- Provide and install (2) new water source heat pump geothermal water loop pumps with VFDs and associated accessories.
- Drill (69) new geothermal wells and pipe to mechanical room.
- Connect power to new equipment.
- Provide and install new HVAC equipment, system, and components per N3D engineered/stamped drawings and specifications.

INITIALED BY:	Owner _	Trane
whihit D. Qualified Provide	er Project No	· 7680317

## **HVAC Controls Upgrades**

The HVAC system will be controlled by a new Trane web-based controls system. The new controls system includes the following:

- Trane Tracer SC+ system controls panel located in the mechanical room.
- A new Trane UC600 panel will be installed to control the mechanical room equipment.
- New water source heat pump condenser water distribution loop pump motors will be equipped with new VFDs which will interface with new Tracer SC+ system controls panel.
- All new Trane equipment will be equipped with new Trane factory-mounted controls which will interface with new Tracer SC+ system controls panel.
- (5) new Trane UC600 panels will be installed to control the (5) existing ERV units
- (1) Electric meter will be installed and connected to the new Trane BAS to measure energy usage of the building.
- Install (2) new temperature sensors for the walk-in cooler and freezer monitoring.
- Provide all programming and commissioning of the new Trane BAS.
- Integration and graphical interface into the Trane district frontend.
- All programming and commissioning will be done in coordination with Trane.

## **Lighting Upgrades**

- Remove existing lighting components and fixtures in select interior/exterior spaces.
- Remove existing lighting components and fixtures associated with exterior site lighting.
- Install new high-efficiency lighting scope per the following table.

Fixture Type	Qty
New LED Troffer Retrofit Kit	634
New LED Lamp and Driver Combination	37
New LED Lamp	98
New Recessed Downlight Retrofit Kit	1
New NSF Flat Panel	36
New LED Flat Panel Troffer Retrofit Kit	5
New Wireless Contactor Modules	6
New LED Floods	4
New LED Doorway Light	2
New LED Pole Fixture	38

Install new web-based site lighting controls.

#### **Solar Power Generation**

This scope item involves the installation of a new solar photovoltaic electricity generation system on the roof of Lakewood ES contingent upon a satisfactory structural review by a qualified third party of the roof where the system is intended to be placed.

- a) Solar Power Generation Scope of Work:
  - Provide and install (92) new 485W solar modules (or equal power value).
  - Provide and install new inverter system(s).
  - Provide and install associated balance of system and wiring.
  - Provide and install new means of AC Power disconnect for the system.
  - Provide production generation feedback via local controls integration with smart inverter
  - Interconnection with local electric Utility Provider.
  - Commissioning of system.

New solar power generation system will comply with all local utility provider mandates regarding renewable energy generation systems. Tests will be performed upon installation completion to satisfy all requirements from utility provider, as well as all safety requirements mandated by Kentucky electrical code before system is turned on and power is officially produced.

- Replacement or upgrade of existing electrical switchgear
- Arc flash studies on existing equipment
- Warranty, repair or replacement of existing systems in disrepair or outside of code compliance
- Structural improvement work to the roof as the result of an unsatisfactory structural review of the intended roof site
- Additional roof painting or replacement after or during installation; the roof condition after install will match the existing roof condition

## **New Highland Elementary School**

#### Overview

This energy conservation measure (ECM) involves mechanical renovations at New Highland Elementary School. The scope includes a new HVAC system and controls per new engineered drawings. Existing water source heat pump units will be removed and replaced with new Trane water source heat pump units in areas indicated on new mechanical drawings. The existing ductwork and water source heat pump condenser water loop piping infrastructures in most areas will remain and be reused. The existing (3) ventilation energy recovery serving most of the school will be refurbished in place. The existing water source heat pump condenser water loop distribution pumps will be removed and replaced with new appropriately sized pumping systems. All new pump motors will be equipped with new variable frequency drives and will operate in conjunction with the new water source heat pump modulation valves to create a variable flow system. The existing fluid cooler and natural gas boiler will be removed. New geothermal wells will be drilled and piped to the mechanical room. Piping in the main mechanical room will be modified for pump replacements per Hafer engineered drawings.

## **HVAC Upgrades**

- Disconnect power from existing equipment and components to be replaced.
- Remove (47) existing water source heat pump units.
- Remove (1) existing natural gas boiler.
- Remove (1) existing fluid cooler.
- Remove (4) existing water source loop pumps
- Provide and install (47) new water source heat pump units.
- Refurbish (3) existing ventilation units.
- Provide and install (4) new water source heat pump geothermal water loop pumps with VFDs and associated accessories.
- Drill (52) new geothermal wells and pipe to mechanical room.
- Connect power to new equipment.
- Provide and install new HVAC equipment, system, and components per Hafer engineered/stamped drawings and specifications.

## **HVAC Controls Upgrades**

The HVAC system will be controlled by a new Trane web-based controls system. The new controls system includes the following:

- Trane Tracer SC+ system controls panel located in the mechanical room.
- A new Trane UC600 panel will be installed to control the mechanical room equipment.
- New water source heat pump condenser water distribution loop pump motors will be equipped with new VFDs which will interface with new Tracer SC+ system controls panel.
- All new Trane equipment will be equipped with new Trane factory-mounted controls which will interface with new Tracer SC+ system controls panel.
- (3) New Trane UC600 panels will be installed to control the (3) existing ventilation units
- Install (2) new temperature sensors for the walk-in cooler and freezer monitoring.
- Provide all programming and commissioning of the new Trane BAS.
- Integration and graphical interface into the new Trane district frontend.
- All programming and commissioning will be done in coordination with Trane.

## **Lighting Upgrades**

- Remove existing lighting components and fixtures in select interior spaces.
- Install new high-efficiency lighting scope per the following table.

Fixture Type	Qty
New LED Lamp and Driver Combination	79
New Architectural Ring 4'	1
New LED Troffer Retrofit Kit	435
New LED Lamp	11
New Recessed Downlight Retrofit Kit	3

#### **Solar Power Generation**

This scope item involves the installation of a new solar photovoltaic electricity generation system on the roof of New Highland Elementary School contingent upon a satisfactory structural review by a qualified third party of the roof where the system is intended to be placed.

- a) Solar Power Generation Scope of Work:
  - Provide and install (92) new 485W solar modules (or equal power value).
  - Provide and install new inverter system(s).
  - Provide and install associated balance of system and wiring.
  - Provide and install new means of AC power disconnect for the system.
  - Provide production generation feedback via local controls integration with smart inverter
  - Interconnection with local electric utility provider.
  - · Commissioning of system.

New solar power generation system will comply with all local utility provider mandates regarding renewable energy generation systems. Tests will be performed upon installation completion to satisfy all requirements from utility provider, as well as all safety requirements mandated by Kentucky electrical code before system is turned on and power is officially produced.

- Replacement or upgrade of existing electrical switchgear
- Arc flash studies on existing equipment
- Warranty, repair, or replacement of existing systems in disrepair or outside of code compliance
- Structural improvement work to the roof as the result of an unsatisfactory structural review of the intended roof site
- Additional roof painting or replacement after or during installation; the roof condition after install will match the existing roof condition

## John Hardin High School

## **Lighting Upgrades**

- Remove existing lighting components and fixtures in select interior/exterior spaces.
- Remove existing lighting components and fixtures associated with exterior site lighting.
- Install new high-efficiency lighting scope per the following table.

Fixture Type	Qty
New LED Troffer Retrofit Kit	1,512
New Recessed Downlight Retrofit Kit	74
New LED Lamp and Driver Combination	195
New LED Wrap	17
New LED Lamp	86
New NSF Flat Panel	48
New LED Flat Panel Troffer Retrofit Kit	88
New High Abuse Wrap	12
New High Abuse Wall Sconce	2
New LED Strip	47
New LED Vapor Tight	20
New LED Pole Fixture	71
New LED Flood Light	26
New LED Wall Pack	3

- Utilize existing Trane site lighting controls reconnect.
- Performing Art Center scope only, Owner to provide new architectural wall sconces and Qualified provider to remove existing and install the new fixtures.

#### **Solar Power Generation**

This scope item involves the installation of a new solar photovoltaic electricity generation system on the roof of John Hardin High School contingent upon a satisfactory structural review by a qualified third party of the roof where the system is intended to be placed.

- a) Solar Power Generation Scope of Work:
  - Provide and install (345) new 485W solar modules (or equal power value).
  - Provide and install new inverter system(s).
  - Provide and install associated balance of system and wiring.
  - Provide and install new means of AC power disconnect for the system.
  - Provide production generation feedback via local controls integration with smart inverter
  - Interconnection with local electric utility provider.
  - · Commissioning of system.

New solar power generation system will comply with all local utility provider mandates regarding renewable energy generation systems. Tests will be performed upon installation completion to satisfy all requirements from utility provider, as well as all safety requirements mandated by Kentucky electrical code before system is turned on and power is officially produced.

- Replacement or upgrade of existing electrical switchgear
- Arc flash studies on existing equipment
- Warranty, repair or replacement of existing systems in disrepair or outside of code compliance
- Structural improvement work to the roof as the result of an unsatisfactory structural review of the intended roof site
- Additional roof painting or replacement after or during installation; the roof condition after install will match the existing roof condition

# North Hardin High School

## **Lighting Upgrades**

- Remove existing lighting components and fixtures in select interior/exterior spaces.
- Remove existing lighting components and fixtures associated with exterior site lighting.
- Install new high-efficiency lighting scope per the following table.

Fixture Type	Qty
New LED Troffer Retrofit Kit	1,374
New Recessed Downlight Retrofit Kit	23
New LED Flat Panel Troffer Retrofit Kit	6
New LED Lamp and Driver Combination	303
New High Abuse Wall sconce	22
New LED Flat Panel	50
New LED Vapor Tight	33
New LED Wrap	2
New LED Strip	4
New LED Pole Fixture	25
New LED Wall Pack	10
New LED Lamp	21
New Wireless Contactor Modules	6

Install new web-based site lighting controls.

# **Bluegrass Middle School**

# **Lighting Upgrades**

- Remove existing lighting components and fixtures in select interior/exterior spaces (including Gym).
- Install new high-efficiency lighting scope per the following table.

Fixture Type	Qty
New Recessed Downlight Retrofit Kit	8
New LED Troffer Retrofit Kit	658
New LED Lamp and Driver Combination	69
New NSF Flat Panel	33
New LED Strip Retrofit Kit	5
New LED High Bay	42
New LED Flat Panel Troffer Retrofit Kit	18
New LED Wall Pack	5
New LED Flood Light	2

• Install new occupancy controls in the main Gym space.

## **North Middle School**

#### **Lighting Upgrades**

- Remove existing lighting components and fixtures in select interior spaces (including Gym).
- Install new high-efficiency lighting scope per the following table.

Fixture Type	Qty
New LED Troffer	583
New LED Lamp and Driver Combination	248
New LED Troffer Retrofit Kit	89
New Recessed downlight Retrofit Kit	38
New NSF Flat Panel	27
New LED High Bay	42
New LED Lamp	66

Reuse existing main Gym occupancy controls - reconnect

#### **Solar Power Generation**

This scope item involves the installation of a new solar photovoltaic electricity generation system on the roof of North Middle School contingent upon a satisfactory structural review by a qualified third party of the roof where the system is intended to be placed.

- a) Solar Power Generation Scope of Work:
  - Provide and install (90) new 485W solar modules (or equal power value).
  - Provide and install new inverter system(s).
  - Provide and install associated balance of system and wiring.
  - Provide and install new means of AC power disconnect for the system.
  - Provide production generation feedback via local controls integration with smart inverter
  - Interconnection with local electric utility provider.
  - · Commissioning of system.

New solar power generation system will comply with all local utility provider mandates regarding renewable energy generation systems. Tests will be performed upon installation completion to satisfy all requirements from utility provider, as well as all safety requirements mandated by Kentucky electrical code before system is turned on and power is officially produced.

- Replacement or upgrade of existing electrical switchgear
- Arc flash studies on existing equipment
- Warranty, repair or replacement of existing systems in disrepair or outside of code compliance
- Structural improvement work to the roof as the result of an unsatisfactory structural review of the intended roof site
- Additional roof painting or replacement after or during installation; the roof condition after install will match the existing roof condition

## **Creekside Elementary School**

## **Lighting Upgrades**

- Remove existing lighting components and fixtures in select interior spaces.
- Install new high-efficiency lighting scope per the following table.

Fixture Type	Qty
New LED Troffer Retrofit Kit	596
New LED Lamp and Driver Combination	106
New Recessed Downlight Retrofit Kit	55
New LED Lamp	10

#### **Solar Power Generation**

This scope item involves the installation of a new solar photovoltaic electricity generation system on the roof of Creekside Elementary School contingent upon a satisfactory structural review by a qualified third party of the roof where the system is intended to be placed.

- a) Solar Power Generation Scope of Work:
  - Provide and install (92) new 485W solar modules (or equal power value).
  - Provide and install new inverter system(s).
  - Provide and install associated balance of system and wiring.
  - Provide and install new means of AC power disconnect for the system.
  - · Provide production generation feedback via local controls integration with smart inverter
  - Interconnection with local electric utility provider.
  - · Commissioning of system.

New solar power generation system will comply with all local utility provider mandates regarding renewable energy generation systems. Tests will be performed upon installation completion to satisfy all requirements from utility provider, as well as all safety requirements mandated by Kentucky electrical code before system is turned on and power is officially produced.

- Replacement or upgrade of existing electrical switchgear
- Arc flash studies on existing equipment
- Warranty, repair or replacement of existing systems in disrepair or outside of code compliance
- Structural improvement work to the roof as the result of an unsatisfactory structural review of the intended roof site
- Additional roof painting or replacement after or during installation; the roof condition after install will match the existing roof condition

## GC Burkhead Elementary School

## **Lighting Upgrades**

- Remove existing lighting components and fixtures in select interior/exterior spaces.
- Remove existing lighting components and fixtures associated with exterior site lighting.
- Install new high-efficiency lighting scope per the following table.

Fixture Type	Qty
New LED Lamp and Driver Combination	295
New LED Troffer	143
New LED Troffer Retrofit Kit	346
New LED Lamp	10
New LED Flat Panel Troffer Retrofit Kit	34
New NSF Flat Panel	29
New LED Pole Fixture	23
New LED Floods	8

• Utilize existing Trane site lighting controls – reconnect.

## **Solar Power Generation**

This scope item involves the installation of a new solar photovoltaic electricity generation system on the roof of GC Burkhead Elementary School contingent upon a satisfactory structural review by a qualified third party of the roof where the system is intended to be placed.

- a) Solar Power Generation Scope of Work:
- Provide and install (90) new 485W solar modules (or equal power value).
- Provide and install new inverter system(s).
- Provide and install associated balance of system and wiring.
- Provide and install new means of AC Power disconnect for the system.
- Provide production generation feedback via local controls integration with smart inverter
- Interconnection with local electric Utility Provider.
- Commissioning of system.

New solar power generation system will comply with all local utility provider mandates regarding renewable energy generation systems. Tests will be performed upon installation completion to satisfy all requirements from utility provider, as well as all safety requirements mandated by Kentucky electrical code before system is turned on and power is officially produced.

- Replacement or upgrade of existing electrical switchgear
- Arc flash studies on existing equipment
- Warranty, repair or replacement of existing systems in disrepair or outside of code compliance
- Structural improvement work to the roof as the result of an unsatisfactory structural review of the intended roof site
- Additional roof painting or replacement after or during installation; the roof condition after install will match the existing roof condition

## **Heartland Elementary School**

## **Lighting Upgrades**

- Remove existing lighting components and fixtures in select interior spaces.
- Install new high-efficiency lighting scope per the following table.

Fixture Type	Qty
New LED Lamp and Driver Combination	89
New LED Troffer Retrofit Kit	494
New Recessed Downlight Retrofit Kit	53
New LED Lamp	84
New NSF Flat Pane	40
New LED Flat Panel Troffer Retrofit Kit	3
New LED Strip	4

#### **Solar Power Generation**

This scope item involves the installation of a new solar photovoltaic electricity generation system on the roof of Heartland Elementary School contingent upon a satisfactory structural review by a qualified third party of the roof where the system is intended to be placed.

- a) Solar Power Generation Scope of Work:
  - Provide and install (90) new 485W solar modules (or equal power value).
  - Provide and install new inverter system(s).
  - Provide and install associated balance of system and wiring.
  - Provide and install new means of AC Power disconnect for the system.
  - Provide production generation feedback via local controls integration with smart inverter
  - Interconnection with local electric utility provider.
  - · Commissioning of system.

New solar power generation system will comply with all local utility provider mandates regarding renewable energy generation systems. Tests will be performed upon installation completion to satisfy all requirements from utility provider, as well as all safety requirements mandated by Kentucky electrical code before system is turned on and power is officially produced.

- · Replacement or upgrade of existing electrical switchgear
- Arc flash studies on existing equipment
- Warranty, repair or replacement of existing systems in disrepair or outside of code compliance
- Structural improvement work to the roof as the result of an unsatisfactory structural review of the intended roof site
- Additional roof painting or replacement after or during installation; the roof condition after install will match the existing roof condition

# **North Park Elementary School**

# **Lighting Upgrades**

- Remove existing lighting components and fixtures in select interior/exterior spaces (including Gym).
- Remove existing lighting components and fixtures associated with exterior site lighting.
- Install new high-efficiency lighting scope per the following table.

Fixture Type	Qty
New LED Troffer Retrofit Kit	833
New LED Lamp and Driver Combination	43
New LED Wrap	3
New LED Lamp	14
New LED Vapor Tight	4
New LED Flat Panel Troffer Retrofit Kit	2
New LED High Bay	20
New RC Retrofit Kit	7
New LED Pole Fixture	7
New LED Flood Light	3
New Wireless Contactor Modules	5

- Install new occupancy controls in the main Gym space.
- Install new web-based site lighting controls.

# **Radcliff Elementary School**

# **Lighting Upgrades**

- Remove existing lighting components and fixtures in select interior/exterior spaces (including Gym).
- Remove existing lighting components and fixtures associated with exterior site lighting.
- Install new high-efficiency lighting scope per the following table.

Fixture Type	Qty
New LED Troffer	65
New LED Lamp	57
New LED Troffer Retrofit Kit	524
New LED Lamp and Driver Combination	90
New NSF Flat Panel	25
New Recessed Downlight Retrofit Kit	2
New LED High Bay	30
New Ext. Cylinder Wall Mount	2
New LED Pole Fixture	23
New LED Flood Light	12

- Install new occupancy controls in the main Gym space.
- Utilize existing Trane site lighting controls reconnect.

## Rineyville Elementary School

## **Lighting Upgrades**

- Remove existing lighting components and fixtures in select interior/exterior spaces.
- Remove existing lighting components and fixtures associated with exterior site lighting.
- Install new high-efficiency lighting scope per the following table.

Fixture Type	Qty
New LED Troffer Retrofit Kit	727
New LED Lamp and Driver Combination	86
New Recessed Downlight Retrofit Kit	50
New LED Lamp	60
New NSF Flat Panel	37
New LED Pole Fixture	15
New LED Flood Light	3
New LED Wall Pack	14

• Utilize existing Trane site lighting controls – reconnect.

#### **Solar Power Generation**

This scope item involves the installation of a new solar photovoltaic electricity generation system on the roof of Rineyville Elementary School contingent upon a satisfactory structural review by a qualified third party of the roof where the system is intended to be placed.

- a) Solar Power Generation Scope of Work:
  - Provide and install (92) new 485W solar modules (or equal power value).
  - Provide and install new inverter system(s).
  - Provide and install associated balance of system and wiring.
  - Provide and install new means of AC Power disconnect for the system.
  - · Provide production generation feedback via local controls integration with smart inverter
  - Interconnection with local electric Utility Provider.
  - Commissioning of system.

New solar power generation system will comply with all local utility provider mandates regarding renewable energy generation systems. Tests will be performed upon installation completion to satisfy all requirements from utility provider, as well as all safety requirements mandated by Kentucky electrical code before system is turned on and power is officially produced.

- Replacement or upgrade of existing electrical switchgear
- Arc flash studies on existing equipment
- Warranty, repair or replacement of existing systems in disrepair or outside of code compliance
- Structural improvement work to the roof as the result of an unsatisfactory structural review of the intended roof site
- Additional roof painting or replacement after or during installation; the roof condition after install will match the existing roof condition

## **Vine Grove Elementary School**

### **Lighting Upgrades**

- Remove existing lighting components and fixtures in select interior/exterior spaces.
- Install new high-efficiency lighting scope per the following table.

Fixture Type		
New LED Troffer Retrofit Kit	402	
New LED Troffer	45	
New Recessed Downlight Retrofit Kit	10	
New LED Lamp and Driver Combination	27	
New NSF Flat Panel	27	
New High Abuse Wall Sconce	1	
New LED Lamp	42	
New LED Wall Pack	8	

#### **Solar Power Generation**

This scope item involves the installation of a new solar photovoltaic electricity generation system on the roof of Vine Grove Elementary School contingent upon a satisfactory structural review by a qualified third party of the roof where the system is intended to be placed.

- a) Solar Power Generation Scope of Work:
  - Provide and install (90) new 485W solar modules (or equal power value).
  - Provide and install new inverter system(s).
  - Provide and install associated balance of system and wiring.
  - Provide and install new means of AC power disconnect for the system.
  - Provide production generation feedback via local controls integration with smart inverter
  - Interconnection with local electric utility provider.
  - Commissioning of system.

New solar power generation system will comply with all local utility provider mandates regarding renewable energy generation systems. Tests will be performed upon installation completion to satisfy all requirements from utility provider, as well as all safety requirements mandated by Kentucky electrical code before system is turned on and power is officially produced.

- Replacement or upgrade of existing electrical switchgear
- Arc flash studies on existing equipment
- Warranty, repair or replacement of existing systems in disrepair or outside of code compliance
- Structural improvement work to the roof as the result of an unsatisfactory structural review of the intended roof site
- Additional roof painting or replacement after or during installation; the roof condition after install will match the existing roof condition

## **Bus Garage**

## **Lighting Upgrades**

- Remove existing lighting components and fixtures in select interior/exterior spaces.
- Remove existing lighting components and fixtures associated with exterior site lighting.
- Install new high-efficiency lighting scope per the following table.

Fixture Type	Qty
New LED Troffer Retrofit Kit Above 12'	18
New LED Troffer Retrofit Kit	8
New LED Lamp and Driver Combination	2
New Wireless Contactor Modules	7
New LED Wall Pack	16
New LED Doorway Light	2
New LED Pole Fixture	11

Install new web-based site lighting controls.

#### **Solar Power Generation**

This scope item involves the installation of a new solar photovoltaic electricity generation system on the roof of Bus Garage contingent upon a satisfactory structural review by a qualified third party of the roof where the system is intended to be placed.

- a) Solar Power Generation Scope of Work:
  - Provide and install (33) new 485W solar modules (or equal power value).
  - Provide and install new inverter system(s).
  - Provide and install associated balance of system and wiring.
  - Provide and install new means of AC power disconnect for the system.
  - Provide production generation feedback via local controls integration with smart inverter
  - Interconnection with local electric utility provider.
  - Commissioning of system.

New solar power generation system will comply with all local utility provider mandates regarding renewable energy generation systems. Tests will be performed upon installation completion to satisfy all requirements from utility provider, as well as all safety requirements mandated by Kentucky electrical code before system is turned on and power is officially produced.

- Replacement or upgrade of existing electrical switchgear
- Arc flash studies on existing equipment
- Warranty, repair or replacement of existing systems in disrepair or outside of code compliance
- Structural improvement work to the roof as the result of an unsatisfactory structural review of the intended roof site
- Additional roof painting or replacement after or during installation; the roof condition after install will match the existing roof condition

# **Central Office**

# **Lighting Upgrades**

- Remove existing lighting components and fixtures in select interior spaces.
- Install new high-efficiency lighting scope per the following table.

Fixture Type		
New LED Troffer	117	
New LED Troffer Retrofit Kit	294	
New LED Lamp and Driver Combination		
New Recessed Downlight Retrofit Kit	48	
New LED Lamp	9	

# **IT-TV Building**

## **Lighting Upgrades**

- Remove existing lighting components and fixtures in select interior/exterior spaces.
- Install new high-efficiency lighting scope per the following table.

Fixture Type		
New LED Troffer Retrofit Kit	129	
New LED Lamp and Driver Combination		
New Recessed Downlight Retrofit Kit		
New LED Wall Pack		

## **Lincoln Trail Elementary School**

#### **Solar Power Generation**

This scope item involves the installation of a new solar photovoltaic electricity generation system on the roof of Lincoln Trail Elementary School contingent upon a satisfactory structural review by a qualified third party of the roof where the system is intended to be placed.

- a) Solar Power Generation Scope of Work:
  - Provide and install (90) new 485W solar modules (or equal power value).
  - Provide and install new inverter system(s).
  - Provide and install associated balance of system and wiring.
  - Provide and install new means of AC power disconnect for the system.
  - Provide production generation feedback via local controls integration with smart inverter
  - Interconnection with local electric utility provider.
  - Commissioning of system.

New solar power generation system will comply with all local utility provider mandates regarding renewable energy generation systems. Tests will be performed upon installation completion to satisfy all requirements from utility provider, as well as all safety requirements mandated by Kentucky electrical code before system is turned on and power is officially produced.

- · Replacement or upgrade of existing electrical switchgear
- Arc flash studies on existing equipment
- Warranty, repair or replacement of existing systems in disrepair or outside of code compliance
- Structural improvement work to the roof as the result of an unsatisfactory structural review of the intended roof site
- Additional roof painting or replacement after or during installation; the roof condition after install will match the existing roof condition

## **Woodland Elementary School**

#### **Solar Power Generation**

This scope item involves the installation of a new solar photovoltaic electricity generation system on the roof of Woodland Elementary School contingent upon a satisfactory structural review by a qualified third party of the roof where the system is intended to be placed.

- a) Solar Power Generation Scope of Work:
  - Provide and install (90) new 485W solar modules (or equal power value).
  - Provide and install new inverter system(s).
  - Provide and install associated balance of system and wiring.
  - Provide and install new means of AC power disconnect for the system.
  - Provide production generation feedback via local controls integration with smart inverter
  - Interconnection with local electric utility provider.
  - · Commissioning of system.

New solar power generation system will comply with all local utility provider mandates regarding renewable energy generation systems. Tests will be performed upon installation completion to satisfy all requirements from utility provider, as well as all safety requirements mandated by Kentucky electrical code before system is turned on and power is officially produced.

- · Replacement or upgrade of existing electrical switchgear
- · Arc flash studies on existing equipment
- Warranty, repair or replacement of existing systems in disrepair or outside of code compliance
- Structural improvement work to the roof as the result of an unsatisfactory structural review of the intended roof site
- Additional roof painting or replacement after or during installation; the roof condition after install will match the existing roof condition

## **Lighting Exclusions for All Facilities:**

- Emergency lighting systems including but not limited to: Exit signs, standalone emergency lights, exterior emergency egress lights, lighting inverters, and Backup batteries.
- Non-essential learning areas, already fully converted to LED including but not limited to gyms, libraries, and cafeterias.
- Interior/Exterior lighting controls not specified.
- Theatrical lighting and or theatrical controls.
- Mechanical mezzanines with existing T8 light fixtures.
- Exterior sports lighting.
- Teacher-owned floor lamps and table lamps.

# EXHIBIT D.1 Certificate of Substantial Completion

# **Certificate of Substantial Completion and Acceptance**

## Hardin County Schools GESC BG # 24-193

Trane Project No.: 7680317

Date Certificate Submitted to Owner:

The Work performed pursuant to the **STANDARD FORM OF AGREEMENT BETWEEN OWNER AND DESIGN BUILDER AIA141-2004**, by and between Hardin County Board of Education ("Owner") and Trane U.S. Inc., ("Qualified Provider") dated as of May 16, 2024 (together with any Exhibits, Attachments and Addenda thereto, and as amended, supplemented or modified from time to time, the "Agreement"), have been inspected by the undersigned Owner, have been determined to be substantially complete, and Owner accepts the same.

The Date(s) of Substantial Completion for the Work noted below is/are hereby established as the <u>earlier</u> of (i) the date Owner executes this Certificate, as noted below, or (ii) fourteen (14) calendar days after the date noted above as the date this Certificate is submitted to Owner.

The Warranty Period, pursuant to Section 14 of Addendum No. 1 to the Agreement, commences as of the Warranty Commencement Date stated below with respect to the following corresponding Equipment or Work:

Facility	Services: Description of Equipment or Work	Warranty Commencement Date
Lakewood Elementary School	HVAC and controls upgrades	
New Highland Elementary School	HVAC and controls upgrades	
<ul> <li>John Hardin High School</li> <li>North Hardin High School</li> <li>Bluegrass Middle School</li> <li>North Middle School</li> <li>Creekside Elementary School</li> <li>G.C. Burkhead Elementary School</li> <li>Heartland Elementary School</li> <li>Lakewood Elementary School</li> <li>New Highland Elementary School</li> <li>North Park Elementary School</li> <li>Radcliff Elementary School</li> <li>Rineyville Elementary School</li> <li>Vine Grove Elementary School</li> <li>Bus Garage</li> <li>Central Office</li> <li>IT-TV Building</li> </ul>	LED Lighting Upgrades	
<ul> <li>John Hardin High School</li> <li>North Middle School</li> <li>Creekside Elementary School</li> <li>G.C. Burkhead Elementary School</li> <li>Heartland Elementary School</li> <li>Lakewood Elementary School</li> <li>Lincoln Trail Elementary School</li> <li>New Highland Elementary School</li> <li>Rineyville Elementary School</li> <li>Vine Grove Elementary School</li> <li>Woodland Elementary School</li> <li>Bus Garage</li> </ul>	Solar Photovoltaic Solar Arrays	

Owner, by and through the undersigned duly authorized representative, accepts the listed Work as substantially complete and assumes full possession thereof as of the Date of Substantial Completion.

## **Hardin County Board of Education**

By:	Teresa Morgan	
Its:	Superintendent	
Date	e of Owner's Signature:	

# EXHIBIT D.2 Certificate of Final Completion

# **Certificate of Final Completion and Acceptance**

## Hardin County Schools GESC BG # 24-193

Trane Project No.: 7680317

Date Certificate Submitted to Owner: \_\_\_\_\_\_

The Work performed pursuant to the **STANDARD FORM OF AGREEMENT BETWEEN OWNER AND DESIGN BUILDER AIA141-2004**, by and between Hardin County Board of Education ("Owner") and Trane U.S. Inc., ("Qualified Provider") dated as of May 16, 2024 (together with any Exhibits, Attachments and Addenda thereto, and as amended, supplemented or modified from time to time, the "Agreement"), has been inspected by the undersigned Owner and have been determined to be finally complete.

The Date of Final Completion is hereby established as the <u>earlier</u> of (i) the date Owner executes this Certificate, as noted below, or (ii) fourteen (14) calendar days after the date noted above as the date this Certificate is submitted to Owner.

Owner, by and through the undersigned duly authorized representative, accepts the Work as finally complete and assumes full possession thereof as of the Date of Final Completion.

Ву:	Teresa Morgan
Its:	Superintendent
Date	of Owner's Signature:

**Hardin County Board of Education** 

# EXHIBIT E Energy Savings Guarantee & Operational Savings

**Section 1. Energy Savings Guarantee.** Subject to the terms and conditions of this Exhibit E and the sub-Exhibits hereof, Qualified Provider guarantees that, as a result of the Services Qualified Provider will furnish hereunder, Owner will realize the energy savings shown in Table 1 (the "Energy Savings"), in each consecutive twelve-month period following the Commencement Date (each such twelve-month period, a "Guarantee Year") for the Guarantee Term (collectively, the "Energy Savings Guarantee"). The Energy Savings Guarantee is for energy savings in the aggregate, not on a per building basis, per energy conservation measure ("ECM"), or by fuel type, notwithstanding the presentation of the Energy Savings in this Exhibit or sub-Exhibits hereto, or in any other document.

In addition to Energy Savings, Qualified Provider and Owner agree that Owner will realize Operational Savings as a result of Qualified Provider's performance of the Services, as more fully described in Section 5 and in the applicable sub-Exhibits hereof.

The monetary value of Energy Savings is derived by multiplying the units of Energy Savings as outlined in Table 2 by the applicable Effective Utility Rates as defined and described in Section 4. Along with agreed upon annual Operational Savings, Table 1 sets forth the calculated monetary value of the annual Energy Savings for the term of the contract.

Table 1 – Monetary Value of Annual Energy Savings with 4.5% Annual Utility Escalation and Operational Savings Calculated Utilizing the Applicable Adjusted Base Utility Rate and Applicable Annual Operational Savings Escalation of 4%

Total Savings (\$)				
Year	Energy Savings	Operational Savings (Mutually Agreed)	Capital Cost Avoidance	Total Savings and Capital Cost Avoidance
Construction Period Savings	\$0	\$0	\$0	\$0
1	\$280,963	\$95,104	\$541,970	\$918,037
2	\$293,606	\$98,908	\$545,964	\$938,478
3	\$306,819	\$102,864	\$544,823	\$954,506
4	\$320,625	\$106,979	\$542,454	\$970,058
5	\$335,054	\$111,258	\$543,613	\$989,925
6	\$350,131	\$115,709	\$543,433	\$1,009,272
7	\$365,887	\$120,337	\$541,224	\$1,027,448
8	\$382,352	\$125,150	\$541,950	\$1,049,452
9	\$399,558	\$130,156	\$545,401	\$1,075,115
10	\$417,538	\$135,363	\$546,059	\$1,098,959
11	\$436,327	\$140,777	\$544,101	\$1,121,205
12	\$455,962	\$146,408	\$543,831	\$1,146,201
13	\$476,480	\$152,265	\$544,168	\$1,172,912
14	\$497,922	\$158,355	\$541,305	\$1,197,581
15	\$520,328	\$164,689	\$544,404	\$1,229,422
16	\$543,743	\$171,277	\$541,608	\$1,256,628
17	\$568,211	\$178,128	\$544,873	\$1,291,212
18	\$593,781	\$185,253	\$542,765	\$1,321,799
19	\$620,501	\$192,663	\$545,205	\$1,358,369
20	\$648,423	\$200,370	\$541,578	\$1,390,371
Grand Total	\$8,814,209	\$2,832,014	\$10,870,730	\$22,516,954

Due to rounding of numbers, the summation in the table above may vary slightly.

INITIALED BY: \_\_\_Owner \_\_\_Trane Exhibit E (041321R); Qualified Provider Project No.: 7680317 Page 1 of 10 **Section 2. Measurement and Verification of Energy Savings.** Four (4) different methods may be utilized to measure and verify ("M&V") Energy Savings. Each method is in accordance with the International Performance Measurement and Verification Protocol (IPMVP). The four (4) M&V methods are summarized below. Under certain circumstances, the parties may find it cost effective to mutually agree to certain Energy Savings and eliminate the need to M&V such Energy Savings in accordance with the M&V methods described below. In such event, the parties will separately outline such mutually agreed Energy Savings in this Exhibit E and the sub-Exhibits hereto.

**Option A. Retrofit Isolation: Key Parameter Measurements.** The verification techniques for Option A determine energy savings by measuring the capacity or efficiency of a system before and after a retrofit, and multiplying the difference by a mutually agreed-upon or "stipulated" factor, such as hours of operation or load on the system. Careful review of ECM design and installation ensure that stipulated values fairly represent the probable actual value.

Option B. Retrofit Isolation: All Parameter Measurements. (*This option not used*)

Verification techniques for Option B are designed for projects where long-term continuous measurement of performance is desired. Under Option B, individual loads are continuously monitored to determine performance, and this measured performance is compared with a baseline to determine savings. Option B M&V techniques provide long-term persistence data on ECM operation and performance. This data can be used to improve or optimize the operation of the equipment on a real-time basis, thereby improving the benefit of the retrofit. Option B also relies on the direct measurement of affected end uses.

**Option C. Whole Facility.** *(This option not used)* Verification techniques for Option C determine savings by studying overall energy use in a facility and identifying the effects of energy projects from changes in overall energy use patterns. This approach is intended for measurements of the whole-facility or specific meter baseline energy use, and measurements of whole-facility or specific meter post-implementation (Post) energy use can be measured. The methodology to establish baseline and Post parameter identification, modeling approach and baseline or model adjustments will be defined in the applicable sub-Exhibit. Periodic inspections of baseline energy usage, operating practices, and facility and equipment, and meter measurements will be necessary to verify the on-going efficient operation of the equipment, systems, practices and facility, and saving attainment.

Option D. Calibrated Simulation. (*This option not used*) Option D is intended for energy retrofits where calibrated simulation of baseline energy use and calibrated simulations of post-installation energy consumption are used to measure savings from the retrofit. Option D can involve measurements of energy use both before and after the retrofit for specific equipment/systems or whole-building data for calibrating the simulation(s). Simulation routines must be demonstrated to adequately model actual energy performance measured in the facility. This option usually requires considerable skill in calibrated simulation. Energy use simulation is calibrated with hourly or monthly utility billing data and/or end use metering.

**Mutually Agreed Savings.** This approach is utilized with energy retrofits where M&V costs would have significant negative impact on the savings. Savings are verified mutually by Qualified Provider and Owner after installation or commissioning.

**Section 3. Summary of Energy Savings and Applicable M&V.** The type and location of energy conservation measures installed determine which M&V calculation method shall be utilize. Table 2 sets forth the M&V method utilized, by building, ECM or ECM type, as applicable, and the associated Energy Savings. Specific M&V methodologies and any mutually agreed upon values for each savings strategy and applicable M&V method are detailed in the applicable sub-Exhibits to this Exhibit E.

Table 2 – Annual Energy Savings Guarantee per Building, ECM or ECM Type

Building, ECM or ECM Type	Applicable Energy Savings			
<u> </u>			greed Savings	
	kWh	kW	Therms Saved	kGals Saved
	Saved	Saved	(Natural Gas)	(Water)
New Highland Elementary School			1,283	
	Option	A: Partially Me	easured Retrofit Is	solation
	kWh Saved	kW Saved	Therms Saved (Natural Gas)	kGals Saved (Water)
John Hardin High School	507,128	1,487		
North Hardin High School	216,191	937		
Bluegrass Middle School	123,599	626		
North Middle School	134,811	507		
Creekside Elementary School	157,391	562		
G.C. Burkhead Elementary School	175,386	533		
Heartland Elementary School	123,847	402		
Lakewood Elementary School	299,335	2,358		
Lincoln Trail Elementary School	50,269	27		
New Highland Elementary School	127,085	359		
North Park Elementary School	125,488	590		
Radcliff Elementary School	57,126	267		
Rineyville Elementary School	169,123	576		
Vine Grove Elementary School	117,716	365		
Woodland Elementary School	47,586	33		
Bus Garage	36,457	48		
Central Office	36,609	201		
IT-TV Bldg	14,105	70		
		tion B: Retrofi	t Isolation (not us	
	kWh Saved	kW Saved	Therms Saved	kGals Saved (water)
	0	 ption C: Whole	│ e Facility (not use	d)
	kWh Saved	kW Saved	Therms Saved	kGals Saved (water)
	Optio	n D: Calibrate	│ d Simulation (not	used)
	kWh Saved	kW Saved	Therms Saved	kGals Saved (water)
-				
Grand Total Energy Savings Guarantee (annual)	2,519,253	9,947	1,283	

Due to rounding of numbers, some numbers in the table above may vary slightly from similar energy references within this Agreement.

Section 4. Calculated Monetary Value of Energy Savings. The monetary value of Energy Savings is calculated using Effective Rates set forth in Tables 3.1 and 3.2. Effective Rates are derived from the respective Base Utility Rates (defined and described in Section 8) and include applicable riders and fees that affect the unit value. An average of two years of monthly utility data was used to calculate the Effective Rates. The Effective Rate shall be increased annually during the Guarantee Term by four and a half percent (4.5%) per year starting in Year 2, compounded annually (the "Adjusted Utility Rates"). The parties agree that such an adjustment is a reasonable projection of future increases in utility rates based on past inflation experience, applicable to utility rates and Owner's budgetary analysis. In calculating the monetary value of the Energy Savings for the purpose of the Energy Savings Guarantee reconciliation, Qualified Provider will use the greater of (i) the then current applicable utility Effective Rate unit cost and (ii) the Adjusted Utility Rate.

Table 3.1	Electric Utility				
Facility	Provider	Rate Class	Effective	Effective Rates	
1 donity	Tiovidei	Nate Class	\$/kWh	\$/kW	
John Hardin High School	Nolin RECC	Rate 4	\$0.08829	\$6.06	
North Hardin High School	Nolin RECC	Rate 4	\$0.08829	\$6.06	
Bluegrass Middle School	Nolin RECC	Rate 4	\$0.08829	\$6.06	
North Middle School	KU	AES	\$0.11447	\$0.00	
Creekside Elementary School	KU	AES	\$0.11447	\$0.00	
G.C. Burkhead Elementary School	Nolin RECC	Rate 4	\$0.08704	\$5.97	
Heartland Elementary School	Nolin RECC	Rate 4	\$0.08704	\$5.97	
Lakewood Elementary School	KU	KU	\$0.11123	\$0.00	
Lincoln Trail Elementary School	Nolin RECC	Rate 4	\$0.08579	\$5.89	
New Highland Elementary School	Nolin RECC	Rate 4	\$0.08829	\$6.06	
North Park Elementary School	Nolin RECC	Rate 4	\$0.08829	\$6.06	
Radcliff Elementary School	KU	AES	\$0.11447	\$0.00	
Rineyville Elementary School	KU	AES	\$0.11123	\$0.00	
Vine Grove Elementary School	KU	GS-3	\$0.13678	\$0.00	
Woodland Elementary School	Nolin RECC	Rate 4	\$0.08829	\$6.06	
Bus Garage	KU	GS-3	\$0.13291	\$0.00	
Central Office	Nolin RECC	Rate 3	\$0.09895	\$7.37	
IT-TV Bldg	KU	PSS	\$0.04319	\$25.08	
John Hardin High School (Solar)*	Nolin RECC	Rate 4/NM	\$0.08728	\$6.06	
North Middle School (Solar)*	KU	AES/NM	\$0.11130	\$0.00	
Creekside Elementary School (Solar)*	KU	AES/NM	\$0.10596	\$0.00	
Lakewood Elementary School (Solar)*	KU	AES/NM	\$0.11017	\$0.00	
Rineyville Elementary School (Solar)*	KU	AES/NM	\$0.09939	\$0.00	
Vine Grove Elementary School (Solar)*	KU	GS-3/NM	\$0.12943	\$0.00	
Bus Garage (Solar)*	KU	GS-3/NM	\$0.11931	\$0.00	

<sup>\*</sup>It is estimated that a portion of the electric energy produced by the solar array will not be used by the facility but will be sent to the grid for the Utility to purchase at Net Metering rates. The provided kWh rate for this ECM is a mixed rate based on the amount of energy expected to be purchased by the Utility rather than used by the facility.

Table 3.2	Natural Gas Utility		
Facility	Provider	Rate Class	Effective Rate \$/therm
New Highland Elementary School	City of Elizabethtown	Firm - Commercial	\$0.57

**Section 5. Operational Savings.** Owner and Qualified Provider agree that, as a direct result of the Services, as of the Commencement Date, Owner shall achieve annual operational cost savings in the amounts set forth in Table 1 ("Operational Savings") during the Guarantee Term. Owner and Qualified Provider worked together to identify and quantify the Operational Savings based upon past and projected expenditure data provided by the Owner. Operational Savings may include the categories set forth below (as applicable).

- a. <u>Direct Cost Avoidance</u>. Reduction or elimination of costs or expenses in connection with existing or planned service contracts, materials, supplies, energy costs and labor expenditures. Direct cost avoidance Operational Savings may include savings achieved through a reduction in fuel and/or electricity rates ("Energy Rate Optimization Savings") by one or more of the following means:
  - (i) Improved rate from local electric utility company, natural gas company, or fuel company;
  - (ii) Direct purchase of natural gas or electricity; and/or
  - (iii) Bulk purchase of fuel.
- b <u>Indirect Cost Avoidance</u>. Owner valuation, including such items as re-deployed labor resources and reduction in overhead; and
- c. <u>Future Capital Cost Avoidance</u>. Future avoided capital outlay funds expended by a local public agency or school district as defined in KRS 45A.345(2).

Throughout the Guarantee Term, Operational Savings (in the amounts set forth in Table 1) will be realized in each Guarantee Year and will be deemed to escalate at a rate of four percent (4%) per year as set forth in Table 1. The parties agree that the 4% escalation rate is a reasonable projection of future Operational Savings based upon past inflation experience, escalation in the cost of energy, goods and services experienced by Owner and the parties' expectations. The Operational Savings are detailed in the applicable sub-Exhibits. Operational Savings are stipulated by the parties and will not be measured, monitored or verified.

**Section 6. Construction Period Savings.** Energy Savings will accrue as the Services progress during the construction period until the Commencement Date. Trane will calculate and document such Energy Savings as they accrue in accordance with the sub-Exhibit(s) (such savings referred to as "Construction Period Savings").

**Section 7. Commencement Date and Guarantee Term.** The "Commencement Date" shall be the first calendar day of the month following the month in which the Date of Final Completion occurs, unless the Date of Final Completion falls on the first calendar day of a month, in which event the Commencement Date shall be the first calendar day of that month. The Energy Savings Guarantee shall begin as of the Commencement Date and, unless this Agreement shall terminate earlier, shall expire on the day immediately preceding the 20-year anniversary of the Commencement Date (hereinafter the "Guarantee Term").

**Section 8. Base Utility Rates.** The Base Utility Rates are the original utility rates posted by the respective utility before applicable riders and fees are added. The Base Utility Rates are used to calculate the Effective Rates set forth in Section 4.The following are the Base Utility Rates:

# Cost of Electricity

Table 4.1 – Electric Rate Structures – Kentucky Utilities (KU)

Table 4.1 – Liectric Nate Structures	riomasky similos (110)
KU – All Electric School Service (AES), 3-Phase	
SERVICE CHARGE (per day)	\$4.60
ENERGY CHARGE (per kWh) all kWh	\$0.09636
KU – General Service (GS), 3-Phase	
SERVICE CHARGE (per day)	\$2.15
ENERGY CHARGE (per kWh) all kWh	\$0.11869
KU – Power Service (PSS), Secondary	
SERVICE CHARGE (per day)	\$2.96
ENERGY CHARGE (per kWh) all kWh	\$0.03191
DEMAND CHARGE (per kW) <u>Summer Rate</u> – five billing periods of May through September  Per kW for all kW of peak Billing Demand	r \$25.30
Winter Rate – all other months Per kW for all kW of peak Billing Demand	\$22.66

Table 4.2 - Electric Rate Structures - Nolin RECC

Nolin RECC – Rate 3	
SERVICE CHARGE (per month)	\$36.26
ENERGY CHARGE (per kWh) all kWh	\$0.07231
DEMAND CHARGE (per kW) Monthly peak kW	\$6.24
Nolin RECC – Rate 4	
SERVICE CHARGE (per month)	\$44.03
ENERGY CHARGE (per kWh) all kWh	\$0.06328
DEMAND CHARGE (per kW) Monthly peak kW	\$5.13

## Cost of Fuel(s)

Table 4.2 - Natural Gas Rate Structure

City of Elizabethtown – Firm Commercial Service		
January through December: All therms (\$/therms)	\$0.57	

<sup>\*</sup>Because the natural gas rate changes on a monthly basis and can vary drastically depending on the season, an average rate was calculated based on the annual usage.

**Section 9. Building Operation.** The following operational parameters were collaboratively agreed upon by Owner and Qualified Provider and form the basis for calculating Energy Savings. Owner bears the risk of decreased Energy Savings if the facilities are operated outside of these operational parameters. Variation from these parameters will permit Qualified Provider to make an adjustment to the Baseline as indicated in Exhibit F, Section 2.

Table 5.1 - Operational Hours: Lakewood ES

Area	Weekdays	Weekends	Room Temperatures (within <u>+</u> 2° F)
Classrooms & Corridors: August thru May	Occupied Hrs: 6am – 4pm Unoccupied Hrs: 4pm – 6am	Unoccupied: All Hours	Occupied Clg: 72° F Unoccupied Clg: 80° F Occupied Htg: 70° F Unoccupied Htg: 58° F
Front Offices: August thru May	Occupied Hrs: 5am – 5pm Unoccupied Hrs: 5pm – 5am	Unoccupied: All Hours	Occupied Clg: 72° F Unoccupied Clg: 80° F Occupied Htg: 70° F Unoccupied Htg: 58° F
Gym: August thru May	Occupied Hrs: 6am – 6pm Unoccupied Hrs: 6pm – 6am	Unoccupied: All Hours – Except for Special Events / Games	Occupied Clg: 72° F Unoccupied Clg: 80° F Occupied Htg: 70° F Unoccupied Htg: 58° F
Kitchen: August thru May	Occupied Hrs: 3am – 3pm Unoccupied Hrs: 3pm – 3am	Unoccupied: All Hours	Occupied Clg: 72° F Unoccupied Clg: 80° F Occupied Htg: 70° F Unoccupied Htg: 58° F
Cafeteria: August thru May	Occupied Hrs: 5am – 6pm Unoccupied Hrs: 6pm – 5am	Unoccupied: All Hours	Occupied Clg: 72° F Unoccupied Clg: 80° F Occupied Htg: 70° F Unoccupied Htg: 58° F
Classrooms, Corridors, Cafeteria, & Kitchen: June thru July	Occupied Hrs: 8am – noon Unoccupied Hrs: noon – 8am	Unoccupied: All Hours	Occupied Clg: 72° F Unoccupied Clg: 80° F Occupied Htg: 70° F Unoccupied Htg: 58° F
Gym & Front Offices: June thru July	Occupied Hrs: 8am – 3pm Unoccupied Hrs: 3pm – 8am	Unoccupied: All Hours – Except for Special Events / Games	Occupied Clg: 72° F Unoccupied Clg: 80° F Occupied Htg: 70° F Unoccupied Htg: 58° F

Table 5.2 – Operational Hours: Lighting – High Schools

Area(s)	Annual Hours of Operation Used in Analysis
Classrooms	2,500
Offices, Admin Areas	2,500
Cafeteria	2,500
Gyms	2,000
Student Restrooms	2,500
Staff Restrooms	500
Kitchen	2,000
Media Center	2,500
Corridors	4,000
Storage/Mech Rm. Areas	1,000
Exterior	4,000

Table 5.3 – Operational Hours: Lighting – Middle/Elementary Schools

Area(s)	Annual Hours of Operation Used in Analysis
Classrooms	2,500
Offices, Admin Areas	2,500
Cafeteria	2,500
Gyms	2,000
Student Restrooms	2,500
Staff Restrooms	500
Kitchen	2,000
Media Center	2,500
Corridors	2,500
Storage/Mech Rm. Areas	1,000
Exterior	4,000

## Section 10. Guarantee Reconciliation. (See Exhibit F, Section 1)

Section 11. Adjustments to Baseline. (See Exhibit F, Section 2)

**Section 12. Owner Responsibilities.** Owner acknowledges that it has an integral role in achieving Energy Savings and agrees to perform the following responsibilities:

- a. Properly maintain, repair, and replace all energy consuming equipment with equipment of equal or better energy and operational efficiencies and promptly notify Qualified Provider of the repair and /or replacement, but no later than within fourteen (14) calendar days from the commencement thereof;
- b. Make available to Qualified Provider upon its request copies of maintenance records and procedures regarding maintenance of the Premises:
- c. Promptly provide Qualified Provider with notice of system and building alterations at the Premises that impact energy consumption, including but not limited to: energy management systems, automatic door operation, structural, occupancy sensors, photocell/timer control of exterior lighting and heat recovery systems;
- d. Log any utility meters and the operation of any energy consuming devices or equipment as directed by Qualified Provider and furnish copies of such logs to Qualified Provider within thirty (30) calendar days after preparation of the logs;
- e. Provide to Qualified Provider true, accurate and complete copies of all energy related bills within ten (10) days after Owner's receipt of such bills. The parties stipulate that, in each event that Owner fails to provide an energy related bill within thirty (30) days after the end of the Billing Period to which the bill relates, Owner shall be deemed to have realized that portion of the Total Energy Savings prorated for the utility billing period to which said energy related bill relates and for such subsequent utility billing periods as are affected by an increase in energy and/or demand use that could have been avoided had Qualified Provider been provided with the energy related bill in a timely manner. In the event Qualified Provider subsequently receives or obtains the untimely energy related bill and such bill discloses that savings were achieved in an amount greater than had been stipulated hereunder, such greater savings will be used in calculating Verified Savings;
- f. Provide to Qualified Provider true, accurate and complete descriptions of all energy consuming devices that, individually or in the aggregate, have a material adverse impact on Energy Savings within seven (7) days after installation and startup of such equipment. This equipment includes but is not limited to heating, cooling or ventilating equipment, computers and other electronics,

water heaters, kitchen equipment, laundry equipment, mobile trailer units, portable hospital equipment. The parties stipulate that, in each event that Owner fails to provide this information within thirty (30) days after the startup of such equipment, Owner shall be deemed to have realized that portion of the Energy Savings prorated for the utility billing period to which said energy related bill relates and for such subsequent utility billing periods as are affected by an increase in energy and/or demand use that could have been avoided had Qualified Provider been provided with the energy related information in a timely manner. In the event Qualified Provider subsequently receives or obtains the untimely energy related bill and such bill discloses that savings were achieved in an amount greater than had been mutually agreed upon hereunder, such greater savings will be used in calculating Verified Savings;

- g. Furnish to Qualified Provider true, accurate and complete copies of any utility rate schedules or tariffs promptly upon Qualified Provider's request for the same and, in any event, within thirty (30) calendar days after Owner's receipt of notice of a utility rate change;
- h. Maintain in effect and fully perform all manufacturer and/or industry recommended maintenance and prescribed cleaning obligations throughout the duration of the Guarantee Term; and
- i. During the Term of the Agreement, permit only Qualified Provider and/or Owner approved personnel to repair, adjust or program equipment, systems, and/or controls covered by this Agreement or affecting equipment, systems, and/or controls covered by this Agreement, except in the event of an emergency, in which event Owner shall immediately notify Qualified Provider of the existence of the emergency no later than within twenty-four (24) hours of the commencement of the emergency condition.

**Section 13. Exclusions from Qualified Provider's Responsibilities.** Qualified Provider shall not be responsible for any of the following:

- a. Any shortfalls in Energy Savings, failure to satisfy the Energy Savings Guarantee, or for loss, damage or malfunction to equipment, systems, controls or building(s) structures resulting from non-Qualified Provider personnel examining, adjusting or repairing equipment, systems, or controls:
- b. Any failure of Owner to achieve or realize Operational Savings;
- c. Any damage or malfunction resulting from freezing, corrosion or erosion on the water side of the equipment or caused by scale or sludge on equipment;
- d. Problems or damages caused by utility service or damage sustained by equipment or systems;
- e. Furnishing any items of equipment, material, or labor, or performing tests recommended or required by insurance companies or federal, state, or local governments; and
- f. Failure or inadequacy of any structure or foundation supporting or surrounding equipment or work or any portion thereof.
- g. Any shortfalls in solar array production resulting from Owner's failure to perform the manufacturer and/or industry recommended cleaning intervals for solar panels.

## Section 14. Independent Audit. (See Exhibit F, Section 3)

**Section 15. Energy Savings Model.** In the event that energy savings models are re-run for an adjustment to the Baseline or to verify Verified Energy Savings, Qualified Provider may, at its sole discretion, use the modeling software of its choice.

# EXHIBIT E.1 Energy Savings Guarantee New HVAC & Building Automation System – Lakewood Elementary School

## 1.0 Agreed Upon Parameters:

The following are mutually agreed upon parameters that form the basis of this performance guarantee.

### a) Applicability:

This performance guarantee applies to the energy conservation measure involving the installation of a new HVAC and building automation system at Lakewood Elementary School.

#### b) Existing Conditions:

For the purposes of this Agreement, the air handlers, heating and cooling equipment, and all related appurtenances (pumps, etc.) operate and consume energy as per the TRACE<sup>TM</sup> 700 building modeling software analysis. Qualified Provider based this building simulation on extensive survey and analysis. The Owner and Qualified Provider collaboratively agreed upon its assumptions and results throughout the modeling process. Existing operation run hours and thermostat schedules were confirmed through data loggers and the existing building automation system. It should be noted that existing operation hours and thermostat schedules will not change as a result of this ECM.

## c) Comfort Standards:

For the purpose of this Agreement, Qualified Provider assumes that indoor temperatures will be maintained at the conditions set forth in Table 3 of Section 3 of this Exhibit E.1.

#### d) <u>Existing HVAC Equipment Efficiency</u>:

Analysis has determined the efficiency for the existing HVAC equipment and equipment operations, which is provided in Tables 1a, 1b, 1c, and 1d.

#### Table 1a

Existing Equipment	Existing System Cooling Efficiency	Existing System Heating Efficiency
Existing WSHPs (Average of All)	9.84 EER	3.07 COP
Existing Boiler (Electric)	NA	100%

#### Table 1b

Existing Pump Equipment	Existing Pump Horsepower	Qty	Operation
Condenser Loop Pumps	25	2	Constant Flow

#### Table 1c

Existing Heat Rejection Equipment	Existing Efficiency	Qty	Operation
Fluid Cooler	0.17 kW/ton	1	Constant Fan Speed (On/Off - No Modulation)

INITIALED BY: \_\_\_\_Owner \_\_\_\_Trane Exhibit E.1 Qualified Provider Project No.: 7680317

Table 1d

Existing Air Handling Equipment	Existing Fan Horsepower	Operation
HRU-A1	2	Constant Volume
HRU-A2	2	Constant Volume
HRU-A3	3	Constant Volume
HRU-A4	3	Constant Volume
HRU-A5	5	Constant Volume

These values form the basis of the pre-retrofit condition and are used in the TRACE<sup>TM</sup> 700 modeling efforts to recreate the existing energy consumption profile. The values in Tables 1a, 1b, 1c, and 1d are mutually agreed to by Owner and Qualified Provider for the purposes of this Agreement.

## 2.0 Pre-Retrofit Consumption Data:

The pre-retrofit consumption data was established utilizing the following methodology agreed to by Owner and Qualified Provider.

## a) <u>Measurement Methodology</u>:

TRACE<sup>TM</sup> 700 building simulation software was used to model the energy consumption of the building. Known parameters such as local weather data, internal building loads (people and equipment), occupancy data, utility costs, percent outside air, etc., were all utilized in the modeling of the base case. The accuracy of the pre-retrofit energy model was validated by its correlation to the actual utility data for Lakewood Elementary School. Its assumptions and results were collaboratively agreed upon by Owner and Qualified Provider throughout the modeling process. The measurement of the pre-installation equipment performance data is based on the methodology defined in IPMVP 2012.

The pre-retrofit condition can be characterized as a situation where the efficiencies of the existing HVAC equipment have diminished due to age and wear. The existing system is also one comprised of an all-electric water-source heat pump system with fluid cooler heat rejection and electric boiler supplemental heat. A significant amount of the energy savings presented in this Exhibit E.1 is associated with changing this system to be a geothermal water source heat pump system with no fluid cooler and no supplemental boiler.

## 3.0 Post-Retrofit Measurements:

The following describes the agreed to methodology for computing Energy Use Savings.

## a) <u>Measurement Methodology</u>: New BAS System

Qualified Provider has completed an engineering analysis for this conservation measure utilizing TRACE<sup>TM</sup> 700 building simulation software. A portion of the energy savings due to this conservation measure are related to maintaining control strategies set forth in the sequence of operations for this new HVAC system. The complete list of new control strategies is listed in Table 2 below.

Table 2

Control Strategy	Validation Methodology
Condenser Loop Pumps Variable Frequency Drives	DDC system report showing that the variable frequency drives are modulating the condenser water pumps.
Occupied and Unoccupied Thermostat Schedule Control	DDC system report showing occupied and unoccupied schedules and temperature setpoints

Since all external variables (weather, hours of operation, utility rates, building envelope values, occupancy, percent outdoor air, etc.) have been established, the remaining items to validate are that the control system truly controls to the strategies listed in Table 2. In order to validate the performance of this conservation measure, Qualified Provider will monitor the operation of the equipment and the internal environmental conditions using the building automation system. The DDC system will generate a report validating the control strategies listed in Table 2.

Throughout the term of this Agreement, Qualified Provider will validate that the room temperatures are capable of being maintained to the set points as per Table 3 during the year utilizing the building automation system. The validation report will consist of a 24-hour trend log for one representative weekday and one representative weekend day on a quarterly basis for each unique area including the Classrooms/Corridors, Front Offices, Gym, Kitchen, and Cafeteria. Qualified Provider will also provide quarterly reports consisting of a snapshot of a representative week of operation from the building automation system for the condenser water pumps to simply show/demonstrate that modulation is occurring.

#### Table 3

Area	Weekdays	Weekends	Room Temperatures (within <u>+</u> 2° F)
Classrooms & Corridors: August thru May	Occupied Hrs: 6am – 4pm Unoccupied Hrs: 4pm – 6am	Unoccupied: All Hours	Occupied Clg: 72° F Unoccupied Clg: 80° F Occupied Htg: 70° F Unoccupied Htg: 58° F
Front Offices: August thru May	Occupied Hrs: 5am – 5pm Unoccupied Hrs: 5pm – 5am	Unoccupied: All Hours	Occupied Clg: 72° F Unoccupied Clg: 80° F Occupied Htg: 70° F Unoccupied Htg: 58° F
Gym: August thru May	Occupied Hrs: 6am – 6pm Unoccupied Hrs: 6pm – 6am	Unoccupied: All Hours – Except for Special Events / Games	Occupied Clg: 72° F Unoccupied Clg: 80° F Occupied Htg: 70° F Unoccupied Htg: 58° F
Kitchen: August thru May	Occupied Hrs: 3am – 3pm Unoccupied Hrs: 3pm – 3am	Unoccupied: All Hours	Occupied Clg: 72° F Unoccupied Clg: 80° F Occupied Htg: 70° F Unoccupied Htg: 58° F
Cafeteria: August thru May	Occupied Hrs: 5am – 6pm Unoccupied Hrs: 6pm – 5am	Unoccupied: All Hours	Occupied Clg: 72° F Unoccupied Clg: 80° F Occupied Htg: 70° F Unoccupied Htg: 58° F
Classrooms, Corridors, Cafeteria, & Kitchen: June thru July	Occupied Hrs: 8am – noon Unoccupied Hrs: noon – 8am	Unoccupied: All Hours	Occupied Clg: 72° F Unoccupied Clg: 80° F Occupied Htg: 70° F Unoccupied Htg: 58° F
Gym & Front Offices: June thru July	Occupied Hrs: 8am – 3pm Unoccupied Hrs: 3pm – 8am	Unoccupied: All Hours – Except for Special Events / Games	Occupied Clg: 72° F Unoccupied Clg: 80° F Occupied Htg: 70° F Unoccupied Htg: 58° F

#### Note:

It should be noted that if the building can be operated less than the agreed to hours or can be maintained at cooler heating or warmer cooling temperatures, there will just be additional savings realized by the Owner in these instances.

## b) Measurement Methodology: New HVAC Equipment/System

Qualified Provider has completed an engineering analysis for this conservation measure utilizing the TRACE<sup>TM</sup> 700 building simulation software. A significant portion of energy savings due to this conservation measure are related to installing new high efficiency equipment that uses less energy to provide the cooling and heating capacity than the existing HVAC equipment.

Since all external variables (weather, hours of operation, utility rates, building envelope values, occupancy, etc.) have been established, the remaining items to validate are that the true efficiencies of the new equipment matches those listed below in Tables 4a, 4b, 4c, and 4d. To accomplish this, the equipment manufacturer will provide a certified analysis from the proper rating agencies.

Table 4a

Equipment	Cooling Efficiency	Heating Efficiency
New Air Cooled Chiller	15.0 EER	4.82 COP

#### Table 4b

New Equipment	New Pump Horsepower	Qty	Operation
Condenser Water Loop Pumps	25	2	Variable Flow

#### Table 4c

Existing Heat Rejection Equipment	Power Spent	Operation
Geothermal Wellfield	N/A - Renewable Energy	Utilized During Heating and Cooling Modes

#### Table 4d

Existing Air Handling Equipment	Existing Fan Horsepower	Operation
HRU-A1	2	Constant Volume
HRU-A2	2	Constant Volume
HRU-A3	3	Constant Volume
HRU-A4	3	Constant Volume
HRU-A5	5	Constant Volume

Note that all air handling equipment (Table 4d) remains the same as existing (same as Table 1d). There shall be no quantifiable savings expected from heat recovery air handler units. Although these units are scheduled to be refurbished, they will not experience any quantifiable energy efficiency gains or operate differently than they currently do in the existing system.

## 4.0 Computation of Savings:

The following describes the agreed to methodology for computing Energy Use Savings based on the validated output from the BAS system.

#### a) Computation of Energy Use Savings: New BAS System

The building automation system will be used to generate a report showing that occupied and unoccupied set points are being maintained and the control strategies from Table 2 have been implemented. This report will consist of 24-hour trending logs run quarterly during the term of the Agreement, and will constitute the documentation showing the system saves the amount of energy predicted by the TRACE™ 700 building simulation. The content of these validation reports and how they will be compiled is detailed in Section 3 of this document.

Quarterly comparisons will be performed to determine the amount of variance between the agreed to operating conditions presented in Table 3 and the actual operating conditions. In the instances where the Owner's overrides result in extended system runtimes or higher/lower temperature setpoints, Qualified Provider will document and show how these decisions impacted the fulfillment of the predicted savings herein. But since the operational parameters to follow in order to achieve the guaranteed savings are clearly listed in this Exhibit E.1 and the Owner has agreed to all parameters and conditions, the Qualified Provider is not responsible for the negative impact on savings if the Owner chooses not to abide. The responsibility to maintain these operational parameters falls completely on the Owner.

If the actual occupancy times differ from the previous simulation by less than or equal to 30% or the actual space temperatures vary by less than  $\pm$  2 degrees, it is considered to be within an acceptable tolerance based on Qualified Provider's conservative safety factors for this energy conservation measure.

#### b) Computation of Energy Use Savings: New HVAC Equipment/System

Once the new HVAC equipment efficiency is verified, actual annual Energy Use Savings will be calculated. To accomplish this, Qualified Provider will enter the verified efficiency of the new HVAC units into the analysis tool previously used to calculate savings based on the projected (future) operation. The building simulation will only be rerun if the efficiency is less than the efficiency noted below in the Minimum Efficiency Threshold.

Table 5

Equipment	Verified Efficiency being provided (as noted in Section 3.0)	Minimum Efficiency Threshold
New Geothermal WSHPs	15.0 EER	13.4 EER
New Geothermal WSHFS	4.82 COP	4.29 COP

Trane will prepare Validation Reports for new equipment to validate the strategies shown in Table 2. These validation reports will consist of the manufacturers' published literature documenting the performance and specification of the equipment installed during construction. The performance specifications will also adhere to federal efficiency standards (i.e., ENERGY STAR, ANSI, ARI, ASHRAE, etc.).

If the validated efficiency is greater than or equal to the minimum efficiency threshold noted above in Table 5, the HVAC unit's efficiency is within an acceptable tolerance based on Qualified Provider's conservative safety factors for this energy conservation measure and, therefore, satisfies the Guarantee.

## c) <u>Presentation of Savings</u>:

The energy conservation measure described herein will result in the following effect on energy usage:

Total Annual Guaranteed kWh Energy Use Savings (HVAC Upgrades): 180,735 kWh Total Annual Guaranteed Peak kW Demand Savings(HVAC Upgrades): 2,070 kW

Total Annual Guaranteed kWh Energy Use Savings (BAS Upgrades): 42,648 kWh Total Annual Guaranteed Peak kW Demand Savings(BAS Upgrades): 104 kW

## EXHIBIT E.2 Guarantee

## Removal of Hybrid Heating Gas Boiler – New Highland Elementary School

## 1.0 Agreed Upon Parameters:

The following are mutually agreed upon parameters that form the basis of the gas savings related to removing the hybrid heating boiler. The savings are stipulated and will not be measured or monitored.

### a) Applicability:

This removal of the gas heating boiler and the estimated savings associated with the full geothermal HVAC renovation solution applies to New Highland Elementary School.

## b) Existing Condition:

The applicable school facility, New Highland Elementary School, currently utilizes a hybrid geothermal system. In the winter and shoulder seasons a gas boiler is used to temper the hybrid geothermal loop. The boiler is being removed as a part of this project and the gas savings are associated with the removal of the existing HVAC heating boiler.

# 2.0 Computation of Gas Boiler Savings:

The following describes the methodology for computing gas boiler savings based on removing the gas boiler in the existing hybrid geothermal system as it will not be needed or used in the new full geothermal system. The following data is presented for use in the savings calculation and has been established and collaboratively agreed to by Owner and Qualified Provider. For the purposes of this Agreement, the data is considered fact and will not be measured, monitored, or adjusted.

#### a) Solution Description:

The existing hybrid geothermal system is being converted to full geothermal removing the existing hydronic heating boiler. The reduction in gas load is a result of converting the heating system into a full geothermal HVAC system. Total electricity for the HVAC system did not increase as a result of the HVAC system change.

#### b) Computation of Natural Gas Savings:

The savings associated with this ECM were computed in TRACE<sup>TM</sup> 700 modeling software. The following table (Table 1) illustrates the savings as calculated in TRACE<sup>TM</sup> 700 modeling software. Total guaranteed gas savings of 1,283 therms includes a 10% safety from the actual gas savings calculated.

Table 1:

Gas Consumption													
Pre-ECM gas	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
On-Pk Cons. (therms)	550	497	204	198	50	28	19	42	67	33	131	93	1,913
On-Pk Demand (therms/hr)	16	16	16	16	16	16	16	16	16	16	16	16	16
Post-ECM gas													
On-Pk Cons. (therms)	52	47	48	43	50	28	19	42	42	33	50	35	488
On-Pk Demand (therms/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0

As stated above in Table 1, the existing energy profile (Pre-ECM gas) created was based on the most recent year of typical natural gas usage readings (2021/2022 calendar years data). The estimated gas usage profile (Post-ECM gas) shown accounts for gas usage savings as a result of this ECM.

All savings from this conservation measure are mutually agreed and the Owner agreed to the methods by which the dollar savings amounts presented in Table 1 were calculated.

## c) Presentation of Hybrid Heating Boiler Removal Savings:

New Highland Elementary School – Hybrid Heating Gas Savings: 1,283 therms

# EXHIBIT E.3 Energy Savings Guarantee Lighting Upgrade – Multiple Facilities

# 1.0 Agreed Upon Parameters:

The following are mutually agreed upon parameters that form the basis of this Energy Savings Guarantee.

#### a) Applicability:

This Energy Savings Guarantee applies to the high efficiency lighting upgrade energy conservation measure installed by Qualified Provider as described in Tables 1a through 1p and 2a through 2p at multiple locations, including:

- John Hardin High School
- North Hardin High School
- Bluegrass Middle School
- North Middle School
- Creekside Elementary School
- G.C. Burkhead Elementary School
- Heartland Elementary School
- Lakewood Elementary School
- New Highland Elementary School
- North Park Elementary School
- Radcliff Elementary School
- Rineyville Elementary School
- Vine Grove Elementary School
- Bus Garage
- Central Office
- IT-TV Bldg

#### b) Lighting Audit:

The operational hours gathered during the lighting audit to calculate energy savings were agreed to by Owner as representative of actual run times. The operational hours are listed in Exhibit E Section 9.

## c) <u>Existing Conditions</u>:

All facilities were audited in their existing and normal conditions. Savings calculations were based on thorough and extensive audit data. And since more comprehensive facility renovations are underway as a part of this Agreement for Lakewood Elementary School and New Highland Elementary School, these facilities' energy savings were calculated using TRACE™ 700 building modeling software. For the purposes of this Agreement, the air handlers, heating and cooling equipment, and all related appurtenances (pumps, etc.) operate and consume energy as per the TRACE™ 700 building modeling software analysis for these respective facilities. Qualified Provider based these building simulations on extensive survey and analysis of each facility in completeness. Owner and Qualified Provider collaboratively agreed upon its assumptions and results throughout the modeling process.

INITIALED BY:	Owner	Trane
Exhibit E.3 Qualified Prov	vider Project No.:	7680317

## 2.0 <u>Pre-Retrofit Consumption Data</u>:

The following describes the methodology for proving per-fixture wattage of each existing lighting fixture <u>prior to the installation</u> of energy efficient lighting equipment. Actual wattage measurements are taken to validate the pre-retrofit, per-fixture wattage as represented in the lighting audits and analyses performed to date.

### a) <u>Measurement Methodology</u>:

Savings for this energy conservation measure were estimated based on audit calculations respective to each facility. But because there is a significant defined HVAC installation scope at Lakewood Elementary School and New Highland Elementary School, TRACE<sup>TM</sup> 700 building simulation software was used to model the energy consumption of the building to calculate and capture energy savings associated with new efficient lighting as well as its effects on the new HVAC system and its many components for these facilities only. Known parameters such as local weather data, internal building loads (people and equipment), occupancy data, utility costs, percent outside air, etc., were all utilized in the modeling of the base case. The accuracy of the pre-retrofit energy model was validated by its correlation to the actual utility data for both Lakewood ES and New Highland ES, respectively. Model assumptions and results were collaboratively agreed upon by Owner and Qualified Provider throughout the modeling process. The measurement of the existing (pre-installation) lighting performance data is based on the methodology defined in IPMVP 2012 and is further explained in this Section 2.0 of this Exhibit E.3.

Qualified Provider has proposed to retrofit existing fixtures with energy efficient products. The purpose of this section is to explain the measurement and verification process for the wattages assumed in the detailed survey estimates in order to validate the energy savings predicted by the TRACE<sup>TM</sup> 700 building modeling software for Lakewood Elementary School and New Higland Elementary School buildings and audit savings calculations for all other facilities.

Different types of existing fixtures were encountered during the detailed survey. The tables in Section 2.0.b provides a brief description of each fixture, a space for estimated fixture wattage, and notes the quantity of each fixture.

In order to validate the wattage estimates of the existing fixtures, Qualified Provider will measure the actual wattage consumed by a sample of each. The measurements will be taken utilizing an accurate, properly calibrated, power factor corrected wattmeter. The cost of this measurement and the responsibility for the provision of a qualified electrician will be borne entirely by Qualified Provider.

#### **Pre-ECM Installation Wattage Measurement Sample Size Determination**

The lighting fixture types and quantities to be measured prior to installation are based on the methodology defined in the IPMVP 2012 Volume 1 Section B.3. The first step was to determine at each site which fixture(s) make up at least 70% of the existing total lighting load.

The sample criterion for lighting was based on 95% confidence and 5% precision. The quantities for these chosen fixtures were entered into a spreadsheet that uses the initial sample size formula defined by the IPMVP. Based on 95% confidence and 5% precision and with a coefficient of variation to be 0.2, the initial sample size is calculated to be 61.

$$n_0 = \frac{z^2 * cv^2}{e^2}$$

Where:

 $n_0=$  the initial estimate of the required sampling size, before sampling begins z= the standard normal distribution value from the t-Table, with an infinite number of readings, and for the desired confidence level (95% = 1.96)

e = the desired level of precision

cv= the coefficient of variance, which is defined by the standard deviation of the readings divided by the mean. Until the mean and standard deviation of the population can be estimated from actual samples, 0.2 will be used as an initial estimate for the cv.

$$n_0 = \frac{1.96^2 * 0.2^2}{0.05^2} = 61$$

Small sample population test - if the actual fixture counts (population) for the type being sampled is less than 1,220 (61 x 20), then the "Finite Population Adjustment" is performed as outlined in the aforementioned IPMVP 2012 Volume 1 Section B.3. The fixture count is inserted into the Finite Population Adjustment formula to adjust initial sample size estimate for small populations. The example below uses a fixture count of 237 total fixtures in the building.

$$n = \frac{n_0 * N}{n_0 + N}$$

Where:

 $n_0$  = the initial estimate of the required sampling size, before sampling begins n = the new, adjusted sample size for small populations N = Total population size

$$n = \frac{61 * 237}{61 + 237} = 49$$

Finalized Sample Size – The initial sample size  $(n_0)$  is determined by using an assumed cv, so the actual cv must be calculated in order to find out the exact number of samples needed. If the actual cv turns out to be less than the initial cv (0.2), then the required sample size will be unnecessarily large to meet the precision goals. Conversely, if the actual cv turns out to be larger than the initial assumed cv, then the sample size would, theoretically, increase beyond the initial computed sample size.

When sampling, the mean and the standard deviation should be computed with each reading, and, in turn, the cv and the required sample size should be recalculated with each sample reading. The re-computation may allow for an early curtailment of the sampling process. Due to cost constraints in the M&V process, the maximum allowable sampling will be the initial sampling estimate before any readings are conducted.

Pre-Installation Sampling Plan – the fixture types that will be sampled will be highlighted in yellow for ease of review. The fixture types measured will represent over 70% of the total lighting kW load in that particular building.

#### b) Pre-Retrofit Fixture Table:

For the purposes of this Agreement, the lighting fixture quantities were surveyed by Qualified Provider and these quantities are collaboratively agreed upon by Owner and Qualified Provider and are stipulated in this Section 2.0 of Exhibit E.3.

Qualified Provider reserves the right to adjust the Baseline for the pre- and post-retrofit quantities to reflect actual quantities and types of fixtures encountered during the retrofit; however, the Energy Use Savings expected to be achieved will not be less than the Energy Use Savings represented by the difference in consumption between the fixtures and quantities in the pre-retrofit table in this Section 2.0 of this Exhibit E.3 and the post-retrofit table in Section 3.0 of this Exhibit E.3.

The following tables illustrate the pre-retrofit (existing) fixtures and for the purposes of this agreement are stipulated and hereby collaboratively agreed to by Owner and Qualified Provider:

Table 1a – Existing Fixture Description/Quantity – John Hardin High School

HARDIN CO. JHHS - Pre Installation							
Fixture Type		Watts/Fixture	Total Load	% of Total Load			
F32T8 4' 32W 4L	810	106	85,860	41%			
F32T8 4' 32W 3L	815	86	70,090	33%			
250W Mogul Base	71	295	20,945	10%			
F32T8 4' 32W 2L	181	62	11,222	5%			
F17T8 2' 3L	120	48	5,760	3%			
150W Med. Base	26	173	4,498	2%			
Compact Fluorescent, Multi pin (2) 26W lamps	69	50	3,450	2%			
175W Mogul Base	7	210	1,470	1%			
Incandescent 60w	24	60	1,440	1%			
Compact Fluorescent, Multi, 4-pin, (2) 32W lamps	20	62	1,240	1%			
Compact Fluorescent, Multi pin (2) 13W lamps	35	28	980	0.5%			
F17T8 2' 2L	27	33	891	0.4%			
CFL	21	26	546	0.3%			
Compact Fluorescent, Multi pin (1) 26W lamps	15	27 42	405 378	0.2% 0.2%			
100W Med. Base	3	125	375	0.2%			
F17T8 2' 4L	5	60	300	0.1%			
Compact Fluorescent, Multi pin (1) 13W lamps	16	15	240	0.1%			
Compact Fluorescent, Multi, 4-pin, (2) 42W lamps	2	93	186	0.1%			
Incandescent-60W	2	60	120	0.1%			
	2528		210,467	100%			

Table 1b – Existing Fixture Description/Quantity – North Hardin High School

HARDIN CO. NORTH HARDIN HIGH SCHOOL - Pre Installation						
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load		
F32T8 4' 32W 3L	991	86	85,226	55%		
F32T8 4' 32W 2L	388	62	24,056	16%		
F32T8 4' 32W 4L	157	106	16,642	11%		
400W Mogul Base	25	456	11,400	7%		
LED 14W 3L	60	42	2,520	2%		
Customer LED Solution - 64W	33	64	2,112	1%		
F28T5 4' 28W 2L	26	63	1,638	1%		
Compact Fluorescent, Multi pin (2) 26W lamps	25	50	1,250	1%		
100W Med. Base	10	125	1,250	1%		
Incandescent 75w	15	75	1,125	1%		
70W Med. Base	12	93	1,116	1%		
LED 14W 2L	32	28	896	1%		
F28T8 4' 28W 3L	11	72	792	1%		
LED Flat Panel - 30W	20	30	600	0.4%		
4L-TLED-TBD	7	80	560	0.4%		
F40T12 4' 34W 2L	6	78	468	0.3%		
LED Flat Panel - 35W	12	35	420	0.3%		
Compact Fluorescent, Multi, 4-pin, (1) 32W lamps	9	35	315	0.2%		
F28T8 4' 28W4L	3	98	294	0.2%		
LED 14W 4L	5	56	280	0.2%		
F32T8 4' 32W 6L	1	220	220	0.1%		
Customer LED Solution - 24W	6	24	144	0.1%		
Compact Fluorescent, Multi, 4-pin, (2) 32W lamps	2	62	124	0.1%		
F17T8 2' 2L	3	33	99	0.1%		
F17T8 2' 2L	5	16	80	0.1%		
F17T8 2' 2L	3	17	51	0.03%		
Compact Fluorescent, Multi pin (1) 26W lamps	1	27	27	0.02%		
LED Flat Panel - 25W	1	25	25	0.02%		
LED 14W 1L	1	14	14	0.01%		
_	1870		153,744	100%		

Table 1c – Existing Fixture Description/Quantity – Bluegrass Middle School

HARDIN CO. BLUEGRASS MIDDLE SCHOOL - Pre Installation				
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load
F32T8 4' 32W 4L	526	106	55,756	65%
F32T8 4' 32W 3L	145	86	12,470	14%
F32T8 4' 32W 6L	42	220	9,240	11%
F32T8 U 2L	53	68	3,604	4%
F32T8 4' 32W 2L	40	62	2,480	3%
F40T12 4' 34W 4L	8	156	1,248	1%
70W Med. Base	5	93	465	1%
Compact Fluorescent, Multi pin (2) 26W lamps	8	50	400	0.5%
100W Med. Base	2	125	250	0.3%
LED 14W 3L	4	42	168	0.2%
F40T12 4' 34W 1L	3	48	144	0.2%
F40T12 4' 40W 1L	2	51	102	0.1%
Customer LED Solution - 32W	1	32	32	0.04%
LED 14W 2L	1	28	28	0.03%
	840		86,387	100%

Table 1d - Existing Fixture Description/Quantity - North Middle School

HARDIN CO. NORTH MIDDLE SCHOOL - Pre Installation						
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load		
F28T5 4' 28W 2L	694	63	43,722	51%		
F28T5 4' 28W4L	246	126	30,996	36%		
F28T5 4' 28W6L	42	168	7,056	8%		
Compact Fluorescent, Multi, 4-pin, (1) 32W lamps	67	35	2,345	3%		
Compact Fluorescent, Multi pin (2) 26W lamps	20	50	1,000	1%		
Compact Fluorescent, Multi, 4-pin, (2) 85W lamp	2	192	384	0.4%		
Compact Fluorescent, Multi pin (1) 26W lamps	13	27	351	0.4%		
Compact Fluorescent, Multi, 4-pin, (2) 70W lamp	2	146	292	0.3%		
F28T5 4' 28W 1L	6	32	192	0.2%		
F28T5 4' 28W 3L	1	96	96	0.1%		
	1119		86,434	100%		

Table 1e – Existing Fixture Description/Quantity – Creekside Elementary School

Table 16 Existing Fixture Description/Quantity Orecreside Elementary Oction							
Hardin Co. Creekside Elementary - Pre Installation							
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load			
F32T8 4' 32W 4L	353	106	37,418	53%			
F32T8 4' 32W 3L	296	86	25,456	36%			
F32T8 4' 32W 2L	60	62	3,720	5%			
Compact Fluorescent, Multi pin (2) 26W lamps	37	50	1,850	3%			
F32T8 4' 32W 1L	16	33.2	531	1%			
Compact Fluorescent, Multi, 4-pin, (2) 32W lamps	7	62	434	1%			
Incandescent 100w	4	100	400	1%			
F17T8 2' 2L	11	33	363	1%			
Compact Fluorescent, Multi, 4-pin, (1) 42W lamps	7	46	322	0.5%			
F28T5 4' 28W 2L	3	63	189	0.3%			
Compact Fluorescent, Multi pin (1) 13W lamps	10	15	150	0.2%			
	859		70,867	100%			

Table 1f – Existing Fixture Description/Quantity – G.C. Burkhead Elementary School

HARDIN CO. G.C BURKHEAD - Pre Installation							
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load			
F28T5 4' 28W 3L	355	96	34,080	41%			
F28T5 4' 28W 2L	336	63	21,168	25%			
F28T5 4' 28W4L	95	126	11,970	14%			
250W Mogul Base	39	295	11,505	14%			
Compact Fluorescent, Multi, 4-pin, (2) 42W lamps	18	93	1,674	2%			
150W Double Ended	4	185	740	1%			
F14T5 2' 14W 1L	40	18	720	1%			
150W Med. Base	4	173	692	1%			
F14T5 2' 14W 4L	8	66	528	1%			
F14T5 2' 1L	13	18	234	0.3%			
Compact Fluorescent, Multi pin (2) 13W lamps	8	28	224	0.3%			
Compact Fluorescent, Multi pin (2) 26W lamps	2	50	100	0.1%			
	1029		83,635	100%			

Table 1g – Existing Fixture Description/Quantity – Heartland Elementary School

Hardin Co. Heartland Elementary - Pre Installation					
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load	
F32T8 4' 32W 3L	392	86	33,712	60%	
F32T8 4' 32W 2L	126	62	7,812	14%	
F32T8 4' 32W 4L	35	106	3,710	7%	
LED 14W 3L	80	42	3,360	6%	
Compact Fluorescent, Multi pin, 4-pin (2) 26W lamps	46	50	2,300	4%	
Compact Fluorescent, Multi pin (2) 26W lamps	38	50	1,900	3%	
F54T5HO 4' 54W 2L	10	120.3	1,203	2%	
Incandescent 150w	4	150	600	1%	
F17T8 2' 2L	15	33	495	1%	
Incandescent 75w	3	75	225	0.4%	
Compact Fluorescent, Multi pin, 4-pin (1) 26W lamps	8	26	208	0.4%	
F17T8 2' 1L	12	17	204	0.4%	
F32T8 4' 32W 1L	3	33.2	100	0.2%	
LED 2000 LUMENS	1	22.5	23	0.04%	
	773		55,851	100%	

Table 1h – Existing Fixture Description/Quantity – Lakewood Elementary School

Hardin Co. Lakewood Elementary - Pre Installation					
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load	
F32T8 4' 32W 4L	320	106	33,920	49%	
F32T8 4' 32W 3L	131	86	11,266	16%	
LED 14W 3L	168	42	7,056	10%	
150W Med. Base	22	173	3,806	6%	
400W Mogul Base	8	456	3,648	5%	
LED 14W 4L	61	56	3,416	5%	
Compact Fluorescent, Multi pin (2) 26W lamps	44	50	2,200	3%	
100W Med. Base	16	125	2,000	3%	
F32T8 4' 32W 2L	12	62	744	1%	
Compact Fluorescent, Multi pin (2) 13W lamps	10	28	280	0.4%	
F17T8 2' 2L	8	33	264	0.4%	
LED 14W 2L	7	28	196	0.3%	
F32T8 4' 32W 1L	5	33.2	166	0.2%	
Incandescent 75w	1	75	75	0.1%	
Compact Fluorescent, Multi pin (1) 13W lamps	2	15	30	0.04%	
	815		69,067	100%	

Table 1i - Existing Fixture Description/Quantity - New Highland Elementary School

Hardin Co. New Highland Elementary - Pre Installation					
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total	
	~-/			Load	
F32T8 4' 32W 4L	301	106	31,906	64%	
F32T8 4' 32W 3L	136	86	11,696	23%	
F32T8 4' 32W 2L	62	62	3,844	8%	
F28T5 4' 28W4L	7	126	882	2%	
F28T5 4' 28W 2L	11	63	693	1%	
Incandescent-60W	11	60	660	1%	
LED 14W 6L	1	84	84	0.2%	
Compact Fluorescent, Multi pin (2) 26W lamps	1	50	50	0.1%	
LED 14W 3L	1	42	42	0.1%	
F17T8 2' 2L	1	33	33	0.1%	
Compact Fluorescent, Multi pin (1) 13W lamps	2	15	30	0.1%	
LED 14W 2L	1	28	28	0.1%	
	535		49,948	100%	

Table 1j – Existing Fixture Description/Quantity – North Park Elementary School

HARDIN CO. NORTH PARK ELEMENTARY - Pre Installation					
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load	
F32T8 4' 32W 3L	437	86	37,582	44%	
F32T8 4' 32W 4L	276	106	29,256	34%	
F32T8 U 2L	109	68	7,412	9%	
F32T8 4' 32W 6L	17	220	3,740	4%	
400W Mogul Base	7	456	3,192	4%	
F32T8 4' 32W 2L	47	62	2,914	3%	
Compact Fluorescent, Multi, 4-pin, (1) 42W lamps	11	46	506	1%	
100W Double Ended	3	130	390	0.5%	
Incandescent-60W	6	60	360	0.4%	
LED 14W 3L	7	42	294	0.3%	
LED 14W 6L	3	84	252	0.3%	
LED 5000 LUMENS	3	54	162	0.2%	
Compact Fluorescent, Multi pin (1) 13W lamps	6	15	90	0.1%	
LED 4000 LUMENS	1	55	55	0.1%	
F17T8 2' 2L	1	33	33	0.04%	
	934		86,238	100%	

Table 1k - Existing Fixture Description/Quantity - Radcliff Elementary School

HARDIN CO. RADCLIFF ELEMENTARY - Pre Installation					
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load	
F28T5 4' 28W 2L	475	63	29,925	52%	
F28T5 4' 28W 3L	58	96	5,568	10%	
F28T5 4' 28W6L	30	180	5,400	9%	
F28T5 4' 28W4L	36	126	4,536	8%	
150W Med. Base	12	173	2,076	4%	
Compact Fluorescent, Multi, 4-pin, (1) 32W lamps	57	35	1,995	3%	
F14T5 2' 14W 2L	58	33	1,914	3%	
70W Med. Base	16	93	1,488	3%	
F28T5 4' 28W 2L	27	55	1,485	3%	
LED 4000 LUMENS	17	55	935	2%	
150W Double Ended	4	185	740	1%	
F28T5 4' 28W 1L	15	32	480	1%	
F28T5 4' 28W 2L	6	56	336	1%	
100W Med. Base	2	125	250	0.43%	
LED 14W 4L	4	56	224	0.39%	
F54T5HO 4' 54W 1L	3	62.5	188	0.32%	
LED 1000 LUMENS	7	12	84	0.15%	
F32T8 4' 32W 2L	1	62	62	0.11%	
Incandescent-60W	2	60	120	0.21%	
	830		57,806	100%	

Table 1I – Existing Fixture Description/Quantity – Rineyville Elementary School

HARDIN CO. RINEYVILLE ELEMENTARY - Pre Installation					
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load	
F32T8 4' 32W 3L	668	86	57,448	69%	
F32T8 4' 32W 4L	80	106	8,480	10%	
250W Mogul Base	17	295	5,015	6%	
LED 14W 3L	62	42	2,604	3%	
Compact Fluorescent, Multi, 4-pin, (2) 32W lamps	39	62	2,418	3%	
70W Med. Base	23	93	2,139	3%	
Compact Fluorescent, Multi, 4-pin, (2) 42W lamps	15	93	1,395	2%	
F32T8 4' 32W 2L	18	62	1,116	1%	
Incandescent-60W	16	60	960	1%	
F17T8 2' 2L	17	33	561	1%	
150W Med. Base	3	173	519	1%	
Compact Fluorescent, Multi, 4-pin, (1) 42W lamps	11	46	506	1%	
F32T8 4' 32W 1L	7	33.2	232	0.3%	
Compact Fluorescent, Multi, 4-pin, (1) 32W lamps	2	35	70	0.1%	
LED 14W 4L	1	56	56	0.1%	
Compact Fluorescent, Multi pin (1) 13W lamps	2	15	30	0.04%	
	981	_	83,549	100%	

Table 1m - Existing Fixture Description/Quantity - Vine Grove Elementary School

HARDIN CO. VINEGROVE ELEMENTARY - Pre Installation					
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load	
F32T8 4' 32W 4L	211	106	22,366	46%	
F32T8 4' 32W 3L	234	86	20,124	42%	
F32T8 4' 32W 2L	53	62	3,286	7%	
Compact Fluorescent, Multi pin (2) 26W lamps	30	50	1,500	3%	
100W Med. Base	8	125	1,000	2%	
LED 14W 3L	2	40	80	0%	
Compact Fluorescent, Multi pin (2) 13W lamps	2	28	56	0%	
LED 14W 2L	1	28	28	0%	
Compact Fluorescent, Multi pin (1) 26W lamps	1	27	27	0%	
	542		48,467	100%	

Table 1n - Existing Fixture Description/Quantity - Bus Garage

HARDIN CO. CENTRAL BUS GARAGE - Pre Installation						
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load		
250W Mogul Base	15	295	4,425	49%		
100W Med. Base	16	125	2,000	22%		
F32T8 4' 32W 4L	18	106	1,908	21%		
F32T8 4' 32W 2L	10	62	620	7%		
Compact Fluorescent, Multi pin (1) 13W lamps	2	15	30	0.3%		
	64		8,983	100%		

Table 1o - Existing Fixture Description/Quantity - Central Office

HARDIN CO. CENTRAL OFFIC	HARDIN CO. CENTRAL OFFICE - Pre Installation											
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load								
F32T8 4' 32W 2L	265	62	16,430	54%								
F32T8 4' 32W 3L	124	86	10,664	35%								
Incandescent 60w	23	60	1,380	5%								
F17T8 2' 3L	24	48	1,152	4%								
F32T8 4' 32W 4L	3	106	318	1%								
Compact Fluorescent, Multi pin (2) 13W lamps	9	28	252	1%								
F32T8 4' 32W 1L	5	33.2	166	1%								
F28T5 4' 28W 2L	1	63	63	0.2%								
F20T12 2' 2L	1	41.6	42	0.1%								
	480		30,467	100%								

Table 1p - Existing Fixture Description/Quantity - IT-TV Bldg

HARDIN CO. HCEC-TV & TECH DEPA	RTME	NT - Pre Insta	allation	
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load
F28T5 4' 28W 2L	110	63	6,930	63%
F28T5 4' 28W4L	19	126	2,394	22%
F28T5 4' 28W 3L	11	96	1,056	10%
F32T8 4' 32W 2L	6	62	372	3%
70W Double Ended	3	94	282	3%
Compact Fluorescent, Multi, 4-pin, (1) 32W lamps	1	35	35	0.3%
	175		11,069	100%

Table 1.1a - Pre-Installation Sample Size - John Hardin High School

	Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
Ī	F32T8 4' 32W 4L	810	61	57	95%	5%	Infinite	8%	61
Г	F32T8 4' 32W 3L	815	61	57	95%	5%	Infinite	8%	61

Table 1.1b - Pre-Installation Sample Size - North Hardin High School

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
F32T8 4' 32W 3L	991	61	58	95%	5%	Infinite	6%	61
F32T8 4' 32W 2L	388	61	53	95%	5%	Infinite	16%	61

Table 1.1c - Pre-Installation Sample Size - Bluegrass Middle School

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
F32T8 4' 32W 4L	526	61	55	95%	5%	Infinite	12%	61
F32T8 4' 32W 3L	145	61	43	95%	5%	Infinite	30%	43

Table 1.1d – Pre-Installation Sample Size – North Middle School

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
F28T5 4' 28W 2L	694	61	56	95%	5%	Infinite	9%	61
F28T5 4' 28W4L	246	61	49	95%	5%	Infinite	20%	49

Table 1.1e - Pre-Installation Sample Size - Creekside Elementary School

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
F32T8 4' 32W 4L	353	61	52	95%	5%	Infinite	17%	61
F32T8 4' 32W 3L	296	61	51	95%	5%	Infinite	17%	51

Table 1.1f - Pre-Installation Sample Size - G.C. Burkhead Elementary School

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
F28T5 4' 28W 3L	355	61	52	95%	5%	Infinite	17%	61
F28T5 4' 28W 2L	336	61	52	95%	5%	Infinite	18%	61
F28T5 4' 28W4L	95	61	37	95%	5%	Infinite	39%	37

Table 1.1g - Pre-Installation Sample Size - Heartland Elementary School

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
F32T8 4' 32W 3L	392	61	53	95%	5%	Infinite	16%	61
F32T8 4' 32W 2L	126	61	41	95%	5%	Infinite	33%	41

Table 1.1h - Pre-Installation Sample Size - Lakewood Elementary School

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
F32T8 4' 32W 4L	320	61	52	95%	5%	Infinite	19%	61
F32T8 4' 32W 3L	131	61	42	95%	5%	Infinite	32%	42
ESL 14W 3L	168	61	45	95%	5%	Infinite	27%	45

Table 1.1i – Pre-Installation Sample Size – New Highland Elementary School

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
F32T8 4' 32W 4L	301	61	51	95%	5%	Infinite	17%	51
F32T8 4' 32W 3L	136	61	42	95%	5%	Infinite	31%	42

Table 1.1j - Pre-Installation Sample Size - North Park Elementary School

Fixtu	ure Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
F32T8 4' 32W 3L		437	61	54	95%	5%	Infinite	14%	61
F32T8 4' 32W 4L		276	61	50	95%	5%	Infinite	18%	50

Table 1.1k - Pre-Installation Sample Size - Radcliff Elementary School

Table 11 to								
Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
F28T5 4' 28W 2L	475	61	54	95%	5%	Infinite	13%	61
F28T5 4' 28W 3L	58	61	30	95%	5%	Infinite	51%	30
F28T5 4' 28W6L	30	61	20	95%	5%	Infinite	67%	20

Table 1.1I - Pre-Installation Sample Size - Rineyville Elementary School

Table 1111 110 motamation campic cite 11110 time Elementary control								
Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
F32T8 4' 32W 3L	668	61	56	95%	5%	Infinite	9%	61
F32T8 4' 32W 4L	80	61	35	95%	5%	Infinite	43%	35

Table 1.1m - Pre-Installation Sample Size - Vine Grove Elementary School

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
F32T8 4' 32W 4L	211	61	48	95%	5%	Infinite	23%	48
F32T8 4' 32W 3L	234	61	49	95%	5%	Infinite	21%	49

Table 1.1n – Pre-Installation Sample Size – Bus Garage

Table 1.111 TTC-1113tallation	rable 1.111   1 te-installation bample bize bas barage									
Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured		
250W Mogul Base	15	61	12	95%	5%	Infinite	80%	12		
100W Med. Base	16	61	13	95%	5%	Infinite	79%	13		

Table 1.10 - Pre-Installation Sample Size - Central Office

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
F32T8 4' 32W 2L	265	61	50	95%	5%	Infinite	19%	50
F32T8 4' 32W 3L	124	61	41	95%	5%	Infinite	33%	41

Table 1.1p - Pre-Installation Sample Size - IT-TV Bldg

				- J				
Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
F28T5 4' 28W 2L	110	61	39	95%	5%	Infinite	36%	39
F28T5 4' 28W4L	19	61	15	95%	5%	Infinite	76%	15

## 3.0 Post-Retrofit Measurements:

The following describes the methodology for proving per-fixture wattage reductions as a result of the installation of energy efficient lighting equipment. Actual wattage measurements are taken to validate the post-retrofit, per-fixture wattage as represented in the lighting audits and analyses performed to date.

### a) <u>Measurement Methodology</u>:

Qualified Provider has proposed to retrofit existing fixtures with energy efficient products. The detailed survey/scope of work incorporated herein, illustrates the types of retrofits installed, and *estimates* the wattage of the retrofits. The purpose of this section is to validate these estimates through actual wattage measurement.

Different types of retrofit strategies are employed in the applicable areas. The tables in this Section 3.0.b of this Exhibit E.3 lists the retrofit types, and provides a brief description of the retrofit.

In order to validate the wattage estimates of the lighting retrofits, Qualified Provider will measure the actual wattage consumed by a sample of the different retrofits. This measurement will occur once, following installation of the lighting retrofit. The measurements will be taken utilizing an accurate, properly calibrated, power factor corrected wattmeter. The cost of this measurement and the responsibility for the provision of a qualified electrician will be borne entirely by Qualified Provider. It is anticipated that a sufficient representative sample of each retrofit type will be measured and documented within 60 days of completion of the lighting retrofit.

Post-Installation Sampling Plan – the fixture types that will be sampled will be highlighted in yellow for ease of review. The fixture types measured will represent over 70% of the total lighting kW load in that building. The post wattage measurement size determination method is the same as the pre-measurement determination with the exception of the coefficient of variance. The coefficient of variance used was 0.1 instead of 0.2 (new fixtures are expected to have less variance in results than existing).

# b) <u>Post-Retrofit Fixture Tables</u>:

The following tables illustrate the post-retrofit (proposed) fixtures:

Table 2a – Proposed Fixture Description/Quantity – John Hardin High School

HARDIN CO. JHHS - Post Installation									
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load					
24CBRK-42-UNV-L835-CD1-U	1077	28	30,156	40%					
PRV-C60-740-D-UNV-T4-SA-COLOR	52	153	7,956	11%					
FFLEDLSF 120W - 5K/4K -SLIPFITTER BZ UNV (17,000LM)	26	120	3,120	4%					
24CBRK-36-UNV-L835-CD1-U	101	28	2,828	4%					
24FPSL2SCT3-HIGH	48	57	2,736	4%					
24CBRK-47HE-UNV-L835-CD1-U	86	31	2,666	4%					
VPR-24-MU-36-9TW-A-36	71	36	2,556	3%					
4L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	47	52	2,444	3%					
22CBRK-31-UNV-L840-CD1-U	111	22	2,442	3%					
8T-SNX-82SL-LW-UNV-CC83-CD-1-BLACK-U	41	52	2,132	3%					
LXS-VA4-740-U-ACS-A-GM	15	100	1,500	2%					
2L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	53	26	1,378	2%					
4L- 98335-14T8/4F/840/EXT-14w-2050 LM	19	64	1,216	2%					
24CBRK-42HE-UNV-L835-CD1-U	41	28	1,148	2%					
SHARK4-50W/D10	20	50	1,000	1%					
24CBRK-36-UNV-L835-CD1-U	38	25	950	1%					
24CBRK-47HE-UNV-L835-CD1-U	30	28	840	1%					
4L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	13	52	676	1%					
2L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	26	26	676	1%					
MLHA12-48-R-MW-PP-1-45L40K-DDC-1-DV	12	50	600	1%					
9PLO/8CCTS/HYB/PF	64	9	576	1%					
22CBRK-31-UNV-L835-CD1-U	24	22	528	1%					
INFT8/835/DIM010UNV35074	30	17	510	1%					
VPR-24-MU-36-9TW-A-30	17	30	510	1%					
Wrap-4NWS3C3-UNV -35k-MEDIUM	14	33	462	1%					
Remove/Redesign	35	13	455	1%					
SLFT8/9CCT5S/DUALDIM-20	21	20	420	1%					
4L- 98335-14T8/4F/835/EXT-14w-2050 LM	6	64	384	1%					
PRV-C25-740-D-UNV-T2-SA-COLOR	4	96	384	1%					
1L-98401-PL H G24q/G24d 8W-BYPass 120-277V-8PLH/835/HYB	20	16	320	0.4%					
WPX3 CCT 100W BZ -UNV SELECTABLE PC	3	100	300	0.4%					
Strip 4SLSTP4040DD-UNV 4760lm	6	43	258	0.3%					
SLFT9.5/9CCT5S/DUALDIM-40w	6	40	240	0.3%					
INFT8/835/DIM010UNV-2080lm	10	17	170	0.2%					
24CBRK-42-UNV-L840-CD1-U-CBRK-EBPLED14W-NS	4	42	168	0.2%					
2L- 98327-2'TLED- 9.5W-9.5T8/2F/835/EXT- 1500 LM	8	21	168	0.2%					
1L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	12	13	156	0.2%					
SLFT8/9CCT5S/DUALDIM-2320lm	6	20	120	0.2%					
Wrap-4NWS3C3-UNV -40k-MEDIUM	3	33	99	0.1%					
2L- 98335-14T8/4F/835/EXT-14w-2050 LM	3	32	96	0.1%					
H12S-LD4-30W-40-CLR-COLOR-EDC1 BACK BOX	2	30	60	0.1%					
1L- 98327-2'TLED- 9.5W-9.5T8/2F/835/EXT- 1500 LM	5	11	55	0.1%					
, , , ,	2534		75,560	100%					

<u>Table 2b – Proposed Fixture Description/Quantity – North Hardin High School</u>

HARDIN CO. NORTH HARDIN HIGH				
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load
24CBRK-42-UNV-L835-CD1-U	589	28	16,492	26%
24CBRK-42-UNV-L835-CD1-U	454	29	13,166	21%
3L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	179	39	6,981	11%
24CBRK-47HE-UNV-L835-CD1-U	127	31	3,937	6%
24FPSL2SCT3-HIGH	50	57	2,850	5%
PRV-XL-C150-D-UNV-T4-SA-COLOR	10	285	2,850	5%
vaportight SEAL8-100N/D10	28	97	2,716	4%
24CBRK-36-UNV-L835-CD1-U	78	29	2,262	4%
24CBRK-42HE-UNV-L835-CD1-U	59	28	1,652	3%
PRV-C60-740-D-UNV-T4-SA-COLOR	9	153	1,377	2%
2L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	44	26	1,144	2%
2L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	43	26	1,118	2%
WPX2 CCT 80W BZ -UNV SELECTABLE PC	10	80	800	1%
2L- 98314-13.5T5HE/4F/835/EXT- 13.5W-2000lm	26	30	780	1%
24CBRK-36-UNV-L835-CD1-U	31	25	775	1%
24CBRK-42HE-UNV-L835-CD1-U	23	31	713	1%
PRV-C60-740-D-UNV-T5-SA-COLOR	4	153	612	1%
24CBRK-47HE-UNV-L840-CD1-U	13	31	403	1%
SLFT8/9CCT5S/DUALDIM-20	12	20	240	0.4%
vaportight SEAL4-50N/D10	5	48	240	0.4%
VPR-24-MU-36-9TW-A-36	6	36	216	0.3%
PRV-C25-740-D-UNV-T2-SA-COLOR	2	96	192	0.3%
H12F-LD4-15W-40-CLR-COLOR-EDC1 FLUSH MOUNT	11	15	165	0.3%
11BR40DIM/830	15	11	165	0.3%
INFT8/835/DIM010UNV35074	9	17	153	0.2%
H12F-LD4-15W-50-OPL-BZ-EDC1	9	15	135	0.2%
Strip 4SLSTP2040DD-UNV 2410lm	4	23	92	0.1%
H12S-LD4-40W-40-CLR-COLOR-EDC1 BACK BOX	2	40	80	0.1%
Wrap-4NWS3C3-UNV -40k-MEDIUM	2	33	66	0.1%
2L- 98327-2'TLED- 9.5W-9.5T8/2F/835/EXT- 1500 LM	3	21	63	0.1%
2L- 98327-2'TLED- 9.5W-9.5T8/2F/840/EXT- 1500 LM	3	21	63	0.1%
9PLO/8CCTS/HYB/PF	6	9	54	0.1%
4L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	1	52	52	0.1%
LCCONTROL20/D10-PANEL CONTACTOR	5	10	50	0.1%
SLFT8HO/9CCT5S/DUALDIM-4790lm	1	42.5	43	0.1%
2L- 98327-2'TLED- 9.5W-9.5T8/2F/835/EXT- 1500 LM	2	19	38	0.1%
	1886		62,794	100%

Table 2c - Proposed Fixture Description/Quantity - Bluegrass Middle School

HARDIN CO. BLUEGRASS MIDDLE	SCHOO	)L - Post Insta	llation	HARDIN CO. BLUEGRASS MIDDLE SCHOOL - Post Installation									
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load									
24CBRK-42-UNV-L835-CD1-U	482	29	13,978	49%									
OHB-15SE-MFL-UNV-L850-CD-WLS4-U	42	98	4,116	14%									
24FPSL2SCT3-HIGH	33	57	1,881	7%									
24CBRK-47HE-UNV-L835-CD1-U	42	31	1,302	5%									
24CBRK-36-UNV-L835-CD1-U	51	25	1,275	4%									
4L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	16	52	832	3%									
22CBRK-31-UNV-L835-CD1-U	33	22	726	3%									
2L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	24	26	624	2%									
24CBRK-42-UNV-L835-CD1-U-CBRK-EBPLED14W-NS	13	42	546	2%									
24CBRK-42HE-UNV-L835-CD1-U	18	28	504	2%									
3L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	12	39	468	2%									
VPR-24-MU-36-9TW-A-36	12	36	432	2%									
22CBRK-31-UNV-L840-CD1-U	19	22	418	1%									
2L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	13	26	338	1%									
WPX2 CCT 60W BZ -UNV SELECTABLE PC	5	60	300	1%									
4L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	4	52	208	1%									
RX4-12 U(120-277V) 40 -1821LM	5	25	125	0.4%									
SLFT8HO/9CCT5S/DUALDIM-37	3	37	111	0.4%									
VPR-24-MU-36-9TW-A-23	4	23	92	0.3%									
SLFT8/9CCT5S/DUALDIM-20	4	20	80	0.3%									
VPR-24-MU-36-9TW-A-30	2	30	60	0.2%									
FFLEDSSF 26W - 5K/4K - SLIPFITTER BZ UNV (4400LM)	2	26	52	0.2%									
INFT8/835/DIM010UNV35074	1	17	17	0.1%									
_	840		28,485	100%									

Table 2d – Proposed Fixture Description/Quantity – North Middle School

HARDIN CO. NORTH MIDDLE SCH	OOL .	- Post Installa	ation	
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load
24CZ2-45-UNV-L835-SD1-U (Cruze troff) 4602Im-STEP DIM	376	35	13,160	31%
OHB-24SE-W-UNV-L850-CD-WLS4-U	42	148	6,216	15%
24CZ2-45-UNV-L835-CD1-U (Cruze troff) 4602lm	134	35	4,690	11%
4L- 98323-22T5HO/4F/835/EXT-22W-3400lm	28	104	2,912	7%
2L- 98314-13.5T5HE/4F/835/EXT- 13.5W-2000lm	96	30	2,880	7%
4L- 98314-13.5T5HE/4F/835/EXT- 13.5W-2000lm	37	60	2,220	5%
2L- 98314-13.5T5HE/4F/840/EXT- 13.5W-2000lm	70	30	2,100	5%
24CBRK-42-UNV-L835-CD1-U	55	29	1,595	4%
24CZ2-50-UNV-L835-SD1-U (Cruze troff) 5049lm-STEP DIM	38	39	1,482	3%
24FPSL2SCT3-HIGH	24	57	1,368	3%
24CBRK-47HE-UNV-L835-CD1-U	34	31	1,054	2%
24CZ2-50-UNV-L835-CD1-U (Cruze troff) 5049lm	12	39	468	1%
9PLO/8CCTS/HYB/PF	50	9	450	1%
24CZ2-45-UNV-L840-CD1-U (Cruze troff)	9	35	315	1%
24CZ2-35-UNV-L835-CD1-U (Cruze troff) 3633lm	10	27	270	1%
3L- 98314-13.5T5HE/4F/835/EXT- 13.5W-2000lm	6	45	270	1%
SLFT8/9CCT5S/DUALDIM-20	13	20	260	1%
LCR6-15-RD-9FS-E010	13	18	234	1%
2L- 98323-22T5HO/4F/835/EXT-22W-3400lm	4	52	208	0.5%
98389-PL V G24q/G24d 8.5W-HYBM 120-277V-8.5PLV/835/BYP	16	8.5	136	0.3%
24FPSL2SCT3-MED	3	40	120	0.3%
24CZ2-40-UNV-L835-SD1-U (Cruze troff) 4178lm-STEP DIM	4	30	120	0.3%
SLFT8/9CCT5S/DUALDIM-16	7	16	112	0.3%
1L- 98314-13.5T5HE/4F/835/EXT- 13.5W-2000lm	6	15	90	0.2%
INFT8/835/DIM010UNV35074	5	17	85	0.2%
2L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	1	26	26	0.1%
	1119		42,851	100%

Table 2e - Proposed Fixture Description/Quantity - Creekside Elementary School

Hardin Co. Creekside Elementary - Post Installation									
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load					
24CBRK-42-UNV-L835-CD1-U	489	28	13,692	65%					
4L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	29	52	1,508	7%					
24CBRK-36-UNV-L835-CD1-U	44	28	1,232	6%					
24CBRK-47HE-UNV-L835-CD1-U	32	28	896	4%					
24CBRK-42HE-UNV-L835-CD1-U	31	28	868	4%					
2L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	21	26	546	3%					
2L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	17	26	442	2%					
INFT8/835/DIM010UNV35074	25	17	425	2%					
4L- 98335-14T8/4F/840/EXT-14w-2050 LM	4	64	256	1%					
2L- 98327-2'TLED- 9.5W-9.5T8/2F/835/EXT- 1500 LM	11	21	231	1%					
1L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	15	13	195	1%					
SLFT8/9CCT5S/DUALDIM-16	11	16	176	1%					
4L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	3	52	156	1%					
SLFT8/9CCT5S/DUALDIM-20	7	20	140	1%					
2L- 98335-14T8/4F/840/EXT-14w-2050 LM	3	32	96	0.5%					
INFT6/840/DIM010UNV35069	7	13	91	0.4%					
3L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	2	39	78	0.4%					
SLFT6/9CCT5S/DUALDIM-17	4	17	68	0.3%					
1I-36642-5.5PLH/835/HYBM/R BYPass 120-277 (600)	10	5.5	55	0.3%					
2L- 98308-9.5T5HE/2F/840/EXT-9.5W-1500lm	1	24	24	0.1%					
LCR6-15-RD-9FS-E010	1	18	18	0.1%					
	767		21,193	100%					

Table 2f – Proposed Fixture Description/Quantity – G.C. Burkhead Elementary School

HARDIN CO. G.C BURKHEAD - Post Installation									
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load					
24CBRK-42-UNV-L835-CD1-U	308	28	8,624	27%					
4L- 98314-13.5T5HE/4F/835/EXT- 13.5W-2000lm	95	60	5,700	18%					
24CZ2-45-UNV-L835-CD1-U (Cruze troff) 4602lm	121	35	4,235	13%					
2L- 98314-13.5T5HE/4F/835/EXT- 13.5W-2000lm	134	30	4,020	13%					
PRV-C60-740-D-UNV-T5-SA-COLOR	13	153	1,989	6%					
24FPSL2SCT3-HIGH	25	57	1,425	4%					
VPR-24-MU-36-9TW-A-30	28	30	840	3%					
1L- 98314-13.5T5HE/4F/835/EXT- 13.5W-2000lm	48	15	720	2%					
PRV-C25-740-D-UNV-T2-SA-COLOR	7	96	672	2%					
24CBRK-42HE-UNV-L835-CD1-U	23	28	644	2%					
24CZ2-40-UNV-L835-CD1-U (Cruze troff) 4178lm	16	30	480	2%					
FFLEDLSF 120W - 5K/4K -SLIPFITTER BZ UNV (17,000LM)	4	120	480	2%					
PRV-C60-740-D-UNV-T4-SA-COLOR	3	153	459	1%					
24CBRK-36-UNV-L835-CD1-U	15	28	420	1%					
FFLEDMSF 80W - 5K/4K - SLIPFITTER BZ UNV (10,500LM)	4	80	320	1%					
24CZ2-50-UNV-L835-CD1-U (Cruze troff) 5049lm	6	39	234	1%					
VPR-24-MU-36-9TW-A-36	6	36	216	1%					
24FPSL2SCT3-MED	4	40	160	1%					
1L- 98308-9.5T5HE/2F/835/EXT-9.5W-1500lm	13	12	156	0.5%					
2L- 98314-13.5T5HE/4F/840/EXT- 13.5W-2000lm	4	30	120	0.4%					
5.5PLS/835/BYP/2GX7/R INLINE 4 PIN (60LM)	10	5.5	55	0.2%					
2L- 98308-9.5T5HE/2F/835/EXT-9.5W-1500lm	1	24	24	0.1%					
	1028		31,993	100%					

Table 2g - Proposed Fixture Description/Quantity - Heartland Elementary School

Hardin Co. Heartland Elementary - Post Installation				
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load
24CBRK-42-UNV-L835-CD1-U	408	29	11,832	56%
24FPSL2SCT3-HIGH	40	57	2,280	11%
24CBRK-47HE-UNV-L835-CD1-U	50	31	1,550	7%
2L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	40	26	1,040	5%
9PLO/8CCTS/HYB/PF	76	9	684	3%
SLFT8HO/9CCT5S/DUALDIM-4790lm	14	42.5	595	3%
2L- 98323-22T5HO/4F/835/EXT-22W-3400lm	10	52	520	2%
24CBRK-36-UNV-L835-CD1-U	20	25	500	2%
24CBRK-42HE-UNV-L835-CD1-U	14	28	392	2%
2L- 98335-14T8/4F/835/EXT-14w-2050 LM	12	32	384	2%
2L- 98327-2'TLED- 9.5W-9.5T8/2F/835/EXT- 1500 LM	13	21	273	1%
INFT6/835/DIM010UNV - 1700lm	13	13	169	1%
INFT6/835/DIM010UNV - 2100lm	10	16	160	1%
1L- 98330-3ft. T8 Tube 10.5W -10.5T8/3F/835/EXT- 1600 LM	12	12.5	150	1%
Spec 4SNLED-LD5-41SL-LW-UNV-L835 (4214LM)	4	35	140	1%
SLFT6/9CCT5S/DUALDIM-1300lm	7	13.5	95	0.4%
VPR-24-MU-36-9TW-A-30	3	30	90	0.4%
1L-35002- PLO/835/HYBM G24D-9W-35K-UNV(1,200LM)	8	9	72	0.3%
SLFT8/9CCT5S/DUALDIM-2320lm	3	20	60	0.3%
INFT6/840/DIM010UNV35069	4	13	52	0.2%
4L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	1	52	52	0.2%
24CBRK-30HE-UNV-L835-CD1-U	2	20	40	0.2%
LDRT6C-15-90-40-D010-PS-ABR8P 6" to 6-7/16" or 8-9/16"	2	16	32	0.2%
2L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	1	26	26	0.1%
	836		21,188	100%

Table 2h - Proposed Fixture Description/Quantity - Lakewood Elementary School

Hardin Co. Lakewood Elementary - Post Installation				
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load
24CBRK-42-UNV-L835-CD1-U	533	29	15,457	57%
PRV-C25-740-D-UNV-T2-SA-COLOR	22	96	2,112	8%
24FPSL2SCT3-HIGH	36	57	2,052	8%
24CBRK-47HE-UNV-L835-CD1-U	45	31	1,395	5%
PRV-C60-740-D-UNV-T4-SA-COLOR	8	153	1,224	4%
24CBRK-36-UNV-L835-CD1-U	40	25	1,000	4%
9PLO/8CCTS/HYB/PF	88	9	792	3%
PRV-C25-740-D-UNV-T5-SA-COLOR	8	96	768	3%
2L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	20	26	520	2%
4L- 98335-14T8/4F/835/EXT-14w-2050 LM	8	64	512	2%
FFLEDLSF 120W - 5K/4K -SLIPFITTER BZ UNV (17,000LM)	4	120	480	2%
24CBRK-42HE-UNV-L835-CD1-U	16	28	448	2%
2L- 98327-2'TLED- 9.5W-9.5T8/2F/835/EXT- 1500 LM	8	21	168	1%
VPR-24-MU-36-9TW-A-36	4	36	144	1%
5.5PLSV/840/HYB/GX23 2PIN VERTICAL (620LM)	10	5.5	55	0.2%
2L- 98335-14T8/4F/835/EXT-14w-2050 LM	1	32	32	0.1%
VPR-24-MU-36-9TW-A-30	1	30	30	0.1%
WPTLED12N/D10/PC2 120-277V (1,374lm)	2	14	28	0.1%
	909		27,230	100%

Table 2i - Proposed Fixture Description/Quantity - New Highland Elementary School

Hardin Co. New Highland Elementary - Post Installation				
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load
24CBRK-42-UNV-L835-CD1-U	345	29	10,005	61%
24CBRK-42-UNV-L835-CD1-U-CBRK-EBPLED14W-NS	42	42	1,764	11%
2L- 98335-14T8/4F/840/EXT-14w-2050 LM	33	32	1,056	6%
24CBRK-47HE-UNV-L835-CD1-U	24	31	744	5%
4L- 98323-22T5HO/4F/835/EXT-22W-3400lm	7	104	728	4%
24CBRK-36-UNV-L835-CD1-U	19	25	475	3%
3L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	12	39	468	3%
2L- 98335-14T8/4F/835/EXT-14w-2050 LM	13	32	416	3%
2L- 98314-13.5T5HE/4F/835/EXT- 13.5W-2000lm	10	30	300	2%
24CBRK-47HE-UNV-L835-CD1-U-CBRK-EBPLED14W-NS	4	44	176	1%
9A19DIM/940/R	8	9	72	0.4%
RING-4-35-MED-UNV-DB-RED-AC-CENT-SD-NA-NA-CAN-BLK-SJ-	1	70	70	0.4%
2L- 98323-22T5HO/4F/835/EXT-22W-3400lm	1	52	52	0.3%
2L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	2	26	52	0.3%
INFT8/835/DIM010UNV-2080lm	3	17	51	0.3%
2L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	1	26	26	0.2%
22CBRK-31-UNV-L835-CD1-U	1	22	22	0.1%
	543	_	16,477	100%

Table 2j – Proposed Fixture Description/Quantity – North Park Elementary School

HARDIN CO. NORTH PARK ELEMENTARY - Post Installation				
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load
24CBRK-42-UNV-L835-CD1-U	630	29	18,270	60%
OHB-24SE-W-UNV-L850-CD-WLS4-U	20	148	2,960	10%
22CZ2-39-UNV-L835-CD1-U (Cruze troff) 3900lm	55	39	2,145	7%
24CBRK-47HE-UNV-L835-CD1-U	62	31	1,922	6%
22CBRK-31-UNV-L835-CD1-U	53	22	1,166	4%
PRV-C60-740-D-UNV-T4-SA-COLOR	7	153	1,071	4%
24CBRK-36-UNV-L835-CD1-U	21	25	525	2%
2L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	17	26	442	1%
2L- 98335-14T8/4F/840/EXT-14w-2050 LM	13	32	416	1%
4L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	7	52	364	1%
24CBRK-42HE-UNV-L835-CD1-U	12	28	336	1%
4L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	2	52	104	0.3%
VXLED26DG (ceiling mount) 2k lm	4	26	104	0.3%
INFT8/840/DIM010UNV-2080lm	6	17	102	0.3%
Wrap-4NWS3C3-UNV -35k-MEDIUM	3	33	99	0.3%
BR LAMP -8BR30DIM/840-710LM-8W	11	8	88	0.3%
VPR-24-MU-36-9TW-A-30	2	30	60	0.2%
2L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	2	26	52	0.2%
LCCONTROL20/D10-PANEL CONTACTOR	4	10	40	0.1%
2L-98338-14.5T8U6/840/EXT	1	34	34	0.1%
9A19DIM/935/R	3	9	27	0.1%
FFLEDXSSF 9W - 5K/4K -SLIPFITTER BZ UNV (1300LM)	3	9	27	0.1%
2L- 98327-2'TLED- 9.5W-9.5T8/2F/835/EXT- 1500 LM	1	21	21	0.1%
LDRT6C-15-90-40-D010-PS-ABR8P 6" to 6-7/16" or 8-9/16"	1	16	16	0.1%
	941		30,401	100%

Table 2k – Proposed Fixture Description/Quantity – Radcliff Elementary School

HARDIN CO. RADCLIFF ELEMENTA		Post Installa	tion	
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load
24CBRK-42HE-UNV-L835-SD1-U STEP DIM	260	31	8,060	24%
OHB-24SE-W-UNV-L850-CD-WLS4-U	30	148	4,440	13%
24CBRK-42-UNV-L835-CD1-U	101	29	2,929	9%
22CZ2-44-UNV-L835-CD1-U (Cruze troff) 4400lm	58	44	2,552	8%
PRV-C60-740-D-UNV-T4-SA-COLOR	12	153	1,836	6%
24CBRK-47HE-UNV-L835-CD1-U	52	31	1,612	5%
24FPSL2SCT3-HIGH	21	57	1,197	4%
FFLEDLSF 120W - 5K/4K -SLIPFITTER BZ UNV (17,000LM)	9	120	1,080	3%
24CBRK-36-UNV-L835-CD1-U	41	25	1,025	3%
24CZ2-50-UNV-L835-SD1-U (Cruze troff) 5049lm-STEP DIM	26	39	1,014	3%
2L- 98314-13.5T5HE/4F/835/EXT- 13.5W-2000lm	32	30	960	3%
2L- 98314-13.5T5HE/4F/840/EXT- 13.5W-2000lm	29	30	870	3%
2L- 98323-22T5HO/4F/835/EXT-22W-3400lm	15	52	780	2%
24CZ2-45-UNV-L835-CD1-U (Cruze troff) 4602lm	20	35	700	2%
PRV-C25-740-D-UNV-T2-SA-COLOR	7	96	672	2%
PRV-C60-740-D-UNV-T5-SA-COLOR	4	153	612	2%
2L- 98323-22T5HO/4F/840/EXT-22W-3400lm	11	52	572	2%
24CBRK-42HE-UNV-L835-CD1-U	12	28	336	1%
24CZ2-40-UNV-L835-CD1-U (Cruze troff) 4178lm	11	30	330	1%
9PLO/8CCTS/HYB/PF	34	9	306	1%
98257-PL V G24q/G24d 16.5W-BYPass 120-277V-16.5PLV/835/B	14	16.5	231	1%
24CZ2-45-UNV-L835-SD1-U (Cruze troff) 4602lm-STEP DIM	5	35	175	1%
24FPSL2SCT3-MED	4	40	160	0.5%
INT4-48L-55-4K7-MF-UNV-K-CR-**-GTT-SFJ-25N 4' LINEAR FLO	3	48	144	0.4%
24CZ2-35-UNV-L835-CD1-U (Cruze troff) 3633lm	3	27	81	0.2%
CDLED6W40W50D935K	2	40	80	0.2%
3L- 98314-13.5T5HE/4F/840/EXT- 13.5W-2000lm	1	45	45	0.1%
5.5PLH/835/HYBM/R	5	5.5	28	0.1%
2L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	1	26	26	0.1%
LCR6-21-RD-9FS-E010	1	23	23	0.1%
15.5PLH/835/BYP/R	4	5.5	22	0.1%
	830		32,925	100%

Table 2I - Proposed Fixture Description/Quantity - Rineyville Elementary School

HARDIN CO. RINEYVILLE ELEMENTARY - Post Installation										
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load						
24CBRK-42-UNV-L835-CD1-U	656	29	19,024	63%						
24FPSL2SCT3-HIGH	34	57	1,938	6%						
24CBRK-36-UNV-L835-CD1-U	71	25	1,775	6%						
WPX3 CCT 65W BZ -UNV SELECTABLE PC	14	65	910	3%						
PRV-C25-740-D-UNV-T3-SA-COLOR	9	96	864	3%						
2L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	30	26	780	3%						
24HID/840/277V/EX39/SD	26	24	624	2%						
PRV-C60-740-D-UNV-T4-SA-COLOR	4	153	612	2%						
4L- 98335-14T8/4F/840/EXT-14w-2050 LM	9	64	576	2%						
SLFT8/9CCT5S/DUALDIM-2320lm	24	20	480	2%						
4L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	8	52	416	1%						
FFLEDLSF 120W - 5K/4K -SLIPFITTER BZ UNV (17,000LM)	3	120	360	1%						
2L- 98327-2'TLED- 9.5W-9.5T8/2F/835/EXT- 1500 LM	16	21	336	1%						
PRV-C60-740-D-UNV-T5-SA-COLOR	2	153	306	1%						
2L- 98335-14T8/4F/835/EXT-14w-2050 LM	8	32	256	1%						
9PLO/8CCTS/HYB/PF	18	9	162	1%						
INFT8/835/DIM010UNV-1560lm	13	12	156	1%						
INFT8/835/DIM010UNV-2080lm	9	17	153	1%						
2L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	5	26	130	0.4%						
9PLO/840/HYBM 1200lm	14	9	126	0.4%						
24FPSL2SCT3-MED	3	40	120	0.4%						
1L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	6	13	78	0.3%						
3L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	2	39	78	0.3%						
LCR6-15-RD-9FS-E010	3	18	54	0.2%						
4L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	1	52	52	0.2%						
2L- 98308-9.5T5HE/2F/835/EXT-9.5W-1500lm	1	24	24	0.1%						
SLFT8/9CCT5S/DUALDIM-1600lm	1	16	16	0.1%						
	1100		30,420	100%						

Table 2m - Proposed Fixture Description/Quantity - Vine Grove Elementary School

HARDIN CO. VINEGROVE ELEMENTARY - Post Installation											
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load							
24CBRK-42-UNV-L835-CD1-U	310	29	8,990	55%							
24CZ2-45-UNV-L835-CD1-U (Cruze troff) 4602lm	45	35	1,575	10%							
24FPSL2SCT3-HIGH	23	57	1,311	8%							
24CBRK-47HE-UNV-L835-CD1-U	33	31	1,023	6%							
24CBRK-36-UNV-L835-CD1-U	31	25	775	5%							
24CBRK-42HE-UNV-L835-CD1-U	24	28	672	4%							
2L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	20	26	520	3%							
WPX3 CCT 65W BZ -UNV SELECTABLE PC	8	65	520	3%							
9PLO/840/HYB/PF - 26w eqv	42	9	378	2%							
2L- 98335-14T8/4F/835/EXT-14w-2050 LM	6	32	192	1%							
24FPSL2SCT3-MED	4	40	160	1%							
24CBRK-47HE-UNV-L835-CD1-U-EBPLED14W-NS	4	31	124	1%							
SLFT8/9CCT5S/DUALDIM-2320lm	3	20	60	0.4%							
SLFT6/9CCT5S/DUALDIM-1300lm	3	13.5	41	0.2%							
3L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	1	39	39	0.2%							
SLFT6/9CCT5S/DUALDIM-2030lm	2	17	34	0.2%							
INFT8/835/DIM010UNV-1560lm	2	12	24	0.1%							
H12F-LD4-15W-40-OPL-COLOR-EDC1 FLUSH MOUNT	1	15	15	0.1%							
	611		16,453	100%							

Table 2n - Proposed Fixture Description/Quantity - Bus Garage

HARDIN CO. CENTRAL BUS GARAGE - Post Installation										
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load						
PRV-C60-740-D-UNV-T4-SA-COLOR	7	153	1,071	31%						
PRV-C60-740-D-UNV-T5-SA-COLOR	4	153	612	18%						
24CBRK-47HE-UNV-L835-CD1-U	13	31	403	12%						
WPX3 CCT 65W BZ -UNV SELECTABLE PC	5	65	325	10%						
WPX3 CCT /E 65W BZ -UNV SELECTABLE PC BATTERY	5	65	325	10%						
WPX2 CCT /E 40W BZ -UNV SELECTABLE PC BATTERY	6	40	240	7%						
24CBRK-47HE-UNV-L835-CD1-U-EBPLED14W-NS	5	31	155	5%						
24CBRK-36-UNV-L835-CD1-U-EBPLED14W-NS	4	25	100	3%						
2L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	2	26	52	2%						
LCCONTROL20/D10-PANEL CONTACTOR	5	10	50	1%						
24CBRK-36-UNV-L835-CD1-U	4	8	32	1%						
WPTLED12N/D10/PC2 120-277V (1,374lm)	2	14	28	1%						
LCGATEWAY/4G/VZ	2	10	20	1%						
	64		3,413	100%						

Table 20 - Proposed Fixture Description/Quantity - Central Office

HARDIN CO. CENTRAL OFFICE - Post Installation											
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load							
24CBRK-36-UNV-L835-CD1-U	213	25	5,325	45%							
24CZ2-35-UNV-GL-L835-CD1-U (Cruze troff) 3633lm	96	27	2,592	22%							
24CBRK-42-UNV-L835-CD1-U	25	29	725	6%							
24CBRK-42HE-UNV-L835-CD1-U	20	28	560	5%							
24CBRK-36-UNV-L835-CD1-U-EBPLED14W-NS	21	25	525	4%							
SLFT6/9CCT5S/DUALDIM-1300lm	26	13.5	351	3%							
24CZ2-45-UNV-GL-L835-CD1-U (Cruze troff) 4602lm	9	35	315	3%							
SLFT6/9CCT5S/DUALDIM-970lm	22	10	220	2%							
24CZ2-45-UNV-GL-EL14W-L835-CD1-U (Cruze troff) 4602lm	6	35	210	2%							
2L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	8	26	208	2%							
4L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	3	52	156	1%							
14CBRK-30-UNV-L835-CD1-U	6	23	138	1%							
24CZ2-35-UNV-GL-EL14W-L835-CD1-U (Cruze troff) 3633lm	5	27	135	1%							
2L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	5	26	130	1%							
24CBRK-42HE-UNV-L835-CD1-U-EBPLED14W-NS	4	28	112	1%							
14CBRK-30-UNV-L835-CD1-U-EBPLED14W-NS	4	23	92	1%							
5.5PLS/835/HYB/GX23 2PIN VERTICAL (620LM)	9	5.5	50	0.4%							
24CBRK-42-UNV-L835-CD1-U-EBPLED14W-NS	1	29	29	0.2%							
14CZ2-29-UNV-GL-L835-CD1-U (Cruze troff) 2889lm	1	21	21	0.2%							
	484		11,894	100%							

Table 2p - Proposed Fixture Description/Quantity - IT-TV Bldg

HARDIN CO. HCEC-TV & TECH DEPARTMENT - Post Installation										
Fixture Type	Qty	Watts/Fixture	Total Load	% of Total Load						
24CBRK-36-UNV-L835-CD1-U	92	25	2,300	51%						
24CBRK-42-UNV-L835-CD1-U	37	29	1,073	24%						
4L- 98314-13.5T5HE/4F/835/EXT- 13.5W-2000lm	15	60	900	20%						
WPX2 CCT 60W BZ -UNV SELECTABLE PC	3	60	180	4%						
2L- 98314-13.5T5HE/4F/835/EXT- 13.5W-2000lm	2	30	60	1%						
SLFT8/9CCT5S/DUALDIM-1600lm	1	16	16	0.4%						
	162		4,529	100%						

Table 2.1a - Post-Installation Sample Size - John Hardin High School

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
24CBRK-42-UNV-L835-CD1-U	1077	15	15	95%	5%	Infinite	1%	15
PRV-C60-740-D-UNV-T4-SA-COLOR	52	15	12	95%	5%	Infinite	23%	12
FFLEDLSF 120W - 5K/4K -SLIPFITTER BZ UNV								
(17,000LM)	26	15	10	95%	5%	Infinite	37%	10
24CBRK-36-UNV-L835-CD1-U	101	15	13	95%	5%	Infinite	15%	15
24FPSL2SCT3-HIGH	48	15	12	95%	5%	Infinite	24%	12
24CBRK-47HE-UNV-L835-CD1-U	86	15	13	95%	5%	Infinite	18%	15
VPR-24-MU-36-9TW-A-36	71	15	13	95%	5%	Infinite	18%	13
4L- 98333-11.5T8/4F/840/EXT -11.5w-1800LM	47	15	12	95%	5%	Infinite	25%	12

Table 2.1b - Post-Installation Sample Size - North Hardin High School

~p.o							
Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
589	15	15	95%	5%	Infinite	3%	15
454	15	15	95%	5%	Infinite	3%	15
179	15	14	95%	5%	Infinite	9%	15
127	15	14	95%	5%	Infinite	12%	15
50	15	12	95%	5%	Infinite	24%	12
10	15	6	95%	5%	Infinite	61%	6
	Quantity  589 454 179 127 50	Quantity         Initial Sample Size Calc.           589         15           454         15           179         15           127         15           50         15	Quantity         Initial Sample Size Calc.         Finite Population Adjustment           589         15         15           454         15         15           179         15         14           127         15         14           50         15         12	Quantity         Initial Sample Size Calc.         Finite Population Adjustment         Confidence Level           589         15         15         95%           454         15         15         95%           179         15         14         95%           127         15         14         95%           50         15         12         95%	Quantity         Initial Sample Size Calc.         Finite Population Adjustment         Confidence Level         Precision Level           589         15         15         95%         5%           454         15         15         95%         5%           179         15         14         95%         5%           127         15         14         95%         5%           50         15         12         95%         5%	Quantity         Initial Sample Size Calc.         Finite Population Adjustment         Confidence Level         Precision Level         t-Table Number of Readings           589         15         15         95%         5% Infinite           454         15         15         95%         5% Infinite           179         15         14         95%         5% Infinite           127         15         14         95%         5% Infinite           50         15         12         95%         5% Infinite	Quantity         Initial Sample Size Calc.         Finite Population Adjustment         Confidence Level         Precision Level         t-Table Number of Readings         % of Qty Sampled           589         15         15         95%         5%         Infinite         3%           454         15         15         95%         5%         Infinite         3%           179         15         14         95%         5%         Infinite         9%           127         15         14         95%         5%         Infinite         12%           50         15         12         95%         5%         Infinite         24%

Table 2.1c - Post-Installation Sample Size - Bluegrass Middle School

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
24CBRK-42-UNV-L835-CD1-U	482	15	15	95%	5%	Infinite	3%	15
OHB-15SE-MFL-UNV-L850-CD-WLS4-U	42	15	11	95%	5%	Infinite	27%	11
24FPSL2SCT3-HIGH	33	15	10	95%	5%	Infinite	32%	10

Table 2.1d - Post-Installation Sample Size - North Middle School

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Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
24CZ2-45-UNV-L835-SD1-U (Cruze troff) 4602lm-								
STEP DIM	376	15	15	95%	5%	Infinite	4%	15
OHB-24SE-W-UNV-L850-CD-WLS4-U	42	15	11	95%	5%	Infinite	27%	11
24CZ2-45-UNV-L835-CD1-U (Cruze troff) 4602lm	134	15	14	95%	5%	Infinite	11%	15
4L- 98323-22T5HO/4F/835/EXT-22W-3400lm	28	15	10	95%	5%	Infinite	35%	10
2L- 98314-13.5T5HE/4F/835/EXT- 13.5W-2000lm	96	15	13	95%	5%	Infinite	16%	15
4L- 98314-13.5T5HE/4F/835/EXT- 13.5W-2000lm	37	15	11	95%	5%	Infinite	29%	11

Table 2.1e - Post-Installation Sample Size - Creekside Elementary School

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
24CBRK-42-UNV-L835-CD1-U	489	15	15	95%	5%	Infinite	3%	15
4L- 98333-11.5T8/4F/835/EXT -11.5w-1800LM	29	15	10	95%	5%	Infinite	35%	10

Table 2.1f – Post-Installation Sample Size – G.C. Burkhead Elementary School

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
NV-L835-CD1-U	308	15	15	95%	5%	Infinite	5%	15
.5T5HE/4F/835/EXT- 13.5W-2000lm	95	15	13	95%	5%	Infinite	16%	15
V-L835-CD1-U (Cruze troff) 4602lm	121	15	14	95%	5%	Infinite	13%	15
.5T5HE/4F/835/EXT- 13.5W-2000lm	134	15	14	95%	5%	Infinite	11%	15

Table 2.1g - Post-Installation Sample Size - Heartland Elementary School

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Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
24CBRK-42-UNV-L835-CD1-U	408	15	15	95%	5%	Infinite	4%	15
24FPSL2SCT3-HIGH	40	15	11	95%	5%	Infinite	28%	11
24CBRK-47HE-UNV-L835-CD1-U	50	15	12	95%	5%	Infinite	24%	12

Table 2.1h - Post-Installation Sample Size - Lakewood Elementary School

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
24CBRK-42-UNV-L835-CD1-U	533	15	15	95%	5%	Infinite	3%	15
PRV-C25-740-D-UNV-T2-SA-COLOR	22	15	9	95%	5%	Infinite	41%	9
24FPSL2SCT3-HIGH	36	15	11	95%	5%	Infinite	30%	11

Table 2.1i – Post-Installation Sample Size – New Highland Elementary School

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Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured	
24CBRK-42-UNV-L835-CD1-U	345	15	15	95%	5%	Infinite	4%	15	
24CBRK-42-UNV-L835-CD1-U-CBRK-EBPLED14W-NS	42	15	11	95%	5%	Infinite	27%	11	

Table 2.1j - Post-Installation Sample Size - North Park Elementary School

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
24CBRK-42-UNV-L835-CD1-U	630	15	15	95%	5%	Infinite	2%	15
OHB-24SE-W-UNV-L850-CD-WLS4-U	20	15	9	95%	5%	Infinite	43%	9
22CZ2-39-UNV-L835-CD1-U (Cruze troff) 3900lm	55	15	12	95%	5%	Infinite	22%	12

Table 2.1k - Post-Installation Sample Size - Radcliff Elementary School

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
24CBRK-42HE-UNV-L835-SD1-U STEP DIM	260	15	15	95%	5%	Infinite	6%	15
OHB-24SE-W-UNV-L850-CD-WLS4-U	30	15	10	95%	5%	Infinite	34%	10
24CBRK-42-UNV-L835-CD1-U	101	15	13	95%	5%	Infinite	15%	15
22CZ2-44-UNV-L835-CD1-U (Cruze troff) 4400lm	58	15	12	95%	5%	Infinite	21%	12
PRV-C60-740-D-UNV-T4-SA-COLOR	12	15	7	95%	5%	Infinite	56%	7
24CBRK-47HE-UNV-L835-CD1-U	52	15	12	95%	5%	Infinite	23%	12
24FPSL2SCT3-HIGH	21	15	9	95%	5%	Infinite	42%	9
FFLEDLSF 120W - 5K/4K -SLIPFITTER BZ UNV (17,000LM)	9	15	6	95%	5%	Infinite	63%	6

Table 2.1I - Post-Installation Sample Size - Rineyville Elementary School

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
24CBRK-42-UNV-L835-CD1-U	656	15	15	95%	5%	Infinite	2%	15
24FPSL2SCT3-HIGH	34	15	11	95%	5%	Infinite	31%	11
24CBRK-36-UNV-L835-CD1-U	71	15	13	95%	5%	Infinite	18%	13

Table 2.1m - Post-Installation Sample Size - Vine Grove Elementary School

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
24CBRK-42-UNV-L835-CD1-U	310	15	15	95%	5%	Infinite	5%	15
24CZ2-45-UNV-L835-CD1-U (Cruze troff) 4602lm	45	15	11	95%	5%	Infinite	25%	11
24FPSL2SCT3-HIGH	23	15	9	95%	5%	Infinite	40%	9

Table 2.1n - Post-Installation Sample Size - Bus Garage

Table 2. III - FUSI-IIIStaliatio	ni Saiii	pie Size –	bus Garay	<del>-</del>				
Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
PRV-C60-740-D-UNV-T4-SA-COLOR	7	15	5	95%	5%	Infinite	69%	5
PRV-C60-740-D-UNV-T5-SA-COLOR	4	15	3	95%	5%	Infinite	79%	3
24CBRK-47HE-UNV-L835-CD1-U	13	15	7	95%	5%	Infinite	54%	7
WPX3 CCT 65W BZ -UNV SELECTABLE PC	5	15	4	95%	5%	Infinite	75%	4

Table 2.10 - Post-Installation Sample Size - Central Office

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
24CBRK-36-UNV-L835-CD1-U	213	15	14	95%	5%	Infinite	7%	15
24CZ2-35-UNV-GL-L835-CD1-U (Cruze troff)								
3633lm	96	15	13	95%	5%	Infinite	16%	15
24CBRK-42-UNV-L835-CD1-U	25	15	10	95%	5%	Infinite	38%	10

Table 2.1p - Post-Installation Sample Size - IT-TV Bldg

Fixture Description	Quantity	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
24CBRK-36-UNV-L835-CD1-U	92	15	13	95%	5%	Infinite	17%	15
24CBRK-42-UNV-L835-CD1-U	37	15	11	95%	5%	Infinite	29%	11

Measurements based on the fixture type and quantities defined in Tables 2 will be taken at the fixture, switch or circuit. Sample size is determined by following the IPMVP sample sizing standards based on the achieving power readings at a 95% confidence and 5% precision level.

Measured Value	Precision	Confidence	Z	Assumed cv
Power, Watts	5%	95%	1.96	0.10

For each different type of fixture retrofit to be measured, before measurements begin, it must be determined whether or not the measurements will be taken at an individual fixture or a circuit but not both.

Based on the results of the measurements, the relative and absolute precision will be calculated to confirm that the desired confidence and precision target has been reached.

The following steps must be taken to calculate relative and absolute precision:

- 1. The total of the readings must be summed together for a total value.
- 2. The total value will be divided by the number of readings to calculate the mean value.
- 3. For each reading the difference between the reading and the mean must be calculated.
- 4. Each mean/reading difference must then be squared.
- 5. The squares must be totaled.
- 6. Variance, S2, can then be calculated.
  - a. S2 = sum of squares/ (number of readings 1)
- 7. Standard Deviation is the square root of Variance S2.
- 8. Cv = Standard Deviation / average measured value
- 9. Refer to Table 2.3 t distribution table @ 95% confidence from Pg.90 IPMVP shown in Table 3.
  - Based on number of sample measurements select t-value that corresponds to number of measurements minus 1.
- 10. Absolute precision = standard error x T-value
- 11. Relative precision = absolute precision / mean value

Table 3 - T-Distribution Table IPMVP

T-Table IPMVP Number Readings	95%
2	4.30
3	3.18
4	2.78
5	2.57
6	2.45
7	2.36
8	2.31
9	2.26
10	2.23
11	2.20
12	2.18
13	2.16
14	2.14
15	2.13
16	2.12
17	2.11
18	2.10
19	2.09
21	2.08
23	2.07
25	2.06
27	2.05
31	2.04
35	2.03
41	2.02
49	2.01
60	2.00
120	1.98
Infinity	1.96

The result will be a calculated mean value for each set of measurements and the relative precision %. The calculated mean value will be compared to the projected watts per fixture in Table 2. The mean value should be equal to or less than the project value along with the relative precision being 5% or less. If the relative precision is less than 5%, more measurements will need to be taken for that fixture type.

# 4.0 Computation of Savings:

The following describes the methodology for computing Actual Energy Use Savings based on validated wattage and presents guaranteed Energy Use Savings.

### a) Computation and Presentation of Energy Use Savings:

Once the true pre- and post-retrofit, per fixture wattage have been established and documented in the appropriate Tables of this Exhibit, the values will be inserted into the appropriate columns of the detailed audit/scope of work spreadsheets. These actual values will supersede the estimated values currently represented in the spreadsheet. Hence, the resulting spreadsheets will represent the "as-built" conditions. Qualified Provider reserves the right to adjust the pre-retrofit measured values based on observed lamp outages when taking readings.

If the actual wattages differ from the previous estimates by less than or equal to 10%, it is considered to be within an acceptable tolerance based on Qualified Provider's conservative safety factors for this energy conservation measure, and therefore satisfies the Energy Savings Guarantee for all units of energy savings predicted by Qualified Provider's calculation methods.

If the actual wattages differ by more than 10%, the pre- and post-retrofit tables will be adjusted to reflect the actual wattages of the fixtures and all units of energy savings will be adjusted accordingly.

### b) Presentation of Savings:

The energy conservation measure described herein will result in the following effect on energy usage:

Total Annual Guaranteed kWh Energy Use Savings: 1,578,788 kWh Total Annual Guaranteed kW Demand Savings: 7,365 kW

# EXHIBIT E.4 Guarantee Installation of New Photovoltaic Solar Arrays – Multiple Facilities

### 1.0 Agreed Upon Parameters:

The following are mutually agreed upon parameters that form the basis of this Energy Savings Guarantee.

### a) Applicability:

This Energy Savings Guarantee applies to the energy conservation measure involving the generation of electricity by photovoltaic solar modules. This electricity will supplement the electrical load of of each respective site.

### b) Solar Model:

For the purposes of this agreement, the annual hours of the arrays' exposure to sunlight is dependent on the results calculated by industry-accepted computer modeling software. The number of solar hours calculated is largely dependent on the solar site variable inputs summarized in Table 1a. Owner and Qualified Provider collaboratively agreed upon these assumptions and results throughout the process.

Table 1a

Site	Location Used*	System Capacity (kW DC)	Tilt	Azimuth	System Losses
John Hardin HS	Elizabethtown, KY	167.325	20°	135° / 225°	14.51%
North MS	Radcliff, KY	43.650	10°	225°	14.51%
Creekside ES	Sonora, KY	44.620	10°	150°	14.51%
GC Burkhead ES	Elizabethtown, KY	43.650	15°	198°	14.51%
Heartland ES	Elizabethtown, KY	43.650	15°	200°	14.51%
Lakewood ES	Stephensburg, KY	44.620	10°	120°	14.51%
Lincoln Trail ES	Elizabethtown, KY	43.650	10°	170°	14.51%
New Highland ES	Elizabethtown, KY	44.620	15°	190°	14.51%
Rineyville ES	Rineyville, KY	44.620	15°	180°	14.51%
Vine Grove ES	Vine Grove, KY	43.650	15°	190°	14.51%
Woodland ES	Radcliff, KY	43.650	10°	150°	14.51%
Bus Garage	Elizabethtown, KY	16.005	15°	180°	14.51%

### Notes:

\*Computer modeling software uses data from the National Renewable Energy Laboratory's (NREL) National Solar Radiation Database (NSRDB) to predict sun hours per precise location

### Table 1b

Loss Parameter	Loss % Contribution
Soiling	2.0%
Shading***	3.0%
Snow	0.0%
MismatchT	2.0%
WiringT	2.0%
ConnectionsT	0.5%
Light-Induced Degradation	2.0%
Nameplate RatingT	1.0%
Age	0.0%
Availability	3.0%

### Notes:

System Losses are expected losses to occur and are considered in the design and savings calculations for the system. The total % Losses is derived from individual parameters in Table 1b. These parameters are conservative suggestions made by NREL's modeling software.

### c) New Equipment:

Hanwha Q CELLS (solar module manufacturer) has certified the following rated nominal values associated with the model of module in Table 2.

Table 2

Parameter	Value
Module Type	Q.PEAK DUO XL-10.3/BFD
Voc, V	45.33
Isc, A	11.12
Pm, W	480
Vmp, V	53.39
Imp, A	10.59
Panel Eff.	20.7%
Temp. Coeff. (Pmax)	-0.34%
Temp. Coeff. (Voc)	-0.27%
Temp. Coeff. (Isc)	0.04%
Module Degradation (Year 1), %/yr	2.00%
Module Degradation (Years 2-20), %/yr	0.45%

#### Notes

Because of the fluid and quickly evolving nature of the solar pv module industry, it cannot be said for certain that this particular model of module can be obtained when the time comes to install. If it is unavailable or unattainable, Qualified Provider will use a model of module with equivalent or better metrics. If the design is changed because of this, Qualified Provider will install as many pv

<sup>\*\*\*</sup>Estimated using uniquely generated shading profile and local nominal insolation data

<sup>&</sup>lt;sup>T</sup> Parameters that will be considered when testing modules to fulfill gurantee.

modules as it takes to reach the agreed upon kW DC size per site and guaranteed energy savings listed herein. Qualified Provider sizes a solar system based on kW DC power output, not number of modules.

These values form the basis of the original certified performance characteristics of the modules per the manufacturer, otherwise referred to as the nominal dataset. These values were documented by the manufacturer under Standard Testing Conditions (STC) which are defined as standard optimal conditions: 1,000 W/m², 25°C cell temperature, and a solar spectrum air mass of 1.5. The values in Table 2 are mutually agreed to by Owner and Qualified Provider for the purposes of this Agreement.

To obtain a statistically appropriate sample size that is representative of the population of solar modules being installed, the methodology defined in the IPMVP 2012 Volume 1 Section B.3 (also used and referenced in the sub-exhibits detailing lighting savings in this contract document) was used.

The sample criterion was based on 95% confidence and 5% precision. Based on 95% confidence and 5% precision and with an initial coefficient of variation to be 0.1, the initial sample size is calculated to be 16.

$$n_0 = \frac{z^2 * cv^2}{e^2}$$

Where:

 $n_0=$  the initial estimate of the required sampling size, before sampling begins z= the standard normal distribution value from the t-Table, with an infinite number of readings, and for the desired confidence level (95% = 1.96)

e = the desired level of precision

cv = the coefficient of variance, which is defined by the standard deviation of the readings divided by the mean. Until the mean and standard deviation of the population can be estimated from actual samples, 0.1 will be used as an initial estimate for the cv.

$$n_0 = \frac{1.96^2 * 0.1^2}{0.05^2} = 16$$

Small sample population test - since the actual module count (population) for the type being sampled is not less than 160 (16  $\times$  10), then the "Finite Population Adjustment" will not be performed.

Finalized Sample Size – The initial sample size  $(n_0)$  is determined by using an assumed cv, so the actual cv must be calculated in order to find out the exact number of samples needed. If the actual cv turns out to be less than the initial cv (0.1), then the required sample size will be unnecessarily large to meet the precision goals. Conversely, if the actual cv turns out to be larger than the initial assumed cv, then the sample size would, theoretically, increase beyond the initial computed sample size.

When sampling, the mean and the standard deviation should be computed with each reading, and, in turn, the cv and the required sample size should be recalculated with each sample reading. The re-computation may allow for an early curtailment of the sampling process. However, due to cost constraints in the M&V process, the maximum allowable sampling will be the initial sampling estimate before any readings are conducted (this is a conservative approach).

Table 3 lists the number of modules from selected facilities that will be tested to meet the statistally representative sample. Owner is encouraged to be present for module testing and engaged in module selection procedures. The modules selected for testing will be considered representative for all modules installed across the respective sites.

Table 3

Module Samples								
Site	# Modules	Initial Sample Size Calc.	Finite Population Adjustment	Confidence Level	Precision Level	t-Table Number of Readings	% of Qty Sampled	Initial Estimate of Qty to be Measured
John Hardin HS	345	15	15	95%	5%	Infinite	4%	15
North MS	90	15	13	95%	5%	Infinite	17%	15
Creekside ES	92	15	13	95%	5%	Infinite	17%	15
GC Burkhead ES	90	15	13	95%	5%	Infinite	17%	15
Heartland ES	90	15	13	95%	5%	Infinite	17%	15
Lakewood ES	92	15	13	95%	5%	Infinite	17%	15
Lincoln Trail ES	90	15	13	95%	5%	Infinite	17%	15
New Highland ES	92	15	13	95%	5%	Infinite	17%	15
Rineyville ES	92	15	13	95%	5%	Infinite	17%	15
Vine Grove ES	90	15	13	95%	5%	Infinite	17%	15
Woodland ES	90	15	13	95%	5%	Infinite	17%	15
Bus Garage	33	15	10	95%	5%	Infinite	32%	10

If, in the event that Qualified Provider must use another solar pv module (other than what is specified in Table 2) because of supply chain constraints, and the number of modules changes per site, Qualified Provider will re-run these population size calculations presented here with the new site data and the lesser Quantity of Initial Estimate of Qunatity to be Measured will be used.

# 2.0 Pre-Installation Consumption Data:

The pre-installation consumption data was established utilizing the following methodology agreed to by Owner and Qualified Provider.

### a) <u>Measurement Methodology</u>:

A representative annual average of electric energy consumption for all sites was collected and analyzed to determine a load factor for the facility and develop daily building load profiles. These building load profiles were used to predict the number of produced kilowatt-hours that would be unused by the facility, and sent to the utility grid. Based on this data, the optimal electric energy production of the new photovoltaic array was derived and forms the basis of Qualified Provider's sizing methodology. It is collaboratively agreed upon by both the Qualified Provider and Owner that this information used to size the array, displayed in Table 4, is accurate and representative of the true electrical usage of each applicable site.

Table 4

Site	Facility kWh Usage (Base)	Facility Billed kW (Base)	Facility kWh Usage (after other ECMs)*	Facility Billed kW (after other ECMs)*
John Hardin HS	2,319,552	8,210	2,006,335	6,829
North MS	806,850	4,344	719,101	3,879
Creekside ES	570,000	3,120	464,655	2,583
GC Burkhead ES	734,850	3,511	610,886	3,012
Heartland ES	676,200	3,395	603,715	3,026
Lakewood ES	792,750	5,118	543,161	2,785
Lincoln Trail ES	520,920	2,757	No Other ECM Savings	
New Highland ES	506,304	2,772	431,962	2,439
Rineyville ES	592,000	3,458	474,561	2,907
Vine Grove ES	521,700	2,467	454,467	2,127
Woodland ES	581,700	3,123	No Other ECM Savings	
Bus Garage	136,295	582	118,783	542

#### Notes:

### 3.0 Post-Installation Measurements:

The following describes the agreed to methodology for proving the solar modules produce the agreed upon amount of electricity.

### a) Measurement Methodology:

Qualified Provider will commission the solar array installed to meet all engineered requirements and to prove that the system produces the amount of energy it is designed to generate. To commission the solar array system, Qualified Provider will follow industry standards outlined by the International Electrotechnical Commission (IEC) and will meet all requirements set forth by Kentucky Utilities (KU) and Nolin RECC (electric utility providers).

To guarantee energy savings, Qualified Provider will use the appropriate instrumentation to record the necessary data to create I-V curves per module tested. Prior to testing, the modules will be properly cleaned. These datasets and curves will then be adjusted for standard testing conditions (STC) using IEC 60891 Correction Procedure 1 and then compared to the nominal datasets and curves provided by the manufacturer. Specifically, if the Adjusted Actual Maximum Power Output for any tested module is less than 90% of the Nominal Maximum Power Output for that module after conservative safety factors and expected losses have been applied, then further investigations will ensue and actions will be taken to correct to achieve the total Nominal Maximum Power Output after conservative safety factors and expected losses have been applied at the minimum. This procedure will take place upon installation of the system, Year 0. After approximately one year of operation, if energy production data is complete and not missing significant portions due to transmission signal interruptions and it is greater than or equal to guaranteed energy production amounts per facility, then no other procedures shall take place. If insufficient data exists or recorded energy production for Year 1 is less than the

<sup>\*</sup>Anticipated profile after applying other guaranteed savings from this Agreement associated with each respective facility.

guaranteed energy production amounts, then Qualified Provider will move forward with the same tests performed in Year 0. Qualified Provider also reserves the right to claim excess energy savings from other energy conservation measures included in this Guaranteed Energy Savings Contract and apply them here in instances of improbable shortfalls. Again, if the Adjusted Actual Maximum Power Output for any tested module is less than 90% of the Nominal Maximum Power Output for that module after conservative safety factors and expected losses have been applied, then further investigations will ensue and actions will be taken to correct to achieve the total Nominal Maximum Power Output after conservative safety factors and expected losses have been applied at the minimum.

### 4.0 Computation and Presentation of Savings:

The following describes the agreed to methodology for computing Energy Savings based on installation of the new equipment at Hardin County Schools.

### a) Computation of Energy Savings:

Energy savings attributed to this ECM include produced kilowatt-hours (kWh) of electricity and partially reduced facility electrical demand in the form of kilowatts (kW). Energy production was modeled and calculated by PVWatts after the agreed upon parameters were entered for the respective arrays. PVWatts is an open-source computer solar modeling software application provided by the National Renewable Energy Laboratory (NREL), a partner of the United States Department of Energy (DOE) and the United States' primary laboratory for renewable energy and energy efficiency research and development. All demand reduction savings, if applicable, were conservatively calculated using NREL's researched method for calculating solar demand savings on commercial buildings. This method uses data from several different climate zones and and several years' worth of historical wether data. Qualified Provider used the most conservative results from this method and validated the results with real-world Kentucky solar system performance.

Qualified Provider will guarantee energy produced by the new photovoltaic solar system by verifying that the Adjusted Actual Maximum Power Output is within an acceptable tolerance based on Qualified Provider's conservative safety factors for this energy conservation measure. This will require the Qualified Provider to conduct testing upon installation of the solar system and will require either complete datasets of actual energy production via production monitoring to be compared to guaranteed values or a physical visit to the the solar array site approximately one year after installation is complete to conduct testing. This will constitute as the first year of the Guarantee period to conduct the proper testing to produce measured module datasets and I-V curves. It is understood that there will be no further annual testing or production data analysis after Year 1.

Module datasets and I-V curves will be generated and analyzed via industry-accepted analysis software. The software adjusts the measured data to reflect STC variables: module temperature and irradiance. The software uses the following equations, which are standard to IEC protocol, to produce adjusted datasets and I-V curves.

### IEC 60891 Correction procedure 1

$$I_2 = I_1 + I_{sc} * \left(\frac{G_2}{G_1} - 1\right) + \alpha * (T_2 - T_1)$$

$$V_2 = V_1 + \beta * (T_2 - T_1) - Rs * (I_2 - I_1) - k * I_2 * (T_2 - T_1)$$

I1, V1 are coordinates of points on the measured characteristics;

I2, V2 are coordinates of the corresponding points on the corrected characteristic;

G<sub>1</sub> is the irradiance measured with the reference device;

G2 is the irradiance at the standard or other desired irradiance;

 $T_1$  is the measured temperature of the test specimen;

T2 is the standard or other desired temperature;

Isc is the measured short-circuit current of the test specimen at G1 and T1;

 $\alpha$  and  $\beta$  are the current and voltage temperature coefficients of the test specimen in the standard or target irradiance for correction and within the temperature range of interest:

Rs is the internal series resistance of the test specimen;

k is a curve correction factor.

With the STC adjusted data sets and I-V curves, the computer software will calculate an Adjusted Maximum Power Output per tested module. Qualified Provider will further adjust the Nominal Maximum Power Output value to account for annual module degradation as well as deigned system losses. These adjustment values, outlined in Tables 1a, 1b and 2, will be applied to yield a final Nominal Maximum Power Output for Year 0 and Year 1 per module. This will be compared to the Adjusted Actual Maximum Power Output derived from actual measurements via testing.

If the final Adjusted Actual Maximum Power Output is within an acceptable tolerance for Years 0 and 1 based on Qualified Provider's conservative safety factors and anticipated system losses for this energy conservation measure, then the lifetime savings predicted by the computer solar modeling software will be accepted and, therefore, satisfies the Energy Savings Guarantee for the entire project duration. Or, if the final Adjusted Actual Maximum Power Output is within an acceptable tolerance for Year 0 and actual energy production data shows that energy produced over Year 1 was greater than or equal to the respective site guaranteed energy production values listed in Table 5b then the lifetime savings predicted by the computer solar modeling software will be accepted and, therefore, satisfies the Energy Savings Guarantee for the entire project duration. Expected Guaranteed Nominal Maximum Power Output per Module values per Year 0 and Year 1 are outlined in Table 5a.

Table 5a

	Single Module - Guaranteed Outputs					
Year	Annual Module Degradation	Original Nominal Maximum Power Output per Module with Degradation (W)**	Designed System Losses*	Acceptable Tolerance	Guaranteed Nominal Maximum Power Output per Module (W)**	
0	0%	485.0	5.40%	10%	412.9	
1	2.0%	475.3	5.40%	10%	404.7	

#### Notes:

\*Parameters in Table 1B labeled with "T" designation were considered in calculation for designed losses because of their relevance in the testing environment. Other parameter losses occur over time, not in the testing environment.

\*\*As noted from Table 2, the pv module model listed herein (480 W rated) may not be available because of the quickly evolving and fluid nature of the pv module market. If this is the case, Qualified Provider will use Table 5 to back-calculate the appropriate values based on the pv module actually used in order to correctly compare to testing results. The values will remain proportional in relation to each other as they are here, but the values themselves will change because of a different potential model of pv module used.

Table 5b

Facility	Guaranteed kWh Production (Year 1)
John Hardin HS	193,911
North MS	47,062
Creekside ES	52,046
GC Burkhead ES	51,422
Heartland ES	51,362
Lakewood ES	49,747
Lincoln Trail ES	50,269
New Highland ES	52,744
Rineyville ES	51,684
Vine Grove ES	50,483
Woodland ES	47,586
Bus Garage	18,946

# b) Presentation of Savings:

The energy conservation measure described herein will result in the following guaranteed annual energy production and electric demand reduction:

Total Annual Guaranteed kWh Production (First Year): 717,261 kWh Total Annual Guaranteed kW Reduction (First Year): 408 kW

# EXHIBIT E.5 Guarantee Direct Cost Operational Avoidance Savings

### 1.0 Agreed Upon Parameters:

The following are mutually agreed upon parameters are hereby stipulated for the purposes of this Agreement as fact and will not be measured, monitored or adjusted.

### a) Applicability:

This part of the performance guarantee applies to the stipulated Operational Savings realized by Owner as a result of direct cost avoidance.

### b) Existing Condition:

As per the tables set forth in Section 2.0, Qualified Provider and Owner based direct cost avoidance Operational Savings estimation on real district spending and estimated future spending on the affected items described. The Owner and Qualified Provider collaboratively agreed upon the expenditures and values throughout the Operational Savings estimation process.

# 2.0 <u>Operational Savings from HVAC, Controls, and Lighting Repairs and</u> Maintenance:

Information regarding pre-retrofit operational costs for lighting repairs and maintenance over two fiscal years (FY23 and FY24) were provided by Owner via their work order reporting system. These amounts were recorded without considering labor hours since Owner self-performs this repair work. The number of repair incidents will decrease drastically, reducing the amount of times staff must travel to these facilities for repairs. Some fuel costs associated with fleet mileage reduction were considered with the gathered lighting operational cost savings. By completing the lighting upgrades described in Exhibit D, the district's lighting will primarily be LED, thereby eliminating many of these repairs.

The HVAC and controls systems at Lakewood Elementary School and New Highland Elementary School are at or beyond their ASHRAE useful life expectancies of 20 years. Below is the current age of the HVAC system for each school:

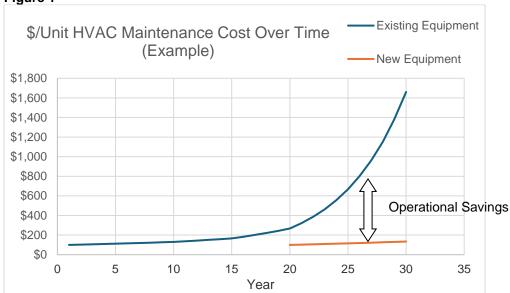
- Lakewood Elementary School –22 years old
- New Highland Elementary School 19 years old

It is projected that maintenance and repair costs may escalate significantly once this useful life has been reached. Although report records indicate that maintenance and repair spikes have not yet occurred for these facilities, it is likely that they will in the near future. The WSHP units in the aforementioned schools utilize R-22 refrigerant, which was banned in 2020 by the EPA for production. Because of increasing scarcity of R-22 due to the phase-out and dependence on reclaimed R-22, prices for the refrigerant have increased exponentially. Future equipment failures of the HVAC equipment in these schools may result in excessive maintenance cost. And although the complete HVAC systems at Lakewood Elementary and New Highland Elementary consist of many components beyond the many individual WSHP units and their controls (boilers, cooling towers, building-level controls, any ancillary equipment, etc.) the focus of this estimate was placed on the actual replacement of failing individual WSHP units.

INITIALED BY:	Owner	Trane
Exhibit E.5; Qualified Prov	vider Project No.:	7680317

The following line graph in Figure 1 illustrates the nature of these HVAC and controls repair costs over time and how operational savings are calculated.





Estimated HVAC and controls replacement cost estimates encompass all repairs and integrations associated with replacing existing water-source heat pump equipment with new units in their place. All other equipment failures associated with the HVAC systems (boiler equipment, fluid cooler equipment, hydronic pumping systems, and larger controller failures) are conservatively not accounted for.

Applicable budget expenditures identified by Owner as being eliminated as a result of the Work performed by Qualified Provider were used to calculate Operational Savings. The Operational Savings are estimated and agreed upon by Owner and Qualified Provider based on the scope of Qualified Provider's Work and the estimated resulting reduction in operational repair costs to the Owner. Qualified Provider and the Owner agree that the Work performed will reduce cost for HVAC, controls, and lighting repairs and maintenance. The fully stipulated Operational Savings detail relating to these systems are set forth in the following tables.

Table 1

Facility	Recorded Lighting Material Cost Savings	Calculated Fleet Fuel Cost Savings from Lighting Repair Incident Reductions*	Estimated HVAC/Controls Cost Savings	Total Estimated Operational Cost Savings
John Hardin HS	\$2,006	\$525	\$0	\$2,531
North Hardin HS	\$2,073	\$610	\$0	\$2,683
Bluegrass MS	\$737	\$125	\$0	\$862
North MS	\$799	\$276	\$0	\$1,075
Creekside ES	\$752	\$59	\$0	\$811
GC Burkhead ES	\$824	\$26	\$0	\$850
Heartland ES	\$1,043	\$105	\$0	\$1,148
Lakewood ES	\$2,320	\$650	\$37,651	\$40,621
New Highland ES	\$736	\$118	\$38,098	\$38,952
North Park ES	\$830	\$72	\$0	\$902
Radcliff ES	\$628	\$118	\$0	\$746
Rineyville ES	\$827	\$105	\$0	\$932
Vine Grove ES	\$1,047	\$1,172	\$0	\$2,220
Bus Garage	\$282	\$26	\$0	\$308
Central Office	\$274	\$59	\$0	\$333
IT-TV Bldg	\$90	\$39	\$0	\$129
TOTAL OPERATIONAL SAVINGS	\$15,268	\$4,085	\$75,750	\$95,104

<sup>\*</sup>Fuel savings calculation assumed that 75% of the number of lighting repair incidents recorded were independent visits and assumed 10 miles of traveling per incident at 20 miles/gal and \$3.50/gal of gasoline.

Table 2 summarizes the estimated future cost avoidance of HVAC and controls on-going maintenance and repair costs.

Table 2

<u></u>						
Lakewood ES and New Highland ES On-Going HVAC Maint.						
Facility	# Existing WSHP Units	Estimated # of WSHP Failures per year	Cost per WSHP Replacement*	Total Cost of Replacement per Year		
Lakewood ES	47	2	\$18,826	\$37,651		
New Highland ES	45	2	\$19,049	\$38,098		
ТО	\$75.750					

<sup>\*</sup>Cost per WSHP Replacement calculated using real industry pricing for replacing both above-ceiling WSHP units and mezzanine-located WSHP units; values differ per location because there is a different mix of these units for each facility (Lakewood is primarily comprised of mezzanine-located WSHP units while New Highland is primarily comprised of above-ceiling WSHP units).

It is concluded that these operational cost savings are fully agreed to by Owner.

## EXHIBIT E.6 Guarantee – Capital Cost Avoidance

# 1.0 Agreed Upon Parameters:

The following are mutually agreed upon parameters are hereby stipulated for the purposes of this Agreement as fact and will not be measured, monitored or adjusted.

### a) Applicability:

This part of the performance guarantee applies to the mutually agreed to Capital Cost Avoidance realized by Owner under guaranteed energy savings contracts, pursuant to KRS 45A.345, 45A.352, 45A.353, 157.420(5), and 157.440(1)(c).

### 2.0 Capital Cost Avoidance:

Kentucky Model Procurement Code and other statutes related to school construction allow school districts to contribute Capital Cost Avoidance as defined in KRS 45A.345(2) as a funding source for guaranteed energy savings contracts. School districts may contribute these funds if the energy conservation measures are identified on the district's approved district facility plan, per KRS 157.420(5), and 157.440(1)(c). Capital cost avoidance for the purpose of financing may come from one or more of the following sources:

- a) General fund
- b) Capital outlay allotment under KRS 157.420; and
- c) State and local funds from the Facilities Support Program of Kentucky under KRS 157.440.

For this Agreement, Capital Cost Avoidance shall come from Owner's General Fund as a source of funds for a 20-year bond issue. Other sources of funds for financing include energy and operational savings. Table 1 illustrates the annual estimated capital cost avoidance for financing. Final capital cost avoidance amounts will be determined upon closing of the bond sale.

INITIALED BY: \_\_\_\_Owner \_\_\_\_Trane Exhibit E.6; Qualified Provider Project No.: 7680317

Table 1

	<u> Fable</u>	e 1		
	Capital Cost			
Fiscal	Avoidance			
Year	(Ge	eneral Fund)		
1	\$	541,970		
2	\$	545,964		
3	\$	544,823		
4	\$	542,454		
5	\$	543,613		
6	\$	543,433		
7	\$	541,224		
8	\$	541,950		
9	\$	545,401		
10	\$	546,059		
11	\$	544,101		
12	\$	543,831		
13	\$	544,168		
14	\$	541,305		
15	\$	544,404		
16	\$	541,608		
17	\$	544,873		
18	\$	542,765		
19	\$	545,205		
20	\$	541,578		
Total	\$	10,870,730		

# EXHIBIT F Annual Reconciliation Statement

**Section 1. Guarantee Reconciliation.** Subject to Owner's obligations to furnish the data and information required hereunder and in Exhibit E, Section 12, within ninety (90) days after the final month of each Guarantee Year, Qualified Provider will determine and reconcile the verified Energy Savings (the "Verified Savings") in accordance with Exhibit E and the applicable sub-Exhibits thereto and provide a written report to Owner (the "M&V Report"). Owner shall review the M&V Report within fourteen (14) days following submittal by Qualified Provider thereof and either accept or reject such report in writing. If Owner timely rejects the M&V Report, Owner shall provide Qualified Provider with detailed reasons thereof and the parties shall negotiate in good faith to correct or reconcile any deficiencies. If a mutual agreement is reached, Qualified Provider shall submit an updated M&V Report to Owner. If the parties are unable to reach agreement, Owner may request an independent audit in accordance with Section 3 hereof. If Owner fails to reject the M&V Report within the fourteen (14) day period outlined above, Owner shall be deemed to have accepted the M&V Report.

Following issuance of the M&V Report, the following shall apply:

- a. If the Verified Savings, together with any Construction Period Savings or Excess Savings that have not been previously applied against any shortfall in Energy Savings, meet or exceed the Energy Savings Guarantee in any Guarantee Year, the Energy Savings Guarantee shall be deemed satisfied for such Guarantee Year. If the Verified Savings exceed the Energy Savings Guarantee in any Guarantee Year, Qualified Provider may apply the amount by which the Verified Savings exceed the Energy Savings Guarantee (the "Excess Savings") to subsequent or preceding Guarantee Years, as set forth in Section 1.d. below.
- b. If the Verified Savings, together with any Construction Period Savings or Excess Savings that have not been previously applied against any shortfall in Energy Savings in accordance with Section 1.d. below, are less than the Energy Savings Guarantee, Qualified Provider shall have the option to correct any issues relating to the Services or implement, with Owner's approval, additional energy saving measures and thereafter re-perform the Measurement and Verification and generate a new M&V Report. If, following Qualified Provider's corrective measures, the Verified Savings meet or exceed the Energy Savings Guarantee in the Guarantee Year, the Energy Savings Guarantee shall be deemed satisfied for such Guarantee Year and Qualified Provider may apply any Excess Savings to subsequent or preceding Guarantee Years in accordance with Section 1.d below.
- c. If the Verified Savings, together with any Construction Period Savings or Excess Savings that have not been previously applied against any shortfall in Energy Savings in accordance with Section 1.d. below, are less than the Energy Savings Guarantee and Qualified Provider has not elected or was unable to apply sufficient corrective measures, if any, or install additional energy savings measures pursuant to Section 1.b. above, then Qualified Provider will pay Owner the difference between the Verified Savings and the Energy Savings Guarantee. Upon agreement of Qualified Provider and Owner, instead of payment, Qualified Provider may provide services and/or product, equal to the value of the payment required hereunder.
- d. Excess Savings, together with any unused Construction Period Savings, may be applied by Qualified Provider retroactively or prospectively to the immediately succeeding Guarantee Year or retroactively to any shortfall previously paid by Qualified Provider for any preceding Guarantee Years, in accordance with KRS 45A.352(8). In the event Excess Savings are applied retroactively and Qualified Provider paid Owner (or implemented additional energy conservation measures) for any shortfall, Owner shall reimburse Qualified Provider for any such Excess Savings up to the amount of any shortfall previously paid by Qualified Provider in accordance with KRS 45A.352(8).

INITIALED BY:	Owner _	Trane
Exhibit F; Qualified Provide	der Project No.	: 7680317

**Section 2. Adjustments to Baseline.** Qualified Provider may, with the approval of Owner (which will not be unreasonably withheld), make adjustments to the Baseline using standard and sound engineering principles as follows:

- a. Building Utilization: The total number of building occupants is a variable that may be adjusted for if the number of occupants differs from the Baseline quantity.
- b. Building Occupancy Hours: The hours the building(s) is/are occupied and/or equipment and/or lighting is utilized is a variable which may be adjusted for if the hours (quantity or time-of-day) differs from the hours identified in this Exhibit E and its sub-Exhibits. Buildings that have Qualified Provider energy management equipment will be monitored by Qualified Provider to verify hours of equipment operation. Buildings without energy management systems will have to have equipment operation logged by Owner's building staff as specified in Section 12, Owner Responsibilities, of Exhibit E.
- c. Weather: Utility bills will be adjusted for weather.
- d. Building Changes: The Baseline may be adjusted to account for any building square footage changes, remodeling, and addition of equipment or change in usage. Owner agrees to contact Qualified Provider within seven (7) calendar days of commencement of any changes or additions of equipment or environments.
- e. Unforeseen Parameters: At Qualified Provider's discretion, the Baseline may be adjusted based on data or other information newly discovered or otherwise not readily available at the time the Baseline was prepared.
- f. Owner's Responsibilities: The Baseline may be adjusted for failures by Owner to perform its obligations under Section 12 of Exhibit E or in the event any representation or warranty made by Owner under the Agreement is false or misleading.
- g. Baseline Adjustment: Any adjustment in the baseline model of the building created as part of the engineering study appropriate to represent operation of the building if it had been designed, constructed, and/or operated in accordance with local and national codes in place as of the date of the Agreement. Such adjustments can include, but are not limited to, increased ventilation rates for code compliance and the addition of heating and/or air-conditioning to areas that previously had no environment conditioning. The adjustments included for this project on account of such issues are estimated to result in an energy increase of 0 kWh, an increase of 0 kW, and an energy increase of 0 therms.

**Section 3. Independent Audit.** Within thirty (30) days after receipt by Owner of the M&V Report, Owner may provide written notice to Qualified Provider that Owner intends to have performed an audit of the savings calculations and billings for the immediately preceding Guarantee Year. Owner and Qualified Provider shall thereupon select agreed upon experienced and qualified energy engineering auditors to complete and submit to the parties an audit of the savings calculations and billings for the immediately preceding Guarantee Year. Owner shall pay for the entire cost of the audit. The audit shall be completed within thirty (30) days of selection of the auditor. Exercise of the right to request an audit shall in no way relieve Owner of its continuing obligation to make current payments pursuant to this Agreement. Any payments between the parties necessary to resolve any agreed upon irregularities identified in the audit will be made within sixty (60) days after submission of the audit to the parties.

# EXHIBIT G Performance Period Services

Qualified Provider will furnish the Performance Period Services described in this Exhibit G upon the terms and conditions contained herein. In the event of an inconsistency or conflict between the terms and conditions of this Exhibit G and the terms and conditions of the balance of the Agreement, the terms and conditions of this Exhibit G shall control.

1. <u>Generally</u>. Performance Period Services shall include periodic measurement and verification of the Guarantee in accordance with Exhibit E and the sub-Exhibits thereto (the "M&V Services") and/or periodic maintenance of Owner's Premises, plant or equipment (the "Maintenance Services") in accordance with the provisions of this Exhibit G.

### 2. Scope of Performance Period Services

- A. M&V Services. Qualified Provider shall provide the M&V Services with respect to the ECMs installed by Qualified Provider under the Agreement in accordance with the methods and procedures outlined in Exhibit E and the sub-Exhibits thereto. The M&V Services shall include the preparation and submittal by Qualified Provider of an M&V Report in accordance with Exhibit F, Section 1.
- **B.** Maintenance Services. In addition to the M&V Services, Qualified Provider shall provide the Maintenance Services with respect to the Covered Equipment as set forth in Schedule A of Exhibit G.
- 3. Performance Period Services Price and Annual Adjustment. The Performance Period Services Price is set forth below as an annual amount that is subject to the annual adjustments provided for herein. Qualified Provider will invoice the Performance Period Services Price once each year, semi-annually, or quarterly, as it determines in its sole discretion, and each such invoice shall be due and payable in advance of performance of the Performance Period Services for the period covered by such invoice. Qualified Provider reserves the right to add to any account outstanding for more than 30 days a service charge equal to the lesser of the maximum allowable legal interest rate or 1.5% of the principal amount due at the end of each month. Qualified Provider may discontinue Performance Period Services whenever payment is overdue. Unless otherwise expressly agreed in writing, Owner shall pay, in addition to the stated Performance Period Services Price, all taxes not legally required to be paid by Qualified Provider or, alternatively, shall provide Qualified Provider with an acceptable, valid certificate of tax exemption. Owner shall pay all costs (including attorneys' fees) incurred by Qualified Provider in attempting to collect amounts due. Effective upon each annual anniversary of the Performance Period Services Commencement Date, the annual Performance Period Services Price shall be adjusted upward by the Annual Adjustment Rate; thereafter, upon each anniversary of the Performance Period Services Commencement Date, the Annual Adjustment Rate shall be applied to the annual Performance Period Services Price as previously adjusted.

M&V Services only – First-Year Annual Price	\$3,985.00
Maintenance Services (see Schedule A to Exhibit G for description of	No Cost for First
Maintenance Services) – First-Year Annual Price	Year*
Any Applicable Tax and Freight	N/A**
First-Year Annual Performance Period Services Price Total	\$3,985.00
Annual Adjustment Rate	4%

\*Owner currently has an existing agreement for Trane's Intelligent Services program, Contract # 7139863I, through June 2025 that includes Lakewood Elementary School and New Highland Elementary. If Owner decides not to renew Intelligent Services for facilities aforementioned, Qualified Provider will charge an additional \$2,485.00 per year (annual adjustment rate applies) to the Performance Period Services Price.

\*\*\$0.00 tax is contingent upon Owner furnishing evidence to Qualified Provider of valid applicable exemption from sales/use or other applicable taxes.)

INITIALED B	Y:	Owner		_Trane
Exhibit G: Qualified I	Provider	Project I	No.: 7	680317

**Term.** Qualified Provider's obligations to furnish the Performance Period Services shall commence upon the Date of Final Completion (the "Performance Period Services Commencement Date") and, unless this Agreement is terminated earlier, shall end upon expiration of the Guarantee Term set forth in Exhibit E. In the event of any extension of the construction period(s) specified in the Agreement, Qualified Provider and Owner will mutually agree which services will commence prior to the Date of Final Completion and any modification to the price therefor required in light of the circumstances existing at such time. Owner and Qualified Provider will agree to a scope and price or rate for those services and execute an amendment to this Exhibit G in respect thereof. Owner may terminate the Performance Period Services upon not less than sixty (60) days advance written notice to Qualified Provider. If Owner terminates the M&V Services prior to the expiration of the Guarantee Term, this Agreement (together with the Guarantee) shall be deemed terminated and of no further force and effect as of the expiration of the Guarantee Year immediately preceding the effective date of such termination. If the effective date of the termination of this Agreement by Owner occurs during any Guarantee Year, Owner shall pay Qualified Provider (or be entitled to a refund in the case of a prepayment) the proportionate share of the applicable Performance Period Services Price.

### **Additional Terms and Conditions**

Performance. Qualified Provider shall perform the Performance Period Services described in the schedules included with this Exhibit G with respect to the listed Covered Equipment with reasonable promptness in a workmanlike manner in accordance with industry standards generally applicable in the area. Except as otherwise expressly stated, Performance Period Services will be performed during Qualified Provider's normal business hours and any after-hours services shall be billed separately according to then prevailing overtime or emergency labor rates. Qualified Provider's duty to perform Performance Period Services is subject to Events of Force Majeure, and contingent upon the ability to procure materials from the usual sources of supply. This Agreement presupposes that all major pieces of equipment are in proper operating condition as of the date hereof. Owner shall perform required restoration at its cost prior to Qualified Provider being obligated to perform hereunder. Performance Period Services furnished hereunder are premised on the Covered Equipment being in a maintainable condition. If initial or seasonal startup is included in the Performance Period Services, or an inspection by Qualified Provider prior to commencement of the Performance Period Services indicates repairs are required in order for Performance Period Services to commence. Owner shall authorize Qualified Provider to perform such repairs at Owners expense pursuant to a quote for the repairs provided by Qualified Provider. During the Term, Qualified Provider may elect to install/attach to Owner equipment (including Covered Equipment) or provide portable devices (hardware and/or software) for execution of control or diagnostic procedures. Such devices shall remain the personal proprietary property of Qualified Provider and shall in no event become a fixture of Owner locations. Owner shall not acquire any interest, title or equity in any hardware, software, processes, and other intellectual or proprietary rights to devices used in connection with providing service on Covered Equipment. Qualified Provider reserves the right to remove such items at its discretion.

### Owner Obligations. Throughout the Guarantee Term, Owner shall:

- a. Provide Qualified Provider reasonable and safe access to all Covered Equipment;
- b. Follow manufacturer recommendations concerning teardown and internal inspection, major overhaul, restoration, or refurbishing of the Equipment; unless expressly stated in the Scope of Services statement, Qualified Provider is not performing any manufacturer recommended teardown and internal inspection, major overhaul, restoration, or refurbishing of the equipment; Qualified Provider shall not be responsible to perform any subsequent repairs to the Equipment necessitated by Owner's failure to follow such manufacturer recommendations;
- c. Reimburse Qualified Provider for services, repairs, and/or replacements performed by Qualified Provider beyond the scope of Performance Period Services or otherwise excluded hereunder. Such reimbursement shall be at the then prevailing overtime/holiday rates for labor and prices for materials and may at Qualified Provider's option be subject to a separate written agreement prior to its undertaking such work;
- d. Promptly notify Qualified Provider of any unusual performance of Covered Equipment;

- e. Permit only Qualified Provider personnel to repair or adjust Covered Equipment and/or controls during the Term;
- f. Utilize qualified personnel to properly operate the Covered Equipment in accordance with the applicable operating manuals and recommended procedures; and
- g. Unless water treatment is expressly included in the Performance Period Services, provide professional cooling tower water treatment in accordance with any reasonable recommendations provided by Qualified Provider.

**Exclusions.** Unless expressly included in "Scope of Services" or "Equipment Coverage," the services to be provided by Qualified Provider do not include, and Qualified Provider shall not be liable for, any of the following:

- Any guarantee of room conditions or system performance, except as expressly stated in Exhibit E to the Agreement;
- b. Inspection, maintenance, repair, replacement of or services for: chilled water and condenser water pumps and piping; electrical disconnect switches or circuit breakers; motor starting equipment (that is not factory mounted) and interconnecting power wiring; recording or portable instruments, gauges or thermometers; non-moving parts or non-maintainable parts of the system, including, but not limited to, storage tanks; pressure vessels; shells, coils, tubes, housings, castings, casings, drain pans, panels, ductwork; piping: hydraulic, hydronic, pneumatic, gas, or refrigerant; insulation; pipe covering; refractory material; fuses; unit cabinets; electrical wiring; ductwork or conduit; electrical distribution system; hydronic; structural supports; and similar items; the appearance of decorative casing or cabinets; damage sustained by other equipment or systems; and/or any failure, misadjustment or design deficiencies in other equipment or systems;
- c. Repairs or replacement of parts made necessary as a result of electrical power failure, low voltage, burned out main or branch fuses, low water pressure, vandalism, misuse or abuse, improper operation, unauthorized alteration of Equipment, accident, negligence of Owner or others, damage due to freezing weather, calamity or malicious act;
- d. Any damage or malfunction resulting from vibration, electrolytic action, freezing, contamination, corrosion, erosion, or caused by scale or sludge on internal tubes except where water treatment protection services are provided by Qualified Provider as part of this Agreement:
- e. Furnishing any items of equipment, material, or labor, or performing special tests recommended or required by insurance companies or federal, state, or local governments;
- f. Failure or inadequacy of any structure or foundation supporting or surrounding the Equipment or any portion thereof;
- g. Building access or alterations that might be necessary to repair or replace Owner's existing equipment:
- h. The normal function of starting and stopping the Equipment or the opening and closing of valves, dampers or regulators normally installed to protect the Equipment against damage;
- i. Valves that are not factory mounted: balance, stop, control, and other valves external to the device unless specifically included in the Agreement:
- j. Any responsibility for design or redesign of the system or the Equipment, obsolescence, safety tests, or removal or reinstallation of valve bodies and dampers;
- k. Any services, claims, or damages arising out of Owner's failure to comply with its obligations under this Agreement;
- I. Failure of Owner to follow manufacturer recommended guidelines concerning overhaul and refurbishing of the Equipment:
- m. Any claims, damages, losses, or expenses, arising from or related to conditions that existed in, on, or upon the premises before the effective date of this Agreement ("Pre-Existing Conditions"), including, without limitation, damages, losses, or expenses involving pre-existing building envelope issues, mechanical issues, plumbing issues, and/or indoor air quality issues involving mold/mould and/or fungi;
- n. Replacement of refrigerant is excluded, unless replacement of refrigerant is expressly stated as included within the scope of Qualified Provider's Services, in which case, replacements shall in no event exceed ten percent (10%) of the rated system charge per year unless a greater percentage is expressly included within the scope of Services. Owner shall be responsible for the cost of any additional replacement refrigerant;

- o. Operation of the equipment; and
- p. Any claims, damages, losses, or expenses, arising from or related to work done by or services provided by individuals or entities that are not employed by or hired by Qualified Provider.

Performance Period Services Warranties. (a) Qualified Provider manufactured material supplied is warranted be free from defect in material and manufacture for a period of twelve months from date of start-up or replacement and Qualified Provider's obligation under this warranty is limited to repairing or replacing the defective part at its option; (b) labor is warranted (to have been properly performed) for a period of 90 days from completion and Qualified Provider's obligation under this warranty is limited to correcting any improperly performed labor; and (c) Equipment and/or parts that are not manufactured by Qualified Provider are not warranted by Qualified Provider and shall have such warranties as are extended to Qualified Provider by the respective manufacturer. THE WARRANTY AND LIABILITY SET FORTH IN THIS SECTION ARE IN LIEU OF ALL OTHER WARRANTIES AND LIABILITIES, WHETHER IN CONTRACT OR IN NEGLIGENCE, EXPRESS OR IMPLIED, IN LAW OR IN FACT, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL QUALIFIED PROVIDER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL (INCLUDING WITHOUT LIMITATION LOST PROFITS), OR PUNITIVE DAMAGES. NO REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS OF PURPOSE IS MADE REGARDING PREVENTION BY THE SCOPE OF SERVICES, OR ANY COMPONENT THEREOF, OF MOLD. FUNGUS, BACTERIA, MICROBIAL GROWTH, OR ANY OTHER CONTAMINATES. QUALIFIED PROVIDER SPECIFICALLY DISCLAIMS ANY LIABILITY IF THE SCOPE OF SERVICES OR ANY COMPONENT THEREOF IS USED TO PREVENT OR INHIBIT THE GROWTH OF SUCH MATERIALS.

### **General Data Access Terms and Conditions**

**Terms Applicability.** These General Data Access Terms and Conditions state that Owner consents to Qualified Provider's connection to Owner's equipment and/or building controls as a part of delivering product and/or services to Owner. These General Data Access Terms and Conditions are supplemental to the other terms and conditions in the Agreement and are an integral part of Qualified Provider's offer and agreement to sell. The terms of the Agreement and these General Data Access Terms and Conditions are intended to be complementary and construed as a whole. However, in the event of an irreconcilable conflict, these General Data Access Terms and Conditions shall control.

**Electronic Monitoring.** Any electronic monitoring Qualified Provider performs is undertaken solely to enable Qualified Provider to collect the data and perform any analysis included in its services. Owner agrees that Qualified Provider is not liable for losses that may occur in cases of malfunction or nonfunctioning of equipment, the energy management system, failure to identify equipment or system performance issues, failure to recommend corrective action, or otherwise related to the monitoring of Owner's equipment and building systems.

Ownership of Data. All data relating to the performance and condition of Owner's building systems that Qualified Provider collects in connection with its performance hereunder shall be owned by Owner, provided that Owner is granting to Qualified Provider the irrevocable, perpetual, nonexclusive, worldwide, royalty-free right and license to use, reproduce, display, distribute internally or externally and prepare derivative works based upon any such data Qualified Provider collects from Owner. Qualified Provider shall not use or publish such data in any way that identifies Owner as the source of that data without Owner's prior written consent except to the extent required by law. The data Owner makes available to Qualified Provider will not include any "personal information" defined as such by applicable law.

**Data Privacy and Security.** Owner is responsible for maintaining the confidentiality of Owner's user name(s) and password(s). Owner is responsible for all uses of Owner's password(s), whether or not authorized by Owner. Owner must inform Qualified Provider immediately of any unauthorized use of Owner's user name(s) or password(s). Transmission of data over the Internet by its nature entails the use of systems under the control of third parties, and as a result Qualified Provider cannot ensure total control of the security of such systems. Owner acknowledges that the very nature of

communication via the Internet restricts Qualified Provider from offering any guarantee of the privacy or confidentiality of information relating to Owner or to any personally identifiable information that may reside in Owner's systems or data when communicate or transmitted by or through the Internet or any electronic device. In gaining access via the Internet, Owner also acknowledges and accepts that electronic communication may not be free from interference by unauthorized persons and may not remain confidential. Owner therefore accepts that access to and storage of data by Qualified Provider and persons under its direction and control, or on equipment provided or used thereby, is at Owner's own risk. Qualified Provider will notify Owner of any breach in security of which Qualified Provider becomes aware. Any breach in privacy of which Owner becomes aware should be reported by Owner to Qualified Provider immediately. Qualified Provider does not disclose Owner's information to third parties for their marketing purposes, but Qualified Provider does use third party software and services to assist it with collecting and analyzing information. Qualified Provider may also disclose Owner's information if required to do so by law, regulation or as required by any governmental body with jurisdiction over it, in which case, Qualified Provider would inform Owner of such disclosure to the extent legally permissible.

Ownership of Intellectual Property. Notwithstanding any provision to the contrary, as between Owner and Qualified Provider, Qualified Provider owns and retains all title and ownership of all intellectual property rights in the software, firmware, analytics, and service processes used to provide services, and consequently both Owner and Qualified Provider agree that these Data Usage Terms and Conditions do not constitute and may under no circumstances be construed as the granting of any license to such intellectual property rights.

Disclaimer of Warranty; Limitation of Liability. The Intelligent Services provided, including any reports Qualified Provider provides, are intended to provide operational assessments and recommendations only and are intended to supplement, but not replace, manual inspections of Owner's equipment and building systems. THE INTELLIGENT SERVICES ARE PROVIDED ON AN "AS IS" BASIS WITHOUT WARRANTIES OF ANY KIND. EITHER EXPRESS OR IMPLIED. INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF TITLE OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OTHER THAN THOSE WARRANTIES WHICH ARE IMPLIED BY AND INCAPABLE OF EXCLUSION, RESTRICTION OR MODIFICATION UNDER THE LAWS APPLICABLE TO THIS AGREEMENT. WITHOUT LIMITING THE FOREGOING, QUALIFIED PROVIDER IS NOT LIABLE FOR GAPS IN DATA COLLECTED. TO THE MAXIMUM EXTENT ALLOWED BY LAW, QUALIFIED PROVIDER SHALL NOT BE LIABLE FOR ANY OF THE FOLLOWING: DAMAGES OR INJURY (OTHER THAN PERSONAL INJURY CAUSED BY QUALIFIED PROVIDER'S NEGLIGENCE) REGARDLESS OF THE CAUSE OR DURATION; FOR ANY ERRORS, INACCURACIES, OMISSIONS, OR OTHER DEFECTS IN THE INTELLIGENT SERVICES; FAILURE OF PERFORMANCE; INTERRUPTION, DELETION, DEFECT, DELAY IN OPERATION OR TRANSMISSION: OWNER'S NETWORK SECURITY: COMPUTER VIRUS; COMMUNICATION FAILURE; THEFT OR DESTRUCTION OF DATA; OR UNAUTHORIZED ACCESS TO OWNER'S DATA OR COMMUNICATIONS NETWORK.

Communications – Analog Modem Facilities. Owner authorizes Qualified Provider to utilize Owner's telephone line to provide the services and acknowledges that, unless an exclusive telephone line has been provided for performance of the services, the telephone line may be unavailable for Owner's use for extended periods of time while data is being collected from Owner's building systems and equipment. Qualified Provider is not responsible for any adverse impact to Owner's communications infrastructure or daily operations. Owner understands that Qualified Provider will not be able to collect data when the telephone line or other transmission mode is not operating or has been cut, interfered with or is otherwise damaged or if Qualified Provider is unable to acquire, transmit or maintain a connection over your telephone service.

Communications – Ethernet. Owner authorizes Qualified Provider to utilize Owner's network infrastructure to provide the contracted services and acknowledges that Qualified Provider is not responsible for any adverse impact to Owner's communications infrastructure. Owner understands that Qualified Provider will not be able to collect data when network issues do not allow for successfully communications between Qualified Provider's data collect ion devices and the data sources. Interruption of external Internet communications of longer than 24 hours may result in loss

of data and degradation of service levels. Interruption of communications can be classified as failure of transmitting or receiving packet transmissions, interfered with or is otherwise damaged or if Qualified Provider is unable to acquire, transmit or maintain a connection over network or the internet for any reason including network or ISP outage or other network/ISP problems such as congestion or downtime, routing problems, or instability of signal quality.

Logging and Data Mining. Owner grants Qualified Provider the unrestricted right, but not the obligation, to log web addresses and/or mine other information and/or data relating to services and information accessed or requested (a) to provide better support, services and/or products to users of Qualified Provider's products and services, (b) to verify compliance with the terms of the Agreement and the Supplemental Terms and Conditions, (c) for use by Qualified Provider for statistical or other analysis of the collective characteristics and behavior of users, (d) to backup user and other data or information and/or provide remote support and/or restoration, (e) to provide or undertake: engineering analysis; failure analysis; warranty analysis; energy analysis; predictive analysis; service e analysis; product usage analysis; and/or other desirable analysis, including histories or trending of any of the foregoing, and (f) to otherwise understand and respond to the needs of the users of Qualified Provider's products and services.

OWNER ACCEPTANCE OF EXHIBIT G:		
Signature:	Teresa Morgan	
Title:	Superintendent	
Date:		

# Schedule A to Exhibit G SCOPE AND DESCRIPTION OF MAINTENANCE SERVICES

Table 1 - Scope of Services

Building	Measurement and Verification (Full Guarantee Term)	SC+ Controller Software Maintenance Plan (SMP) (1 Year)	Hosted Tracer Ensemble - Annual Subscription (1 Year)
Lakewood Elementary	✓	✓	✓
New Highland Elementary	✓	✓	✓
Creekside Elementary School	✓	N/A	N/A
G.C. Burkhead Elementary School	✓	N/A	N/A
Heartland Elementary School	✓	N/A	N/A
Lincoln Trail Elementary School	✓	N/A	N/A
North Park Elementary School	✓	N/A	N/A
Radcliff Elementary School	✓	N/A	N/A
Rineyville Elementary School	✓	N/A	N/A
Vine Grove Elementary School	✓	N/A	N/A
Woodland Elementary School	✓	N/A	N/A
Bluegrass Middle School	✓	N/A	N/A
North Middle School	✓	N/A	N/A
John Hardin High School	✓	N/A	N/A
North Hardin High School	✓	N/A	N/A
Bus Garage	✓	N/A	N/A
Central Office	✓	N/A	N/A
IT-TV Building	✓	N/A	N/A

### **Performance Period Services Terms**

- Measurement and Verification Full Guarantee Term
- SC+ Controller Software Maintenance Plan (SMP) 1 Year
- Hosted Tracer Ensemble Annual Subscription 1 Year

### MEASUREMENT AND VERIFICATION DESCRIPTION OF SERVICES

Qualified Provider shall provide the M&V Services with respect to the energy conservation measures installed by Qualified Provider under the Agreement in accordance with the methods and procedures outlined in Exhibit E and the sub-Exhibits thereto. The M&V Services shall include the preparation and submittal by Qualified Provider of a Reconciliation Report in accordance with Section 10 of Exhibit E.

#### Notes:

- 1. Only those services specifically marked with an "✓" in Schedule A of Exhibit G apply to the corresponding buildings within this contract's scope of services.
- Intelligent Services is provided on a subscription basis. Owner agrees to the terms and conditions applicable to such subscription. Owner access to energy and performance reporting and/or associated dashboards residing outside of the Owner's site will be terminated upon termination of the subscription.
- 3. Data collected by Qualified Provider is subject to the attached General Data Access Terms and Conditions in Exhibit G. Termination of Intelligent Services does not include the termination of the Measurement & Verification (M&V) program. M&V is a service that is separate and distinct from Intelligent Services and is an integral part of the Guarantee. M&V must be provided during the Guarantee Term set forth in Exhibit E, pursuant to KRS 45A.345, KRS 45A.352, and KRS 45A.353.
- 4. Provision of Intelligent Services is conditioned upon Owner providing Qualified Provider with "Site-to-Site" remote access to all systems included within the Intelligent Services monitoring coverage and assuring that the onsite IT network infrastructure and building automation system(s) remains operational.
- 5. The systems and equipment to be monitored as part of the scope of this Exhibit are limited to the available data points exposed to Qualified Provider via the buildings' existing Trane and/or Tridium building automation system(s).

### **DESCRIPTION OF ADDITIONAL SERVICES**

### 1) SC+ CONTROLLER SOFTWARE MAINTENANCE PLAN ("SC+ SMP")

Up to two software version upgrades per year will be implemented as released by the Trane Building Automation Services Division. As SC+ software revisions (i.e. service packs, image files) are released, controllers will be upgraded via remote access.

### a. Additional Considerations

- The owner is expected to allow access to Trane via a remote connection to the site (preferably a site-to-site VPN connection). Any connectivity or owner's computer system issues that result in a site visit to perform the upgrade will be billed to the Owner as an additional service charge at the current service agreement holder rate.
- Remote access requires service through a third-party Internet Service Provider (ISP).
   Owner is solely responsible for entering into and maintaining any contract for service with an ISP. The ISP is not a party to this agreement.
- Software installation does not cover issues related to computer system capacity or configuration issues.
- Software upgrades do not include upgrades to higher platforms.

### 2) Hosted Tracer Ensemble Subscription

Trane will host Owner's Ensemble building automation system on a secure server within the Trane Cloud. This cloud hosted service includes application and operating system updates without the need of separate Ensemble software maintenance or separate licensing. This is a service that must be renewed annually to maintain connectivity and access to the Ensemble operating system.

# The # of Control Panels included in the Hosted Solution: Coverage up to (Qty. 6) SC+control panels

### a. Inclusions

- Ensemble operating system as set up during the initial, year one, set up
- Ensemble software patches, updates, and upgrades
- Connectivity to the Trane Ensemble cloud servers
- Data storage up to the predefined limits of the initial Hosted Ensemble purchase
- Cloud hosted server updates and maintenance

### b. Technical Details

- Connectivity between the Tracer Ensemble server and controllers on the local network is via BACnet/IP. BACnet/IP is an application-level protocol using UDP port 47808.
   The port designation is configurable. As BACnet/IP has no native encryption, all BACnet/IP traffic is tunneled to your Ensemble server using IPsec.
- Owner is assigned a unique virtual web and application server which is located in a single availability zone. All servers are assigned security groups to prevent communication between Owner servers.
- Tracer Ensemble can be accessed using most modern web browsers. Connectivity between the end user and the server is via HTTPS (2,048-bit RSA) over the internet. Access to the application can be source IP restricted at the Owner's request.

### c. Exclusions

- Modifications and/or repairs to Owner's site-based network and/or building automation system
- SC+ software updates and maintenance (note: these services are covered under the separate SC+ software maintenance "SMP")
- · Graphics modifications
- Ensemble add on packages such as Tenant Services unless defined in the initial Hosted Ensemble purchase

**Clarifications:** If for any reason Owner terminates the contract prior to term, there is no proration of fees. The balance of the hosting fees will be calculated, and Owner must pay those fees. At the end of the term commitment, Owner may opt to begin a new contract with different options for the length of the hosted services term. Trane will ensure that notice is given prior to expiration of the current term so there is seamless transition to the next term.

This pricing is predicated on the noted control panel count above. In addition to panel count, if the complexity of equipment and/or configuration of logs and alarms significantly increases the burden of processor and memory capacity of the hosted server, the system will slow down. Trane can scale up the hosted server capacity, but this will introduce incremental fees for the hosting services.

Owner ultimately owns the data that is retained in the SQL database. Upon termination of the Hosted Ensemble agreement, Trane will provide access to the database for the Owner to retrieve whatever amount of archived data that exists.

# **BG1 Project Application Form (Revised)** (Ref# 21393)

Form Status: Saved

GESC Project: HVAC/Lighting Upgrades Lakewood -NHE

BG Number: 24-193 District: Hardin County (HB678)
Status: Active Phase: Project Initiation (View Checklist)

Construction Delivery Method Guaranteed Energy Savings Contract

Procurement Standard Model Procurement

Reason for Revision

Emergency No

# **Project Type and Description**

# **Applicable Items**

**New Building** No Addition No Major Renovation No **GESC** No No Roofing **HVAC** Yes **ADA Compliance** No Life Safety No Security No Minor Project No New Relocatable Classroom No Equipment / Furnishings Procurement No Site Acquisitions No

# **District Facility Plan (DFP)**

Compliance with 702 KAR 4:180 and 702 KAR 4:160

DFP Approval Date 6/1/2022

**DFP Priority** 

**2c.1** - New Highland Elementary School

Estimated Cost: \$11,592,846.00

Facility: No Data

**2c.4** - Woodland Elementary School Estimated Cost: \$6,630,819.00

Facility: No Data

Project Not Listed on DFP No

# **Inventory**

**Facility Name** 

### LAKEWOOD ELEMENTARY SCHOOL (B10000680)

### NEW HIGHLAND ELEMENTARY SCHOOL (B10000687)

# Scope

Provide a Complete Narrative of the Proposed Project

COOP Quote Number: P3-ce8AAC-24-001

COOP & Federal Contract ID: OMNIA Region 4 R2215

- Lakewood Elementary School HVAC and Contols Replacement
- New Highland Elementary HVAC and Controls Replacement
- Multiple Facilities LED Lighting Upgrades
- Multiple Facilities Photovoltaic Solar Arrays

Work Related to Project But Excluded from this BG1 Scope

# **Financial Plan**

# **Probable Costs**

Proposed Plan to Finance Application

Total Construction Cost	\$14,475,700.00
Construction Contingency	\$0.00
Architect / Engineer Fee	\$0.00
Construction Manager Fee	
Fiscal Agent Fee	\$111,600.00
Bond Discount	\$297,700.00
Equipment / Furnishings	
Equipment / Computers	
Technology Network System (KETS)	
Site Acquisition	
Site Survey	\$0.00
Geotechnical Investigations	
Special Inspections	
Commissioning	\$0.00
Advertising	\$0.00
Printing	\$0.00
-	

### **Other Probable Costs**

Title	Amount
No Data No Data	
No Data	

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### **Funds Available**

Bond Sale - SFCC

Bond Requirement - SFCC

Local FSPK Bond Sale

Local General Fund Bond Sale

\$14,885,000.00

Cash - SFCC Requirement

Cash - Building Fund

Cash - Capital Outlay

Cash - Investment Earnings

Cash - General Fund

City - County - KYTC Reimbursement

**KETS** 

Federal Funds

**External Partner Agreement** 

### **Residual Funds**

BG Number Fund Source Amount

No Data No Data No Data

Residual Funds Total: \$0.00

### Other Available Funds

Title Amount

No Data

No Data

No Data

Total Funds Available \$14,885,000.00

### **BG1 Signature Page (Online Form Ref# 21393)**

The signing of this financial document certifies the above stated funds are available and designated for this project during this fiscal year.

Superintendent Date

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Finance Officer	Date
Chairman	Date

NOTE: Any district anticipating the financing of this and/or other projects in a combined school revenue Bond should discuss the financing with the Director/Branch Manager, KDE - District Financial

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### HARDIN COUNTY BOARD OF EDUCATION BG # 24-193 TRANE PROJECT NO.: 7680317

# ADDENDUM NO. 1 TO STANDARD FORM OF AGREEMENT BETWEEN OWNER AND DESIGN BUILDER AIA141-2004

This ADDENDUM NO. 1 TO STANDARD FORM OF AGREEMENT BETWEEN OWNER AND DESIGN BUILDER AIA141-2004 (this "Addendum No. 1") entered into this 16<sup>th</sup> day of May 2024 by and between **Trane U.S. Inc.** ("Qualified Provider"), and **Hardin County Board of Education** ("Owner").

### WITNESSETH:

WHEREAS, Owner and Qualified Provider are parties to that certain STANDARD FORM OF AGREEMENT BETWEEN OWNER AND DESIGN BUILDER AIA141-2004, dated as of May 16, 2024 (the "Agreement"); and

WHEREAS, Owner and Qualified Provider desire to set forth certain terms and conditions of the Agreement in this Addendum No. 1.

NOW, THEREFORE, in consideration of the mutual covenants herein contained and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Owner and Qualified Provider, intending to be legally bound, hereby agree to the following:

- 1. **Defined Terms.** Capitalized terms used in this Addendum No. 1 which are not specifically defined herein, have the meanings given to such terms in the Agreement.
- 2. Priority; List of Attachments. This Addendum No. 1 is intended to supplement the Agreement. To the extent there is any inconsistency between the Agreement (together with its Exhibits) and this Addendum No. 1 (together with its Attachments), the terms of this Addendum No. 1 shall be given precedence, as provided in Section 7.7.1 of the Agreement.

Attachment A: Sample Application and Certificate for Payment

Attachment B: Owner's Direct Purchase Order and Equipment Proposal

Attachment C: Description of the Premises
Attachment D: Form of Notice to Proceed
Attachment E: Hazardous Materials

- 3. Section 179D Tax Deduction Allocation. Allocation to Qualified Provider of Tax Deduction under Section 179D of the Internal Revenue Code. For calendar tax year(s) in which (a) the provisions of Section 179D of the Internal Revenue Code are in effect and (b) the qualifying property installed as a part of the Services has been placed in service pursuant to Section 179D, Owner agrees to allocate the tax deduction available under Section 179D solely to Qualified Provider pursuant to Section 179D(d)(4) and, upon a written request from Qualified Provider, shall provide the written form of allocation to Qualified Provider that is required by the Internal Revenue Service.
- **4. Term.** The term ("Term") of this Agreement shall commence as of the Effective Date and shall end upon expiration of the 20-year Guarantee Term pursuant to, and as defined in Exhibit E, unless earlier terminated pursuant to the provisions hereof.
- **5. Premises.** The Work to be performed by Qualified Provider under the Agreement shall be performed at Owner's premises (the "Premises") identified in Attachment C hereto.

- 6. Commencement of the Work; Section 3.1 of the Agreement. The date for the commencement of the Work under Section 3.1 of the Agreement shall be the date set forth on the Notice to Proceed issued by Owner in the form of Attachment D hereof. Owner intends to finance all or a portion of the Stipulated Sum by issuing bonds. Accordingly, Qualified Provider shall not be required to perform, any of the Work until and unless Owner has closed on its financing (the "Financing Closing"). Owner shall provide Qualified Provider, upon request, copies of the fully executed contract documents for financing of the Stipulated Sum and, if applicable, evidence of funding of any escrow account required under the financing documents. Owner will achieve Financing Closing on or before June 30, 2022, or such later date as may be agreed to in writing by Qualified Provider. Within five (5) calendar days of the Financing Closing, Owner shall execute and issue a written Notice to Proceed (substantially in the form of Attachment D hereto) to Qualified Provider. In the event Owner does not achieve Financing Closing on or before the date specified in the preceding sentence, or such later date as may be agreed to in writing by Qualified Provider, Qualified Provider may terminate this Agreement upon fourteen (14) calendar days prior written notice to Owner. Termination of this Agreement by Qualified Provider in accordance herewith shall be deemed termination by Owner for convenience in accordance with Section A14.4 of the Agreement. In addition, notwithstanding such termination. Owner shall be obligated to immediately compensate Qualified Provider for the amount set forth in any Letter of Commitment, project development agreement, or comparable agreement between Owner and Qualified Provider.
- 7. Initial Payment. Upon execution hereof, an initial payment of 20% of the Contract Sum (for engineering, drafting, mobilization, and other costs) shall be due.
- **8. Neutral Election; Section 6.1 of the Agreement.** The Parties elect not to select a Neutral for the purpose of Section 6.1 of the Agreement.
- **9. Qualified Provider's Proposal; Sections 8.1.4 and 8.1.5.** The terms of Sections 8.1.4 and 8.1.5 of the Agreement are not applicable and are hereby deleted in their entirety.
- 10. Qualified Provider's Compensation in the Event of Termination for Convenience by Owner. In the event Owner terminates the Agreement for convenience in accordance with Section A14.4 of the Agreement, Qualified Provider shall be entitled, in addition to the amounts outlined in Section A14.4.3 of the Agreement, to any damages sustained by Qualified Provider, including the cost of terminating orders or subcontracts for labor or material and price of any specially manufactured items or equipment.
- **11. Exclusions from the Work.** Excluded from the Work are any modifications or alterations to the Premises (not expressly included within the Work as defined) that may be required by operation of the Americans with Disabilities Act or any other law or building code(s).
- **12.** Additional Representations, Warranties and Covenants of Owner. Owner hereby represents, warrants and covenants to Qualified Provider that:
  - a. Owner has furnished, or caused others to furnish, and, for the Term hereof, will continue to furnish to Qualified Provider, promptly as information becomes available, accurate and complete data concerning energy usage for, and other information pertaining to, the Premises, including but not limited to the following:
    - i. utility records for the 24-month period preceding the date hereof and throughout the Term;
    - ii. occupancy and usage information, including current representative tenant leases, for the 24-month period preceding the date hereof and throughout the Term;
    - iii. written surveys or descriptions of heating, cooling, lighting or other systems or energy requirements and any changes thereto;

- iv. descriptions of all energy consuming or saving equipment used on or affecting the Premises;
- v. any energy or environmental audits relating to all or any part of the Premises;
- vi. any service or maintenance agreement(s) regarding any heating, cooling, lighting or other building systems, or part thereof;
- vii. construction drawings ("as-builts") in existence as of the date hereof or developed during the Term; and
- viii. a description of energy management procedures presently utilized by Owner for the Premises and any revisions thereto throughout the Term.
- b. Owner has provided Qualified Provider with all records heretofore requested by Qualified Provider and the information set forth therein is, and all information in other records to be subsequently provided pursuant to this Agreement will be, true and accurate in all material respects except as may be disclosed to Qualified Provider by Owner in writing; and
- c. Owner has not entered into any contracts or agreements with other persons or entities regarding the provision of energy management services or with regard to any servicing of any of the energy related equipment located on the Premises, except as heretofore disclosed to Qualified Provider in writing by Owner; and
- d. During the term of this Agreement, Owner will not enter into any agreements with other persons or entities regarding the provision of energy management services or with regard to any servicing of any of the energy related equipment furnished by Qualified Provider hereunder, without prior written consent of Qualified Provider; and
- e. Owner presently intends to continue to use the Premises in a manner similar to its present use, except as may have been disclosed to Qualified Provider by Owner in writing; and
- f. No part of the systems controlled by Qualified Provider will be placed in a permanent "on" operating mode or manually controlled and, during the Term of this Agreement, Owner shall permit only Qualified Provider personnel or other qualified providers to repair, adjust or program equipment, systems, and/or controls, except in the event of an emergency, in which event Owner may remedy the emergency and shall notify Qualified Provider as soon as possible of the existence of the emergency and measures taken by Owner; and
- g. Owner has disclosed in writing to Qualified Provider the existence and location of all known or suspected asbestos and other Hazardous Materials on the Premises; and
- h. Owner will provide Qualified Provider with copies of any successor or additional contracts for management or servicing of preexisting equipment that may be executed from time-to-time hereafter within ten (10) days after execution thereof and information or services under Owner's control shall be furnished promptly by Owner; and
- i. The execution, delivery and performance by Owner of this Agreement does not violate any provision of law and does not conflict with or result in a breach of any order, writ, injunction or decree of any court or governmental instrumentality, domestic or foreign, or Owner's respective charter or by-laws or create a default under any agreement, bond, note or indenture to which Owner is a party or by which Owner is bound or to which any of Owner's property is subject; and Owner has no knowledge of any facts or circumstances that, but for the passage of time, would materially, adversely affect either party's ability to perform its respective obligations hereunder and, if Owner is a governmental entity or instrumentality thereof, Owner has complied with all laws and regulations relative to bidding or procurement of the Services hereunder; and

- j. The Agreement has been duly authorized, executed and delivered by Owner and constitutes the valid and legally binding obligation of Owner, enforceable in accordance with its terms, except as may be limited by bankruptcy, insolvency, reorganization or other laws or equitable principles of general application relating to or affecting the enforcement of creditor's rights and remedies;
- k. Owner shall notify Qualified Provider within twenty-four (24) hours of Owner's receipt of actual or constructive notice of (1) any material malfunction in the operation of the equipment installed or equipment affected by the Work provided pursuant to this Agreement and/or (2) any interruption or alteration of the energy supply to the Premises; and
- Owner acknowledges and agrees that the Performance Period Services will be performed by Qualified Provider or on behalf of Qualified Provider by a Qualified Provider authorized service provider; and
- m. Owner is the fee owner of the Premises and the real estate upon which the Premises are located.

### 13. Asbestos and Hazardous Materials.

- a. Except as expressly stated in Exhibit D of the Agreement, Qualified Provider's Work expressly excludes any work connected or associated with Hazardous Materials. Hazardous Material means any pollutant, contaminant, toxic or hazardous substance, material or waste, any dangerous, potentially dangerous, noxious, flammable, explosive, reactive or radioactive substance, material or waste, urea formaldehyde, asbestos, asbestos-containing materials ("ACMs"), polychlorinated biphenyl ("PCB"), and any other substance, the manufacture, preparation, production, generation, use, maintenance, treatment, storage, transport, disposal, handling, or ownership of which is regulated, restricted, or prohibited, by any federal, state, or local statute, law, ordinance, code, rule or regulation now or at any time hereafter in effect, and as may be amended from time to time, including but not limited to, the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. §§ 9601 et seq.), the Hazardous Materials Transportation Act (49 U.S.C. §§ 1801 et seq.), the Resource Conservation and Recovery Act (42 U.S.C. §§ 6901 et seq.), the Federal Water Pollution Control Act (33 U.S.C. §§ 1251 et seq.), the Clean Air Act (42 U.S.C. §§ 7401 et seq.), the Toxic Substances Control Act, as amended (15 U.S.C. §§ 2601 et seq.), and the Occupational Safety and Health Act (29 U.S.C. §§ 651 et seq.).
- b. Qualified Provider shall not perform any identification, abatement, cleanup, removal, transport, treatment, storage or disposal of Hazardous Materials on Owner's premises. Owner warrants and represents that, except as expressly, and by reference to this Section, set forth in Attachment E (Hazardous Materials), there are no Hazardous Materials on the Premises in areas within which Qualified Provider will be performing any part of the Services or Owner has disclosed to Qualified Provider the existence and location of any Hazardous Materials in all areas within which Qualified Provider will be performing any part of the Services. Qualified Provider's responsibility, if any, for any Hazardous Materials, shall be limited to and as expressly set forth in Attachment E and Owner shall, at all times, be and remain the owner and generator of any and all Hazardous Materials on the Owner's premises and responsible for compliance with all laws and regulations applicable to such Hazardous Materials.
- c. Should Qualified Provider become aware of or suspect the presence of Hazardous Materials in the course of performing the Services that are not disclosed in Exhibit D of the Agreement or Attachment E hereof, or which present or may present a hazard to or endanger health welfare or safety, Qualified Provider shall have the right to immediately stop work in the affected area and shall notify Owner. Owner will be responsible for taking any and all action necessary to remove or render harmless the Hazardous Materials in accordance with all applicable laws and regulations. Qualified Provider shall be required to resume performance of the Services in the affected area only in the absence of Hazardous Materials or when the

affected area has been rendered harmless; if the area has not been or cannot be rendered harmless within thirty (30) days of discovery of the Hazardous Material, Qualified Provider may terminate this Agreement and such termination shall be deemed termination for convenience by Owner under Section A14.4 of the Agreement. Owner shall compensate Qualified Provider for any additional costs incurred by Qualified Provider as a result of work stoppage, including demobilization and remobilization. In addition to any other indemnity obligation of Owner to Qualified Provider, to the maximum extent permitted by law, Owner shall indemnify, defend, and hold harmless Qualified Provider, its officers, directors, beneficiaries, shareholders, partners, agents, representatives, and employees (collectively referred to as "Qualified Provider" for purposes of this Section 20) and Qualified Provider's subcontractors from all fines, suits, actions, claims, penalties, and proceedings of every kind, and all costs associated therewith (including attorneys' and consultants' fees) arising out of or in any way connected with or related to: (1) any leak, deposit, spill, discharge, or release or disposal of Hazardous Materials in connection with the performance of this Agreement, except to the extent such Hazardous Materials were brought onto the Premises by Qualified Provider; and/or (2) Owner's failure to identify and disclose Hazardous Materials and to fully comply with all federal, state, and local statutes, laws ordinances, codes, rules and regulation now or at any time hereafter in effect regarding Hazardous Materials.

- 14. COVID-19 Limitation on Liability. The transmission of COVID-19 may occur in a variety of ways and circumstances, many of the aspects of which are currently not known. HVAC systems, products, services and other offerings have not been tested for their effectiveness in reducing the spread of COVID-19, including through the air in closed environments. IN NO EVENT WILL QUALIFIED PROVIDER BE LIABLE UNDER THIS AGREEMENT OR OTHERWISE FOR ANY ACTION OR CLAIM, WHETHER BASED ON WARRANTY, CONTRACT, TORT OR OTHERWISE, FOR ANY BODILY INJURY (INCLUDING DEATH) OR ANY OTHER LIABILITIES, DAMAGES OR COSTS RELATED TO COVID-19 (INCLUCING THE SPREAD, TRANSMISSION OR CONTAMINATION THEREOF) (COLLECTIVELY, "COVID-19 LIABILITIES") AND OWNER HEREBY EXPRESSLY RELEASES QUALIFIED PROVIDER FROM ANY SUCH COVID-19 LIABILITIES.
- 15. Workmanship and Equipment Warranty. Notwithstanding any of the terms and conditions of the Agreement or in any Direct Purchase Order issued by Owner under the Agreement and in lieu of any warranties listed therein, Qualified Provider warrants that, for a period of one year from the date of Final Completion (the "Warranty Period"), Qualified Provider-manufactured equipment installed hereunder and the installation work included within the Work (i) shall be free from defects in material, manufacture, and workmanship and (ii) shall have the capacities and ratings set forth in Qualified Provider's catalogs and bulletins. Notwithstanding the foregoing, with respect to Work Elements identified in Exhibit D.1 (Certificate of Substantial Completion and Acceptance), Qualified Provider shall have the option of commencing the Warranty Period upon the date of Substantial Completion with respect to such Work Element. For Qualified Provider-manufactured equipment not installed by Qualified Provider the Warranty Period is the lesser of 12 months from initial start-up or 18 months from the date of shipment. Equipment and/or parts that are not manufactured by Qualified Provider are not warranted by Qualified Provider and have such warranties as may be extended by the respective manufacturer.
- 16. Warranty Remedy. If Owner files a claim with respect to a defect in Qualified Provider-manufactured equipment or the installation work within the Warranty Period, Qualified Provider will correct the defect or furnish replacement equipment (or, at its option, parts therefor) and, if said Qualified Provider-manufactured equipment was installed pursuant hereto, labor associated with the replacement of parts or equipment not conforming to this warranty. No liability whatsoever shall attach to Qualified Provider until said equipment and Services have been paid for in full. Qualified Provider's sole liability and Owner's sole and exclusive remedy with respect to any warranty claim shall be limited, at Qualified Provider's option, to Qualified Provider's cost to correct the defective equipment or work and/or replace equipment shown to be defective. Qualified Provider's warranties expressly exclude any remedy for damage or defect caused by corrosion, erosion, or deterioration, abuse, modifications or repairs not performed by Qualified Provider, improper operation, or normal wear and tear under normal usage. Qualified Provider shall not be obligated to pay for the cost of lost refrigerant.

The foregoing does not apply to Support Services and the warranties for Support Services are separately stated on Exhibit G of the Agreement.

THE WARRANTY, LIABILITY AND REMEDIES SET FORTH IN THIS SECTION ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, LIABILITIES, OR REMEDIES SET FORTH HEREIN OR ELSEWHERE IN THE AGREEMENT, WHETHER IN CONTRACT OR IN NEGLIGENCE, EXPRESS OR IMPLIED, IN LAW OR IN FACT, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL QUALIFIED PROVIDER BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING WITHOUT LIMITATION LOST PROFITS), OR PUNITIVE DAMAGES. NO REPRESENTATION OR WARRANTY OF ANY KIND, INCLUDING WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE, IS MADE REGARDING PREVENTING, ELIMINATING, REDUCING OR INHIBITING ANY MOLD, FUNGUS, BACTERIA, VIRUS, MICROBIAL GROWTH, OR ANY OTHER CONTAMINANTS (INCLUDING COVID-19 OR ANY SIMILAR VIRUS) (COLLECTIVELY, "CONTAMINANTS"), WHETHER INVOLVING OR IN CONNECTION WITH EQUIPMENT, ANY COMPONENT THEREOF, SERVICES OR OTHERWISE. IN NO EVENT SHALL QUALIFIED PROVIDER HAVE ANY LIABILITY FOR THE PREVENTION, ELIMINATION, REDUCTION OR INHIBITION OF THE GROWTH OR SPREAD OF SUCH CONTAMINANTS INVOLVING OR IN CONNECTION WITH ANY EQUIPMENT, ANY COMPONENT THEREOF, SERVICES OR OTHERWISE AND OWNER HEREBY SPECIFICALLY ACKNOWLEDGES AND AGREES THERETO.

- 17. Limitation of Liability. NOTWITHSTANDING ANY PROVISION TO THE CONTRARY, NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING WITHOUT LIMITATION LOST REVENUE AND LOST PROFITS) OR PUNITIVE DAMAGES REGARDLESS OF WHETHER SUCH LIABILITY ARISES FROM BREACH OF CONTRACT, TORT OR ANY OTHER THEORY. IN NO EVENT SHALL QUALIFIED PROVIDER BE LIABLE FOR ANY DAMAGES (WHETHER DIRECT OR INDIRECT) RESULTING FROM MOLD, FUNGUS, BACTERIA, MICROBIAL GROWTH, OR OTHER CONTAMINATES OR AIRBORNE BIOLOGICAL AGENTS.
- **18. Bonds.** Should payment and performance bonds be provided hereunder, in no event shall such bonds cover any energy savings guarantees. Additionally, the bonds shall not cover any warranties beyond one year from Final Completion. For purposes of any performance bond issued hereunder, faithful performance of the Work are deemed satisfied upon Final Completion.
- 19. Owner's Direct Purchase Order. Concurrently with the execution of the Agreement, Owner shall execute and deliver the Owner's Direct Purchase Order and Trane Equipment Proposal, attached hereto as Attachment B. Owner shall pay for the equipment and materials ordered pursuant to the Owner's Direct Purchase Orders in accordance with Attachment A. All equipment and materials orders under the Owner's Direct Purchase Orders shall be delivered pursuant to the terms and conditions set forth therein.
- **20. Integration.** All other provisions of Agreement, except as specifically amended hereby, shall remain in full force and effect and are incorporated herein.
- **21. Validity.** If any term or condition of the Agreement as supplemented by this Addendum No. 1 is invalid, illegal or capable of being enforced by any rule of law, all other terms and conditions of the Agreement, as supplemented by this Addendum No. 1 will nevertheless remain in full force and effect as long as the economic or legal substance of the transaction contemplated hereby is not affected in a manner adverse to any party hereto.

**22. Execution in Counterparts.** This Addendum No. 1 may be executed one or more counterparts, each of which shall be deemed to be an original and shall constitute one and the same instrument. This Addendum No. 1 may be executed by facsimile, and each such facsimile signature shall be deemed to be an original.

**IN WITNESS THEREOF**, the Parties hereto, intending to be legally bound, have executed this ADDENDUM NO. 1 TO STANDARD FORM OF AGREEMENT BETWEEN OWNER AND DESIGN BUILDER AIA141-2004 as of the date first written above.

Trane U.S. Inc.		Hardin County Board of Education		
Ву:		Ву:		
Name:	Chuck Bowers	Name:	Teresa Morgan	
lts:	Area General Manager	Its:	Superintendent	

### **SECURITY ADDENDUM**

This Addendum shall be applicable to the sale, installation and use of Trane equipment and the sale and provision of Trane services. "Trane" shall mean Trane U.S. Inc. for sales and services in the United States, or Trane Canada ULC for sales and services in Canada.

1. <u>Definitions</u>. All terms used in this Addendum shall have the meaning specified in the Agreement unless otherwise defined herein. For the purposes of this Addendum, the following terms are defined as follows:

"Customer Data" means Customer account information as related to the Services only and does not include HVAC Machine Data or personal data. Trane does not require, nor shall Customer provide personal data to Trane under the Agreement. Such data is not required for Trane to provide its Equipment and/or Services to the Customer.

"Equipment" shall have the meaning set forth in the Agreement.

"HVAC Machine Data" means data generated and collected from the product or furnished service without manual entry. HVAC Machine Data is data relating to the physical measurements and operating conditions of a HVAC system, such as but not limited to, temperatures, humidity, pressure, HVAC equipment status. HVAC Machine Data does not include Personal Data and, for the purposes of this agreement, the names of users of Trane's controls products or hosted applications shall not be Personal Data, if any such user chooses to use his/her name(s) in the created accounts within the controls product (e.g., firstname.lastname@address.com). HVAC Machine Data may be used by Trane: (a) to provide better support services and/or products to users of its products and services; (b) to assess compliance with Trane terms and conditions; (c) for statistical or other analysis of the collective characteristics and behaviors of product and services users: (d) to backup user and other data or information and/or provide remote support and/or restoration; (e) to provide or undertake: engineering analysis; failure analysis; warranty analysis; energy analysis; predictive analysis; service analysis; product usage analysis; and/or other desirable analysis, including, but not limited to, histories or trends of any of the foregoing; and (f) to otherwise understand and respond to the needs of users of the product or furnished service. "Personal Data" means data and/or information that is owned or controlled by Customer, and that names or identifies, or is about a natural person, such as: (i) data that is explicitly defined as a regulated category of data under any data privacy laws applicable to Customer; (ii) non-public personal information ("NPI") or personal information ("PI"), such as national identification number, passport number, social security number, social insurance number, or driver's license number; (iii) health or medical information, such as insurance information, medical prognosis, diagnosis information, or genetic information; (iv) financial information, such as a policy number, credit card number, and/or bank account number; (v) personally identifying technical information (whether transmitted or stored in cookies, devices, or otherwise), such as IP address, MAC address, device identifier, International Mobile Equipment Identifier ("IMEI"), or advertising identifier; (vi) biometric information; and/or (vii) sensitive personal data, such as, race, religion, marital status, disability, gender, sexual orientation, geolocation, or mother's maiden name.

"Security Incident" shall refer to (i) a compromise of any network, system, application or data in which Customer Data has been accessed or acquired by an unauthorized third party; (ii) any situation where Trane reasonably suspects that such compromise may have occurred; or (iii) any actual or reasonably suspected unauthorized or illegal Processing, loss, use, disclosure or acquisition of or access to any Customer Data.

"Services" shall have the meaning set forth in the Agreement.

- HVAC Machine Data; Access to Customer Extranet and Third Party Systems. If Customer grants Trane access to HVAC
  Machine Data via web portals or other non-public websites or extranet services on Customer's or a third party's website
  or system (each, an "Extranet"), Trane will comply with the following:
  - a. <u>Accounts</u>. Trane will ensure that Trane's personnel use only the Extranet account(s) designated by Customer and will require Trane personnel to keep their access credentials confidential.
  - b. <u>Systems</u>. Trane will access the Extranet only through computing or processing systems or applications running operating systems managed by Trane that include: (i) system network firewalls; (ii) centralized patch management; (iii) operating system appropriate anti-malware software; and (iv) for portable devices, full disk encryption.
  - c. <u>Restrictions</u>. Unless otherwise approved by Customer in writing, Trane will not download, mirror or permanently store any HVAC Machine Data from any Extranet on any medium, including any machines, devices or servers.
  - d. <u>Account Termination</u>. Vendor will terminate the account of each of Trane's personnel in accordance with Trane's standard practices after any specific Trane personnel who has been authorized to access any Extranet (1) no longer needs access to HVAC Machine Data or (2) no longer qualifies as Trane personnel (e.g., the individual leaves Trane's employment).
  - e. <u>Third Party Systems</u>. Trane will provide Customer prior notice before it uses any third party system that stores or may otherwise have access to HVAC Machine Data, unless (1) the data is encrypted and (2) the third party system will not have access to the decryption key or unencrypted "plain text" versions of the HVAC Machine Data.

- 3. <u>Customer Data; Confidentiality.</u> Trane shall keep confidential, and shall not access or use any Customer Data and information that is marked confidential or by its nature is considered confidential ("Customer Confidential Information") other than for the purpose of providing the Equipment and Services, and will disclose Customer Confidential Information only: (i) to Trane's employees and agents who have a need to know to perform the Services, (ii) as expressly permitted or instructed by Customer, or (iii) to the minimum extent required to comply with applicable law, provided that Trane (1) provides Customer with prompt written notice prior to any such disclosure, and (2) reasonably cooperate with Customer to limit or prevent such disclosure.
- Customer Data; Compliance with Laws. Trane agrees to comply with laws, regulations governmental requirements and industry standards and practices relating to the Trane's processing of Customer Confidential Information (collectively, "Laws").
- 5. <u>Customer Data; Information Security Management.</u> Trane agrees to establish and maintain an information security and privacy program, consistent with applicable HVAC equipment industry practices that complies with this Addendum and applicable Laws ("*Information Security Program*"). The Information Security Program shall include appropriate physical, technical and administrative safeguards, including any safeguards and controls agreed by the Parties in writing, sufficient to protect Customer systems, and Customer's Confidential Information from unauthorized access, destruction, use, modification or disclosure. The Information Security Program shall include appropriate, ongoing training and awareness programs designed to ensure that Trane's employees and agents, and others acting on Trane's, behalf are aware of and comply with the Information Security Program's policies, procedures, and protocols.
- 6. <u>Monitoring</u>. Trane shall monitor and, at regular intervals consistent with HVAC equipment industry practices, test and evaluate the effectiveness of its Information Security Program. Trane shall evaluate and promptly adjust its Information Security Program in light of the results of the testing and monitoring, any material changes to its operations or business arrangements, or any other facts or circumstances that Trane knows or reasonably should know may have a material impact on the security of Customer Confidential Information, Customer systems and Customer property.
- 7. <u>Audits</u>. Customer acknowledges and agrees that the Trane SOC2 audit report will be used to satisfy any and all audit/inspection requests/requirements by or on behalf of Customer. Trane will make its SOC2 audit report available to Customer upon request and with a signed nondisclosure agreement.
- 8. Information Security Contact. Trane's information security contact is Local Sales Office.
- Security Incident Management. Trane shall notify Customer after the confirmation of a Security Incident that affects
  Customer Confidential Information, Customer systems and Customer property. The written notice shall summarize the
  nature and scope of the Security Incident and the corrective action already taken or planned.
- 10. <u>Threat and Vulnerability Management</u>. Trane regularly performs vulnerability scans and addresses detected vulnerabilities on a risk basis. Periodically, Trane engages third-parties to perform network vulnerability assessments and penetration testing. Vulnerabilities will be reported in accordance with Trane's cybersecurity vulnerability reported process. Trane periodically provides security updates and software upgrades.
- 11. <u>Security Training and Awareness</u>. New employees are required to complete security training as part of the new hire process and receive annual and targeted training (as needed and appropriate to their role) thereafter to help maintain compliance with Security Policies, as well as other corporate policies, such as the Trane Code of Conduct. This includes requiring Trane employees to annually re-acknowledge the Code of Conduct and other Trane policies as appropriate. Trane conducts periodic security awareness campaigns to educate personnel about their responsibilities and provide guidance to create and maintain a secure workplace.
- 12. <u>Secure Disposal Policies</u>. and procedures regarding the disposal of tangible and intangible property containing Customer Confidential Information so that wherever possible, Customer Confidential Information cannot be practicably read or reconstructed.
- 13. <u>Logical Access Controls</u>. Trane employs internal monitoring and logging technology to help detect and prevent unauthorized access attempts to Trane's corporate networks and production systems. Trane's monitoring includes a review of changes affecting systems' handling authentication, authorization, and auditing, and privileged access to Trane production systems. Trane uses the principle of "least privilege" (meaning access denied unless specifically granted) for access to customer data.
- 14. <u>Contingency Planning/Disaster Recovery</u>. Trane will implement policies and procedures required to respond to an emergency or other occurrence (i.e. fire, vandalism, system failure, natural disaster) that could damage Customer Data or any system that contains Customer Data. Procedures include the following:
  - (i) data backups; and
  - (ii) formal disaster recovery plan. Such disaster recovery plan is tested at least annually.

- 15. Return of Customer Data. If Trane is responsible for storing or receiving Customer Data, Trane shall, at Customer's sole discretion, deliver Customer Data to Customer in its preferred format within a commercially reasonable period of time following the expiration or earlier termination of the Agreement or, such earlier time as Customer requests, securely destroy or render unreadable or undecipherable each and every original and copy in every media of all Customer's Data in Trane's possession, custody or control no later than [90 days] after receipt of Customer's written instructions directing Trane to delete the Customer Data.
  - <u>Background checks</u> Trane shall take reasonable steps to ensure the reliability of its employees or other personnel having access to the Customer Data, including the conducting of appropriate background and/or verification checks in accordance with Trane policies.
- 16. <u>DISCLAIMER OF WARRANTIES</u>. EXCEPT FOR ANY APPLICABLE WARRANTIES IN THE AGREEMENT, THE SERVICES ARE PROVIDED "AS IS", WITH ALL FAULTS, AND THE ENTIRE RISK AS TO SATISFACTORY QUALITY, PERFORMANCE, ACCURACY AND EFFORT AS TO SUCH SERVICES SHALL BE WITH CUSTOMER. TRANE DISCLAIMS ANY AND ALL OTHER EXPRESS OR IMPLIED REPRESENTATIONS AND WARRANTIES WITH RESPECT TO THE SERVICES AND THE SERVICES PROVIDED HEREUNDER, INCLUDING ANY EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR THAT THE SERVICES WILL OPERATE ERROR-FREE OR UNINTERRUPTED OR RETURN/RESPONSE TO INQUIRIES WITHIN ANY SPECIFIC PERIOD OF TIME:

### Attachment A Sample Application and Certificate for Payment

# RAFTAIA Document G732 1

	\$0.00			NET CHANGES IN THE WORK
	\$0.00 the Owner or Contractor under this Contract.		\$0.00	TOTALS
HEED is payable only to the Contractor are without prejudice to any rights of	\$0.00 This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of		\$0.00	Total approved this month including Construction Change Directives
Date:	\$0.00 By:		\$0.00	Total changes approved in previous months by Owner
e for performing portions of the Project,	ARCHITECT: (NOTE: If multiple Contractors are responsible for performing portions of the Projections of the Architect's Certification is not required.)	DEDUCTIONS	ADDITIONS	SUMMARY OF CHANGES IN THE WORK
Date;	Вус			
unt applied. Initial all figures on this to conform with the amount certified.)	(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified, CONSTRUCTION MANAGER:	\$0.00	Ì	9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 minus Line 6)
\$0.00	SO.00 AMOUNT CERTIFIED			8. CURRENT PAYMENT DUE
RTIFIED.	Contractor is entitled to payment of the AMOUNT CERTIFIED.			(Line 6 from prior Certificate)
er and Architect certify to the Owner d belief the Work has progressed as	comprising this application, the Construction Manager and Architect certify to the Owner \$0.00 that to the best of their knowledge, information and belief the Work has progressed as			(Line 4 minus Line > Total) 7. LESS PREVIOUS CERTIFICATES FOR PAYMENT
evaluations of the Work and the data	\$0.00 In accordance with the Contract Documents, based on evaluations of the Work and the data			6. TOTAL EARNED LESS RETAINAGE
/	\$0.00 CERTIFICATE FOR PAYMENT		of G703)	Total Retainage (Lines 5a + 5b or Total in Column I of G703)
//	My Commission expires:	\$0.00		(Cohn
7	Public			b. 0 % of Stored Material
	Subscribed and sworn to before me this day of	\$0.00		a. $0$ % of Completed Work (Column $D - E$ on $G703$ )
	County of:	Ì	G 011 G (02)	5. RETAINAGE:
Date:	\$0.00 By:		240	3. CONTRACT SUM TO DATE (Line I ± 2)
	\$0.00 CONTRACTOR:	Ì		2. NET CHANGES IN THE WORK
ayment shown herem is now due.	the Contractor for Work for which previous Certificates for Payment were issued and \$0.00 payments received from the Owner, and that current payment shown herein is now due.			1. ORIGINAL CONTRACT SUM
Contractor certifies that to the best of the Contractor's knowledge, belief the Work covered by this Application for Payment has been paid by ridance with the Contract Documents, that all amounts have been paid by		ontract. AIA	ENT nnection with the C	CONTRACTOR'S APPLICATION FOR PAYMENT  Application is made for payment, as shown below, in connection with the Contract. AIA Document G703 <sup>TM</sup> , Continuation Sheet, is attached.
OTHER:			VIA ARCHITECT:	CONTRACT FOR: VIA
CONTRACTOR:	PROJECT NOS:		MANAGER:	RACTOR:
CONSTRUCTION MANAGER: ARCHITECT:	PERIOD TO:		VIA CONSTRUCTION	FROM
OWNER:	Hardin County Schools GESC APPLICATION NO: 001	Hardin Cou	PROJECT:	TO OWNER: Hardin County Board of PR Education

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User Notes:

# Attachment A (Continued) Sample Application and Certificate for Payment

# RAF AIA Document G743 - 2015

# Continuation Sheet for a Design-Build Project

APPLICATION NO: APPLICATION DATE: PERIOD TO: OWNER'S PROJECT NO: G TOTAL COMPLETED AND STORED TO DATE (G+C) BAI
PRESENTLY COMPLETED AND % FINISK STORED STORED TO DATE (G+C) (C-G) (NOT IN D OR E) (D+E+F) (C-G) (C-G) (C-G)
(C-G) (D+E+F) (0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00%
(G+C) (C-G)
FINISI (C - G) 0% 0% 0%
EALANCE IC FINISH (C - G) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.

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# FACPAC Purchase Order Form (Ref# 53365)

Form Status: Saved

GESC Project: HVAC/Lighting Upgrades Lakewood -NHE

BG Number: 24-193 District: Hardin County (HB678)
Status: Active Phase: Project Initiation (View Checklist)

Contract: Trane U.S. Inc., 0001, Mechanical, Lighting, Solar

Type: GESC Proposed

District PO Number 2

Ky Sales Tax Exempt Number

Date of Order 4/1/2024 Specification Section Mechanical

Material Description / Category HVAC Equipment - Lakewood Elementary

Requested By Hardin County Board of Education

Vendor Name Trane US Inc.

Vendor Address

12700 Plantside Drive Louisville, KY 40299

Vendor Phone (502) 499-7000 Vendor Email jfaltin2@trane.com

Bill To Hardin County Board oe Education

Bill To Address

65 W. A. Jenkins Road Elizabethtown, KY 42701

Ship To Lakewood Elementary School

Ship To Address

265 Learning Place Lane Cecilia, KY 42724

Attention Of John Stith, Chief Operations Officer

### Contacts

The following project contacts must be notified 48 hours in advance of delivery to jobsite.

Contact Name	<b>Contact Phone</b>
Jamey Hawkins, Director of Buildings & Grounds	(270) 769-8880
Kyle Lucas, Energy Manager	(270) 769-8880

### **Materials**

Furnish the necessary materials to complete the following bid package(s) / specification section(s) in its entirety. All materials shall be in accordance with the requirements of the Contract.

about:blank 1/5

Item Description	Item Number	Quantity	Unit Price	Total
WSHP - Standard efficiency horizontal - 7.5 Ton	A1	1	\$11,595.08	\$11,595.08
WSHP - Standard efficiency horizontal - 7.5 Ton	A2	1	\$11,593.00	\$11,593.00
WSHP - Standard efficiency vertical - 20 Ton	A3	1	\$20,793.00	\$20,793.00
WSHP - Standard efficiency vertical - 12.5 Ton	A4	1	\$15,093.00	\$15,093.00
WSHP - Standard efficiency vertical - 15 Ton	A5	1	\$17,093.00	\$17,093.00
WSHP - Standard efficiency horizontal - 2 Ton	B1	1	\$4,793.00	\$4,793.00
WSHP - Standard efficiency horizontal - 5 Ton	B2, B13, B18	3	\$6,322.33	\$18,966.99
WSHP - Standard efficiency horizontal - 2.5 Ton	В3	1	\$5,193.00	\$5,193.00
WSHP - Standard efficiency horizontal - 5 Ton	B4, B5, B21	3	\$6,322.33	\$18,966.99
WSHP - Standard efficiency horizontal - 3 Ton	B6	1	\$5,393.00	\$5,393.00
WSHP - Standard efficiency horizontal - 3 Ton	B7, B8	2	\$5,737.00	\$11,474.00
WSHP - Standard efficiency vertical - 4 Ton	B9	1	\$5,693.00	\$5,693.00
WSHP - Standard efficiency vertical - 4 Ton	B10	1	\$5,693.00	\$5,693.00
WSHP - Standard efficiency vertical - 3 Ton	B2	1	\$5,391.00	\$5,391.00
WSHP - Standard efficiency vertical - 1 Ton	B12	1	\$4,493.00	\$4,493.00
WSHP - Standard efficiency vertical - 3.5 Ton	B14	1	\$5,493.00	\$5,493.00
WSHP - Standard efficiency vertical - 1.25 Ton	B15	1	\$4,593.00	\$4,593.00
		Purchas	se Order Total:	\$296,990.00

Item Description	Item Number	Quantity	Unit Price	Total
WSHP - Standard efficiency vertical - 1.5 Ton	B16	1	\$4,693.00	\$4,693.00
WSHP - Standard efficiency vertical - 2.5 Ton	B17, B23, B24	3	\$5,322.33	\$15,966.99
WSHP - Standard efficiency vertical - 2.5 Ton	B19, B20	2	\$5,537.00	\$11,074.00
WSHP - Standard efficiency vertical - 3 Ton	B22	1	\$5,393.00	\$5,393.00
WSHP - Standard efficiency horizontal - 3 Ton	B25, B26, B27, B28, B29, B30, B31, B32, B40	9	\$5,469.44	\$49,224.96
WSHP - Standard efficiency horizontal - 3 Ton	B33, B34, B39	3	\$5,622.33	\$16,866.99
WSHP - Standard efficiency horizontal - 2.5 Ton	B35, B36, B37, B38	4	\$5,365.25	\$21,461.00
		Purchas	se Order Total:	\$296,990.00

### Authorization

Owner Authorization Date	3/6/2024
Vendor Authorization Date	3/8/2024

3/5

Purchase Order Signature Page (Online For	rm Ref# 53365)
Vendor	Date
Owner	Date

### **Terms and Conditions**

- 1. Drawings, catalogs, cut sheets, or samples shall be submitted for approval.
- 2. All invoices shall be sent to the contractor/subcontractor designated on the purchase order for approval. No invoices shall be sent directly to the Board of Education (Owner) for payment.
- 3. All invoices shall reference the purchase order number.
- 4. No change in, modification of, or revision of this order shall be valid unless in writing and signed by the Owner.
- 5. Vendor agrees to observe and comply with all applicable federal, state and locals laws, rules, ordinances and regulations in performance of this order.
- 6. Vendor shall not assign this order or any right hereunder without first having obtained the written consent of the Owner.
- 7. Deliveries are to be made in accordance with the Owner's schedule, as directed by the General Contractor (GC), Construction Manager (CM) or Qualified Provider (QP).
- 8. The Owner may cancel this purchase order in whole or in part in the event that the vendor fails or refuses to deliver any of the items purchased, within the time provided, or otherwise violates any of the conditions of this purchase order, or if it becomes evident that the vendor is not providing materials in accordance with the specifications or with such diligence as to permit delivery on or before the delivery date.
- 9. The vendor agrees to deliver the items to the supplied hereunder free and clear of all liens, encumbrances and claims.
- 10. If any of the goods covered under this purchase order are found to be defective in material or workmanship, or otherwise not in conformity with the requirements of this order, the Owner, in addition to the other rights which it may have under warranty or otherwise, shall have the right to reject the same or require that such articles or materials be corrected or replaced promptly with satisfactory materials or workmanship.
- 11. By acknowledging receipt of this order, by performing the designated work or any portion thereof, or by shipping the designated goods, the vendor agrees to the terms and conditions outlined.
- 12. This purchase order shall be governed in all respects by the laws of the Commonwealth of Kentucky.

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- 13. In the event the quantities of materials supplied via this purchase order are insufficient to complete the work, the GC, CM or QP shall, at no expense to the Owner, provide such materials as necessary to complete the work.
- 14. In the event that at the completion of the work the vendor has not submitted invoices totaling the value of this purchase order, this purchase order shall be considered complete and closed.

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# FACPAC Purchase Order Form (Ref# 53336)

Form Status: Saved

GESC Project: HVAC/Lighting Upgrades Lakewood -NHE

BG Number: 24-193 District: Hardin County (HB678)
Status: Active Phase: Project Initiation (View Checklist)

Contract: Trane U.S. Inc., 0001, Mechanical, Lighting, Solar

Type: GESC Proposed

District PO Number 1

Ky Sales Tax Exempt Number

Date of Order 4/1/2024 Specification Section Mechanical

Material Description / Category HVAC Equipment - New Highland Elementary

Requested By Hardin County Board of Education

Vendor Name Trane US Inc.

Vendor Address

12700 Plantside Drive Louisville, KY 40299

Vendor Phone (502) 499-7000 Vendor Email jfaltin2@trane.com

Bill To Hardin County Board of Education

Bill To Address

65 W. A. Jenkins Road Elizabethtown, KY 42701

Ship To New Highland Elementary

Ship To Address

110 W. A. Jenkins Road Elizabelthtown, KY 42701

Attention Of John Stith, Chief Operations Officer

### Contacts

The following project contacts must be notified 48 hours in advance of delivery to jobsite.

Contact Name	Contact Phone
Jamey Hawkins, Director of Buildings & Grounds	(270) 769-8880
Kyle Lucas, Energy Manager	(270) 769-8880

### **Materials**

Furnish the necessary materials to complete the following bid package(s) / specification section(s) in its entirety. All materials shall be in accordance with the requirements of the Contract.

about:blank 1/4

Item Description	Item Number	Quantity	<b>Unit Price</b>	Total
WSHP - 10 Ton Nominal	A1	2	\$17,509.00	\$35,018.00
WSHP - 15 Ton Nominal	A3	1	\$25,008.09	\$25,008.09
WSHP - 2 1/2 Ton Nominal	B1	2	\$5,343.00	\$10,686.00
WSHP - 2 Ton Nominal	B2	23	\$5,344.17	\$122,915.91
WSHP - 1 Ton Nominal	В3	5	\$5,343.00	\$26,715.00
WSHP - 1 1/4 Ton Nominal	B4	2	\$5,184.50	\$10,369.00
WSHP - 1 1/2 Ton Nominal	B5	2	\$5,284.50	\$10,569.00
WSHP - 4 Ton Nominal	В6	1	\$5,607.00	\$5,607.00
WSHP - 3 Ton Nominal	B7	8	\$5,357.00	\$42,856.00
WSHP - 3 1/2 Ton Nominal	B8	1	\$5,557.00	\$5,557.00
		Purchas	se Order Total:	\$295,301.00

### Authorization

Owner Authorization Date	3/6/2024
Vendor Authorization Date	3/8/2024

Purchase Order Signature Page (Onli	ne Form Ref# 53336)
Vendor	Date
Owner	Date

### **Terms and Conditions**

- 1. Drawings, catalogs, cut sheets, or samples shall be submitted for approval.
- 2. All invoices shall be sent to the contractor/subcontractor designated on the purchase order for approval. No invoices shall be sent directly to the Board of Education (Owner) for payment.
- 3. All invoices shall reference the purchase order number.
- 4. No change in, modification of, or revision of this order shall be valid unless in writing and signed by the Owner.
- 5. Vendor agrees to observe and comply with all applicable federal, state and locals laws, rules, ordinances and regulations in performance of this order.
- 6. Vendor shall not assign this order or any right hereunder without first having obtained the written consent of the Owner.
- 7. Deliveries are to be made in accordance with the Owner's schedule, as directed by the General Contractor (GC), Construction Manager (CM) or Qualified Provider (QP).
- 8. The Owner may cancel this purchase order in whole or in part in the event that the vendor fails or refuses to deliver any of the items purchased, within the time provided, or otherwise violates any of the conditions of this purchase order, or if it becomes evident that the vendor is not providing materials in accordance with the specifications or with such diligence as to permit delivery on or before the delivery date.
- 9. The vendor agrees to deliver the items to the supplied hereunder free and clear of all liens, encumbrances and claims.
- 10. If any of the goods covered under this purchase order are found to be defective in material or workmanship, or otherwise not in conformity with the requirements of this order, the Owner, in addition to the other rights which it may have under warranty or otherwise, shall have the right to reject the same or require that such articles or materials be corrected or replaced promptly with satisfactory materials or workmanship.
- 11. By acknowledging receipt of this order, by performing the designated work or any portion thereof, or by shipping the designated goods, the vendor agrees to the terms and conditions outlined.
- 12. This purchase order shall be governed in all respects by the laws of the Commonwealth of Kentucky.

about:blank 3/4

- 13. In the event the quantities of materials supplied via this purchase order are insufficient to complete the work, the GC, CM or QP shall, at no expense to the Owner, provide such materials as necessary to complete the work.
- 14. In the event that at the completion of the work the vendor has not submitted invoices totaling the value of this purchase order, this purchase order shall be considered complete and closed.

about:blank 4/4

### Proposal

### Proposal is valid for 15 days.

Customer must obtain credit approval and release order to production within 60 days of proposal date.

### PROPRIETARY AND CONFIDENTIAL PROPERTY OF Trane U.S. Inc. DISTRIBUTION TO OTHER THAN THE NAMED RECIPIENT IS PROHIBITED

Prepared For: Hardin Co Schools Date: April 1, 2024

Job Name: Proposal Number: P3-122733-6455-1

Lakewood Elem Heat Pumps OMNIA Quote Number: P3-ce8AAC-24-001

Delivery Terms: OMNIA Contract Number: OMNIA Region 4 R221505 Freight Allowed and Prepaid - F.O.B. Factory

Payment Terms: Net 30 Days

Trane U.S. Inc. is pleased to provide the following proposal for your review and approval.

Tag Data - Water-Source Comfort Systems (Qtv: 5)

Item	Tag(s)	Qty	Description	Model Number	
A1		5	Standard Efficiency WSHP	GEHE/GEVE	

### Product Data - Water-Source Comfort Systems **All Units**

208 volt/60 hertz/3 phase power supply

Copper heat exchanger

Heating and cooling refrigerant circuit

35 deg freeze protection

Symbio 500 / UC400 controller

Condensate overflow sensor

Matte Face Insulation

1" throwaway filter

Polymer drain pan

Digital zone sensor with external adjust and timed override (Field Installed)

Hose kit with isolation valve (Fld)

Filter rack with door (Fld)

Factory start up

Refrigerant circuit parts warranty 5 year 1st year parts & labor warranty whole unit

Item: A1 Qty: 1 Tag(s): A-2

Standard efficiency horizontal

7 1/2 ton nominal size

Item: A2 Qty: 1 Tag(s): A-7

Standard efficiency horizontal

7 1/2 ton nominal size

Item: A3 Qty: 1 Tag(s): A-9

Standard efficiency vertical

20 ton nominal size

Item: A4 Qty: 1 Tag(s): B-1
Standard efficiency vertical

12 1/2 ton nominal size

Item: A5 Qty: 1 Tag(s): B-5

Standard efficiency vertical

15 ton nominal size

Tag Data - Water-Source Comfort Systems (Qty: 40)

Item	Tag(s)	Qty	Description	Model Number
B1		40	Standard Efficiency WSHP	GEHG/GEVG

# Product Data - Water-Source Comfort Systems All Units

Copper heat exchanger

Heating and cooling refrigerant circuit

Variable ECM - Constant Torque supply fan motor

35 deg freeze protection

Symbio 400B / UC400B controller

Condensate overflow sensor

Matte Faced Insulation

1" throwaway filter

Polymer drain pan

Digital zone sensor with external adjust and timed override (Field Installed)

Hose kit with isolation valve (Fld)

Filter rack with door (Fld)

Factory start up

Refrigerant circuit parts warranty 5 year

1st year parts & labor warranty whole unit

### Item: B1 Qty: 1 Tag(s): A-1

Standard efficiency horizontal

2 ton nominal size

208-230/60/3

### Item: B2, B13, B18 Qty: 3 Tag(s): A-3, B-4, B-13

Standard efficiency horizontal

5 ton nominal size

208-230/60/3

### Item: B3 Qty: 1 Tag(s): A-4

Standard efficiency horizontal

2 1/2 ton nominal size

208-230/60/3

### Item: B4, B5, B21 Qty: 3 Tag(s): A-8, A-10, A-11

Standard efficiency horizontal

5 ton nominal size

208-230/60/3

### Item: B6 Qty: 1 Tag(s): A-12

Standard efficiency horizontal

3 ton nominal size

208-230/60/3

### Item: B7, B8 Qty: 2 Tag(s): A-13, A-15

Standard efficiency horizontal

3 ton nominal size

208-230/60/3

Item: B9 Qty: 1 Tag(s): A-14
Standard efficiency vertical
4 ton nominal size
208-230/60/3

### Item: B10 Qty: 1 Tag(s): B-9

Standard efficiency vertical 4 ton nominal size 208-230/60/3

### Item: B11 Qty: 1 Tag(s): B-2

Standard efficiency vertical 3 ton nominal size 208-230/60/3

### Item: B12 Qty: 1 Tag(s): B-3

Standard efficiency vertical 1 ton nominal size 208-230/60/1

### Item: B14 Qty: 1 Tag(s): B-7

Standard efficiency vertical 3 1/2 ton nominal size 208-230/60/3

### Item: B15 Qty: 1 Tag(s): B-10

Standard efficiency vertical 1 1/4 ton nominal size 208-230/60/1

### Item: B16 Qty: 1 Tag(s): B-11

Standard efficiency vertical 1/2 ton nominal size 208-230/60/1

### Item: B17, B23, B24 Qty: 3 Tag(s): B-12, B-6, B-8

Standard efficiency vertical 2 1/2 ton nominal size 208-230/60/3

### Item: B19, B20 Qty: 2 Tag(s): A-5, A-6

Standard efficiency horizontal 2 1/2 ton nominal size 208-230/60/3

### Item: B22 Qty: 1 Tag(s): A-16

Standard efficiency vertical 3 ton nominal size 208-230/60/3

### Item: B25, B26, B27, B28, B29, B30, B31, B32, B40 Qty: 9 Tag(s): C-1, C-2, C-3, C-4, C-5, C-6, C-7, C-8, C-16

Standard efficiency horizontal 3 ton nominal size 208-230/60/3

### Item: B33, B34, B39 Qty: 3 Tag(s): C-9, C-10, C-15

Standard efficiency horizontal 3 ton nominal size 208-230/60/3

Item: B35, B36, B37, B38 Qty: 4 Tag(s): C-11, C-12, C-13, C-14

Standard efficiency horizontal 2 1/2 ton nominal size 208-230/60/3

**Note:** Smoke detectors, external isolation, auxiliary drain pan, filter rack, electrical disconnect, all controls and control system integration, and accessories not listed are not included.

Fld)- field ins Fotal Net Pric Current build	e (Excluding	;)
Tax Status:	Taxable Exempt	IF EXEMPT PLEASE SUBMIT COMPLETED TAX EXEMPTION CERTIFICATE WITH YOUR SIGNED PROPOSAL OR WITH YOUR PURCHASING DOCUMENTS, KEEP YOUR ORIGINAL ON FILE IN THE OFFICE. YOU WILL BE CHARGED TAX IF A VALID EXEMPTION CERTIFICATE IS NOT ON FILE BEFORE EQUIPMENT, PARTS OR SERVICES ARE PROVIDED. SEE <a href="https://www.taxsites.com/state-links.html">www.taxsites.com/state-links.html</a> FOR TAX FORMS.

Sincerely,

Jay Faltin Trane U.S. Inc. 12700 Plantside Drive Louisville, KY 40299

Office Phone: (502) 499-7000

CUSTOMER ACCEPTANCE	TRANE ACCEPTANCE	
Hardin County Board of Education  Jeresa Morgan  Authorized Representative's Signature	Trane U.S. Inc. Submitted by: Matthew Bennett Office: (502) 499-7000 Cell: (812) 483-2829	
Printed Name	Authorized Representative's Signature	
Title Title	Printed Name	i
Purchase Order 40840524	Title	
Acceptance Date 4/11/29	Acceptance Date	-

This proposal is subject to your acceptance of the attached Trane terms and conditions.

### **TERMS AND CONDITIONS - COMMERCIAL EQUIPMENT**

"Company" shall mean Trane U.S. Inc. for sales in the United States and Trane Canada ULC for sales in Canada.

- 1. Acceptance. These terms and conditions are an integral part of Company's offer and form the basis of any agreement (the "Agreement") resulting from Company's proposal (the "Proposal") for the sale of the described commercial equipment and any anciliary services (the "Equipment"). COMPANY'S TERMS AND CONDITIONS AND EQUIPMENT PRICES ARE SUBJECT TO PERIODIC CHANGE OR AMENDMENT. The Proposal is subject to acceptance in writing by the party to whom this offer is made or an authorized agent ("Customer") delivered to Company within 15 days from the date of the Proposal. Prices in the Proposal are subject to change at any time upon notice to Customer. If Customer accepts the Proposal by placing an order, without the addition of any other terms and conditions of sale or any other modification, Customer's order shall be deemed acceptance of the Proposal subject to Company's terms and conditions. If Customer's order is expressly conditioned upon Company's acceptance or assent to terms and/or conditions other than those expressed herein, return of such order by Company with Company's terms and conditions attached or referenced serves as Company's notice of objection to Customer's terms and as Company's counteroffer to provide Equipment in accordance with the Proposal and the Company's terms and conditions. If Customer does not reject or object in writing to Company within 10 days, Company's counteroffer will be deemed accepted. Notwithstanding anything to the contrary herein, Customer's acceptance of the Equipment will in any event constitute an acceptance by Customer of Company's terms and conditions. This Agreement is subject to credit approval by Company. Upon disapproval of credit, Company may delay or suspend performance or, at its option, renegotiate prices and/or terms and conditions with Customer. If Company and Customer are unable to agree on such revisions, this Agreement shall be cancelled without any liability.
- 2. Connected Services. In addition to these terms and conditions, the Connected Services Terms of Service ("Connected Services Terms"), available at https://www.trane.com/TraneConnectedServicesTerms, as updated from time to time, are incorporated herein by reference and shall apply to the extent that Company provides Customer with Connected Services, as defined in the Connected Services Terms.
- 3. Title and Risk of Loss. All Equipment sales with destinations to Canada or the U.S. shall be made as follows: FOB Company's U.S. manufacturing facility or warehouse (full freight allowed). Title and risk of loss or damage to Equipment will pass to Customer upon tender of delivery of such to carrier at Company's U.S. manufacturing facility or warehouse.
- 4. Pricing and Taxes., Within forty-five (45) days following Customer acceptance of the Proposal without addition of any other terms and conditions of sale or any modification, Customer shall provide notification of release for immediate production at Company's factory. Prices for Equipment are subject to change at any time prior to shipment to reflect any cost increases related to the manufacture, supply, and shipping of Equipment. This includes, but is not limited to, cost increases in raw materials supplier components, labor, utilities, freight, logistics, wages and benefits, regulatory compliance, or any other event beyond Company's control. If shipment is delayed due to Customer's actions, Company may also charge Customer with storage fees. If a release is not received within 6 months following order acceptance, Company reserves the right to cancel any order. Company shall be entitled to equitable adjustments in the contract price to reflect any cost increases as set forth above and will provide notice to Customer prior to the date for which the increased price is to be in effect for the applicable customer contract. In no event will prices be decreased. The price of Equipment does not include any present or future foreign, federal, state, or local property, license, privilege, sales, use, excise, value added, gross receipts or other like taxes or assessments. Such amounts will be itemized separately to Customer, who will make prompt payment to Company. Company will accept valid exemption documentation for such taxes and assessments from Customer, if applicable. All prices include packaging in accordance with Company's standard procedures. Charges for special packaging, crating or packing are the responsibility of Customer.
- 5. Delivery and Delays. Delivery dates are approximate and not guaranteed. Company will use commercially reasonable efforts to deliver the Equipment on or before the estimated delivery date, will notify Customer if the estimated delivery dates cannot be honored, and will deliver the Equipment and services as soon as practicable thereafter. In no event will Company be liable for any damages or expenses caused by delays in delivery.
- 6. Performance. Company shall be obligated to furnish only the Equipment described in the Proposal and in submittal data (if such data is issued in connection with the order). Company may rely on the acceptance of the Proposal and submittal data as acceptance of the suitability of the Equipment for the particular project or location. Unless specifically stated in the Proposal, compliance with any local building codes or other laws or regulations relating to specifications or the location, use or operation of the Equipment is the sole responsibility of Customer. If Equipment is tendered that does not fully comply with the provisions of this Agreement and Equipment is rejected by Customer, Company will have the right to cure within a reasonable time after notice thereof by substituting a conforming tender whether or not the time for performance has passed.
- 7. Force Majeure. Company's duty to perform under this Agreement and the Equipment prices are contingent upon the non-occurrence of an Event of Force Majeure. If the Company shall be unable to carry out any material obligation under this Agreement due to an Event of Force Majeure, this Agreement shall at Company's election (i) remain in effect but Company's obligations shall be suspended until the uncontrollable event terminates or (ii) be terminated upon 10 days' notice to Customer, in which event Customer shall pay Company for all parts of the Work furnished to the date of termination. An "Event of Force Majeure" shall mean any cause or event beyond the control of Company. Without limiting the foregoing, "Event of Force Majeure" includes: acts of God; acts of terrorism, war or the public enemy; flood; earthquake; tomado; storm; fire; civil disobedience; pandemic insurrections; riots; labor/labour disputes; labor/labour or material shortages; sabotage; restraint by court order or public authority (whether valid or invalid); and action or non-action by or inability to obtain or keep in force the necessary governmental authorizations, permits, licenses, certificates or approvals if not caused by Company; and the requirements of any applicable government in any manner that diverts either the material or the finished product to the direct or indirect benefit of the government.
- 8. Limited Warranty. Company warrants the Equipment manufactured by Company for a period of the lesser of 12 months from initial start-up or 18 months from date of shipment, whichever is less, against failure due to defects in material and manufacture and that it has the capacities and ratings set forth in Company's catalogs and bulletins ("Warranty"). Equipment manufactured by Company that includes required start-up and sold in North America will not be warranted by Company unless Company performs the Equipment startup. Exclusions from this Warranty include damage or failure arising from: wear and tear; corrosion, erosion, deterioration; modifications made by others to the Equipment; repairs or alterations by a party other than Company that adversely affects the stability or reliability of the Equipment; vandalism; neglect; accident; adverse weather or environmental conditions; abuse or improper use; improper installation; commissioning by a party other than Company; unusual physical or electrical or mechanical stress; operation with any accessory, equipment or part not specifically approved by Company; refrigerant not supplied by Company, and/or lack of proper maintenance as recommended by Company. Company shall not be obligated to pay for the cost of lost refrigerant or lost product. Company's obligations and liabilities under this Warranty are limited to furnishing replacement equipment or parts, at its option, FCA (Incoterms 2000) factory or warehouse (f.o.b. factory or warehouse for US domestic purposes) at Company-designated shipping point, freight-allowed to Company's warranty agent's stock location, for all nonconforming Company-manufactured Equipment (which have been returned by Customer to Company). Returns must have prior written approval by Company and are conforming Company-manufactured Equipment (which have been returned by Customer to Company). Returns must have prior written approval by Company and are subject to restocking charge where applicable. Equipment, material and/or parts that are not manufactured by Company ("Third-Party Product(s)") are not warranties to Company and have such warranties as may be extended by the respective manufacturer. CUSTOMER UNDERSTANDS THAT COMPANY IS NOT THE MANUFACTURER OF ANY THIRD-PARTY PRODUCT(S) AND ANY WARRANTIES, CLAIMS, STATEMENTS, REPRESENTATIONS, OR SPECIFICATIONS ARE THOSE OF THE THIRD-PARTY MANUFACTURER, NOT COMPANY AND CUSTOMER IS NOT RELYING ON ANY WARRANTIES, CLAIMS, STATEMENTS, REPRESENTATIONS, OR SPECIFICATIONS REGARDING THE THIRD-PARTY PRODUCT THAT MAY BE PROVIDED BY COMPANY OR ITS AFFILIATES, WHETHER ORAL OR WRITTEN. COMPANY MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, INCLUDING WARRANTY OF MERCHANTABILITY. OR FITNESS FOR PARTICULAR PURPOSE ADDITIONALLY, COMPANY MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND REGARDING PREVENTING., ELIMINATING, REDUCING OR INHIBITING ANY MOLD, FUNGUS, BACTERIA, VIRUS, MICROBIAL GROWTH, OR ANY OTHER CONTAMINANTS (INCLUDING COVID-19 OR ANY SIMILAR VIRUS) (COLLECTIVELY, "CONTAMINANTS"), WHETHER INVOLVING OR IN CONNECTION WITH EQUIPMENT, ANY COMPONENT THEREOF, SERVICES OR OTHERWISE. IN NO EVENT SHALL COMPANY HAVE ANY LIABILITY FOR THE PREVENTION, ELIMINATION, REDUCTION OR INHIBITION OF THE GROWTH OR SPREAD OF SUCH CONTAMINANTS INVOLVING OR IN CONNECTION WITH ANY EQUIPMENT, THIRD-PARTY PRODUCT, OR ANY COMPONENT THEREOF, SERVICES OR OTHERWISE AND CUSTOMER HEREBY SPECIFICALLY ACKNOWLDES AND AGREES THERETO. No warranty liability whatsoever shall attach to Company until Customer's complete order has been paid for in full and Company liability under this Warranty shall be limited to the purchase price of the Equipment shown to be defective. Additional warranty protection is available on an extra-cost basis and must be in writing and agreed to by an authorized signatory of the Company. EXCEPT FOR COMPANY'S WARRANTY EXPRESSLY SET FORTH HEREIN, COMPANY DOES NOT MAKE, AND HEREBY EXPRESSLY DISCLAIMS, ANY WARRANTIES, EXPRESS OR IMPLIED CONCERNING ITS PRODUCTS, EQUIPMENT OR SERVICES, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF DESIGN, MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, OR OTHERS THAT ARE ALLEGED TO ARISE FROM COURSE OF DEALING OR TRADE.
- 9. Indemnity. To the fullest extent permitted by law, Company and Customer shall indemnify, defend and hold harmless each other from any and all claims, actions, costs, expenses, damages and liabilities, including reasonable attorneys' fees, resulting from death or bodily injury or damage to real or personal property, to the extent caused by the negligence or misconduct of their respective employees or other authorized agents in connection with their activities within the scope of this Agreement. Neither party shall indemnify the other against claims, damages, expenses or liabilities to the extent attributable to the acts or omissions of the other party. If the parties are both at fault, the obligation to indemnify shall be proportional to their relative fault. The duty to indemnify will continue in full force and effect, notwithstanding the expiration or early termination hereof, with respect to any claims based on facts or conditions that occurred prior to expiration or termination.

- 10. Insurance. Upon request, Company will furnish evidence of its standard insurance coverage. If Customer has requested to be named as an additional insured under Company's insurance policy, Company will do so but only subject to Company's manuscript additional insured endorsement under its primary Commercial General Liability policies. In no event does Company waive any rights of subrogation.
- 11. Customer Breach. Each of the following events or conditions shall constitute a breach by Customer and shall give Company the right, without an election of remedies, to terminate this Agreement, require payment prior to shipping, or suspend performance by delivery of written notice: (1) Any failure by Customer to pay amounts when due; (2) any general assignment by Customer for the benefit of its creditors, or if Customer becomes bankrupt or insolvent or takes the benefit of any statute for bankrupt or insolvent debtors, or makes or proposes to make any proposal or arrangement with creditors, or if any steps are taken for the winding up or other termination of Customer or the liquidation of its assets, or if a trustee, receiver, or similar person is appointed over any of the assets or interests of Customer; (3) Any representation or warranty furnished by Customer in connection with this Agreement is false or misleading in any material respect when made; or (4) Any failure by Customer to perform or comply with any material provision of this Agreement. Customer shall be liable to the Company for all Equipment furnished and all damages sustained by Company (including lost profit and overhead).
- (Including lost profit and overnead).

  12. Limitation of Liability. NOTWITHSTANDING ANYTHING TO THE CONTRARY, IN NO EVENT SHALL COMPANY BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT CONSEQUENTIAL, PUNITIVE, EXEMPLARY DAMAGES (INCLUDING WITHOUT LIMITATION REFRIGERANT LOSS, BUSINESS INTERRUPTION, LOST DATA, LOST REVENUE, LOST PROFITS),OR CONTAMINANTS LIABILITIES, EVEN IF A PARTY HAS BEEN ADVISED OF SUCH POSSIBLE DAMAGES OR IF SAME WERE REASONABLY FORESEEABLE AND REGARDLESS OF WHETHER THE CAUSE OF ACTION IS FRAMED IN CONTRACT, NEGLIGENCE, ANY OTHER TORT, WARRANTY, STRICT LIABILITY, OR PRODUCT LIABILITY. In no event will Company's liability in connection with the provision of products or services or otherwise under this Agreement exceed the entire amount paid to Company by Customer under this Agreement.

  13. CONTAMINANTS LIABILITY
- The transmission of COVID-19 may occur in a variety of ways and circumstances, many of the aspects of which are currently not known. HVAC systems, products, services and other offerings have not been tested for their effectiveness in reducing the spread of COVID-19, including through the air in closed environments. IN NO EVENT WILL COMPANY BE LIABLE UNDER THIS AGREEMENT OR OTHERWISE FOR ANY INDEMNIFICATION, ACTION, OR CLAIM, WHETHER BASED ON WARRANTY, CONTRACT, TORT OR OTHERWISE, FOR ANY BODILY INJURY (INCLUDING DEATH), DAMAGE TO PROPERTY, OR ANY OTHER LIABILITIES, DAMAGES OR COSTS RELATED TO CONTAMINANTS (INCLUCING THE SPREAD, TRANSMISSION, MITIGATION, ELIMINATION, OR CONTAMINATION THEREOF) (COLLECTIVELY, "CONTAMINANTS LIABILITIES") AND CUSTOMER HEREBY EXPRESSLY RELEASES COMPANY FROM ANY SUCH CONTAMINANTS LIABILITIES.
- 14. Nuclear Liability. In the event that the Equipment sold hereunder is to be used in a nuclear facility, Customer will, prior to such use, arrange for insurance or governmental indemnity protecting Company against all liability and hereby releases and agrees to indemnify Company and its suppliers for any nuclear damage, including loss of use, in any manner arising out of a nuclear incident, whether alleged to be due, in whole or in part to the negligence or otherwise of Company or its suppliers.
- loss of use, in any manner arising out of a nuclear incident, whether alleged to be due, in whole or in part to the negligence or otherwise of Company or its suppliers.

  15. Intellectual Property; Patent Indemnity. Company retains all ownership, license and other rights to all patents, trademarks, copyrights, trade secrets and other intellectual property intellectual property intellectual property intellectual property of the Equipment sold, Customer obtains no rights to use any such intellectual property. Company agrees to defend any suit or proceeding brought against Customer so far as such suit or proceeding is solely based upon a claim that the use of the Equipment provided by Company constitutes infringement of any patent of the United States of America, provided Company is promptly notified in writing and given authority, information and assistance for defense of same. Company will, at its option, procure for Customer the right to continue to use said Equipment, or modify it so that it becomes non-infringing, or replace same with non-infringing Equipment, or to remove said Equipment and to refund the purchase price. The foregoing will not be construed to include any Agreement by Company to accept any liability whatsoever in respect to patents for inventions including more than the Equipment furnished hereunder, or in respect of patents for methods and processes to be carried out with the aid of said Equipment. The provision of Equipment by Company does not convey any license, by implication, estoppel, or otherwise, under patent claims covering combinations of said Equipment with other devices or elements. The foregoing states the entire liability of Company with regard to patents infringement. Notwithstanding the provisions of this paragraph, Customer will hold Company hamiless against any expense or loss resulting from infringement of patents or trademarks arising from compliance with Customer's designs or specifications or instructions.
- 16. Cancellation. Equipment is specially manufactured in response to orders. An order placed with and accepted by Company cannot be delayed, canceled, suspended, or extended except with Company's written consent and upon written terms accepted by Company that will reimburse Company for and indemnify Company against loss and provide Company with a reasonable profit for its materials, time, labor, services, use of facilities and otherwise. Customer will be obligated to accept any Equipment shipped, tendered for delivery or delivered by Company pursuant to the order prior to any agreed delay, cancellation, suspension or extension of the order. Any attempt by Customer to unilaterally revoke, delay or suspend acceptance for any reason whatever after it has agreed to delivery of or accepted any shipment shall constitute a breach of this Agreement. For purposes of this paragraph, acceptance occurs by any waiver of inspection, use or possession of Equipment, payment of the invoice, or any indication of exclusive control exercised by Customer.
- 17. Invoicing and Payment. Unless otherwise agreed to in writing by Company, equipment shall be invoiced to Customer upon tender of delivery thereof to the carrier. Customer shall pay Company's invoices within net 30 days of shipment date. Company reserves the right to add to any account outstanding for more than 30 days a service charge equal to the lesser of the maximum allowable legal interest rate or 1.5% of the principal amount due at the end of each month. Customer shall pay all costs (including attorneys' fees) incurred by Company in attempting to collect amounts due and otherwise enforcing these terms and conditions. If requested, Company will provide appropriate lien waivers upon receipt of payment. Company may at any time decline to ship, make delivery or perform work except upon receipt of cash payment, letter of credit, or security, or upon other terms and conditions satisfactory to Company. Customer agrees that, unless Customer makes payment in advance, Company will have a purchase money security interest in all Equipment to secure payment in full of all amounts due Company and its order for the Equipment, together with these terms and conditions, form a security agreement (as defined by the UCC in the United States and as defined in the Personal Property Security Act in Canada). Customer shall keep the Equipment free of all taxes and encumbrances, shall not remove the Equipment from its original installation point and shall not assign or transfer any interest in the Equipment until all payments due Company have been made. The purchase money security interest granted herein attaches upon Company's acceptance of Customer's order and on receipt of the Equipment described in the accepted Proposal but prior to its installation. The parties have no agreement to postpone the time for attachment unless specifically noted in writing on the accepted order. Customer will have no rights of set off against any amounts, which become payable to Company under this Agreement or otherwise.
- 18. Claims. Company will consider claims for concealed shortages in shipments or rejections due to failure to conform to an order only if such claims or rejections are made in writing within 15 days of delivery and are accompanied by the packing list and, if applicable, the reasons in detail why the Equipment does not conform to Customer's order. Upon receiving authorization and shipping instructions from authorized personnel of Company, Customer may return rejected Equipment, transportation charges prepaid, for replacement. Company may charge Customer any costs resulting from the testing, handling, and disposition of any Equipment returned by Customer which are not found by Company to be nonconforming. All Equipment damaged during shipment and all claims relating thereto must be made with the freight carrier in accordance with such carrier's policies and procedures. Claims for Equipment damaged during shipment are not covered under the warranty provision stated herein.
- 19. Export Laws. The obligation of Company to supply Equipment under this Agreement is subject to the ability of Company to supply such items consistent with applicable laws and regulations of the United States and other governments. Company reserves the right to refuse to enter into or perform any order, and to cancel any order, under this Agreement if Company in its sole discretion determines that performance of the transaction to which such order relates would violate any such applicable law or regulation. Customer will pay all handling and other similar costs from Company's factories including the costs of freight, insurance, export clearances, import duties and taxes. Customer will be "exporter of record" with respect to any export from the United States of America and will perform all compliance and logistics functions in connection therewith and will also comply with all applicable laws, rules and regulations. Customer understands that Company and/or the Equipment are subject to laws and regulations of the United States of America which may require licensing or authorization for and/or prohibit export, re-export or diversion of Company's Equipment to certain countries, and agrees it will not knowingly assist or participate in any such diversion or other violation of applicable United States of America laws and regulations. Customer agrees to hold harmless and indemnify Company for any damages resulting to Customer or Company from a breach of this paragraph by Customer.

  20. General. Except as provided below, to the maximum extent provided by law, this Agreement is made and shall be interpreted and enforced in accordance with the
- 20. General. Except as provided below, to the maximum extent provided by law, this Agreement is made and shall be interpreted and enforced in accordance with the laws of the state of New York for Equipment shipped to a U.S. location and the laws of the province to which Equipment is shipped within Canada, without regard to its conflict of law principles that might otherwise call for the application of a different state's or province's law, and not including the United Nations Convention on Contracts for the International Sale of Goods. Any action or suit arising out of or related to this Agreement must be commenced within one year after the cause of action has accrued. To the extent the Equipment is being used at a site owned and/or operated by any agency of the Federal Government, determination of any substantive issue of law shall be according to the Federal common law of Government contracts as enunciated and applied by Federal judicial bodies and boards of contract appeals of the Federal Government. This Agreement contains all of the agreements, representations and understandings of the parties and supersedes all previous understandings, commitments or agreements, oral or written, related to the subject matter hereof. This Agreement may not be amended, modified or terminated except by a writing signed by the parties hereto. No documents shall be incorporated herein by reference except to the extent Company is a signatory thereon. If any term or condition of this Agreement is invalid, illegal or incapable of being enforced by any rule of law, all other terms and conditions of this Agreement will nevertheless remain in full force and effect as long as the economic or legal substance of the transaction contemplated hereby is not affected in a manner adverse to any party hereto. Customer may not assign, transfer, or convey this Agreement, or any part hereof, or its right, title or interest herein, without the written consent of the Company. Subject to the foregoing, this Agreement shall be binding upon and inur

shall be deemed to be an original, but all together shall constitute but one and the same Agreement. A fully executed facsimile copy hereof or the several counterparts shall suffice as an original.

21. Equal Employment Opportunity/Affirmative Action Clause. Company is a federal contractor that complies fully with Executive Order 11246, as amended, and the applicable regulations contained in 41 C.F.R. Parts 60-1 through 60-60, 29 U.S.C. Section 793 and the applicable regulations contained in 41 C.F.R. Part 60-741; and 38 U.S.C. Section 4212 and the applicable regulations contained in 41 C.F.R. Part 60-250 Executive Order 13496 and Section 29 CFR 471, appendix A to subpart A, regarding the notice of employee rights in the United States and with Canadian Charter of Rights and Freedoms Schedule B to the Canada Act 1982 (U.K.) 1982, c. 11 and applicable Provincial Human Rights Codes and employment law in Canada.

### 22. U.S. Government Work.

The following provision applies only to direct sales by Company to the US Government. The Parties acknowledge that Equipment ordered and delivered under this Agreement are Commercial Items as defined under Part 12 of the Federal Acquisition Regulation (FAR). In particular, Company agrees to be bound only by those Federal contracting clauses that apply to "commercial" suppliers and that are contained in FAR 52.212-5(e)(1).

The following provision applies only to indirect sales by Company to the US Government. As a Commercial Item Subcontractor, Company accepts only the following mandatory flow down provisions: 52.219-8; 52.222-36; 52.222-36; 52.222-39; 52.227-64. If the sale of the Equipment is in connection with a U.S. Government contract, Customer certifies that it has provided and will provide current, accurate, and complete information, representations and certifications to all government officials, including but not limited to the contracting officer and officials of the Small Business Administration, on all matters related to the prime contract, including but not limited to all aspects of its ownership, eligibility, and performance. Anything herein notwithstanding, Company will have no obligations to Customer unless and until Customer provides Company with a true, correct and complete executed copy of the prime contract. Upon request, Customer will provide copies to Company of all requested written communications with any government official related to the prime contract prior to or concurrent with the execution thereof, including but not limited to any communications related to Customer's ownership, eligibility or performance of the prime contract. Customer will obtain written authorization and approval from Company prior to providing any government official any information about Company's performance of the work that is the subject of the Proposal or this Agreement, other than the Proposal or this Agreement.

23. Limited Walver of Sovereign Immunity. If Customer is an Indian tribe (in the U.S.) or a First Nation or Band Council (in Canada), Customer, whether acting in its capacity as a government, governmental entity, a duly organized corporate entity or otherwise, for itself and for its agents, successors, and assigns: (1) hereby provides this limited waiver of its sovereign immunity as to any damages, claims, lawsuit, or cause of action (herein "Action") brought against Customer by Company and arising or alleged to arise out of the furnishing by Company of any product or service under this Agreement, whether such Action is based in contract, tort, strict liability, or any other legal theory; (2) agrees that jurisdiction and venue for any such Action shall be proper and valid (a) if Customer is in the U.S., in any state or United States court located in the state in which Company is performing this Agreement or (b) if Customer is in Canada, in the superior court of the province or territory in which the work was performed; (3) expressly consents to such Action, and waives any objection to jurisdiction or venue; (4) waives any requirement of exhaustion of tribal court administrative remedies for any Action arising out of or related to this Agreement; and (5) expressly acknowledges and agrees that Company is not subject to the jurisdiction of Customer's tribal court or any similar tribal forum, that Customer will not bring any action against Company in tribal court, and that Customer will not avail itself of any ruling or direction of the tribal court permitting or directing it to suspend its payment or other obligations under this Agreement. The individual signing on behalf of Customer warrants and represents that such individual is duly authorized to provide this waiver and enter into this Agreement and that this Agreement constitutes the valid and legally binding obligation of Customer, enforceable in accordance with its terms.

1-26.130-4 (0622) Supersedes 1-26.130-4(1221b)

### **SECURITY ADDENDUM**

This Addendum shall be applicable to the sale, installation and use of Trane equipment and the sale and provision of Trane services. "Trane" shall mean Trane U.S. Inc. for sales and services in the United States, or Trane Canada ULC for sales and services in Canada.

 <u>Definitions</u>. All terms used in this Addendum shall have the meaning specified in the Agreement unless otherwise defined herein. For the purposes of this Addendum, the following terms are defined as follows:

"<u>Customer Data</u>" means Customer account information as related to the Services only and does not include HVAC Machine Data or personal data. Trane does not require, nor shall Customer provide personal data to Trane under the Agreement. Such data is not required for Trane to provide its Equipment and/or Services to the Customer.

"Equipment" shall have the meaning set forth in the Agreement.

"HVAC Machine Data" means data generated and collected from the product or furnished service without manual entry. HVAC Machine Data is data relating to the physical measurements and operating conditions of a HVAC system, such as but not limited to, temperatures, humidity, pressure, HVAC equipment status. HVAC Machine Data does not include Personal Data and, for the purposes of this agreement, the names of users of Trane's controls products or hosted applications shall not be Personal Data, if any such user chooses to use his/her name(s) in the created accounts within the controls product (e.g., firstname.lastname@address.com). HVAC Machine Data may be used by Trane: (a) to provide better support services and/or products to users of its products and services; (b) to assess compliance with Trane terms and conditions; (c) for statistical or other analysis of the collective characteristics and behaviors of product and services users; (d) to backup user and other data or information and/or provide remote support and/or restoration; (e) to provide or undertake: engineering analysis; failure analysis; warranty analysis; energy analysis; predictive analysis; service analysis; product usage analysis; and/or other desirable analysis, including, but not limited to, histories or trends of any of the foregoing; and (f) to otherwise understand and respond to the needs of users of the product or furnished service. "Personal Data" means data and/or information that is owned or controlled by Customer, and that names or identifies, or is about a natural person, such as: (i) data that is explicitly defined as a regulated category of data under any data privacy laws applicable to Customer; (ii) non-public personal information ("NPI") or personal information ("PI"), such as national identification number, passport number, social security number, social insurance number, or driver's license number; (iii) health or medical information, such as insurance information, medical prognosis, diagnosis information, or genetic information; (iv) financial information, such as a policy number, credit card number, and/or bank account number; (v) personally identifying technical information (whether transmitted or stored in cookies, devices, or otherwise), such as IP address, MAC address, device identifier, International Mobile Equipment Identifier ("IMEI"), or advertising identifier; (vi) biometric information; and/or (vii) sensitive personal data, such as, race, religion, marital status, disability, gender, sexual orientation, geolocation, or mother's maiden name.

"Security Incident" shall refer to (i) a compromise of any network, system, application or data in which Customer Data has been accessed or acquired by an unauthorized third party; (ii) any situation where Trane reasonably suspects that such compromise may have occurred; or (iii) any actual or reasonably suspected unauthorized or illegal Processing, loss, use, disclosure or acquisition of or access to any Customer Data.

"Services" shall have the meaning set forth in the Agreement.

- HVAC Machine Data; Access to Customer Extranet and Third Party Systems. If Customer grants Trane access to HVAC Machine
  Data via web portals or other non-public websites or extranet services on Customer's or a third party's website or system (each,
  an "Extranet"), Trane will comply with the following:
  - a. Accounts. Trane will ensure that Trane's personnel use only the Extranet account(s) designated by Customer and will require Trane personnel to keep their access credentials confidential.
  - b. <u>Systems</u>. Trane will access the Extranet only through computing or processing systems or applications running operating systems managed by Trane that include: (i) system network firewalls; (ii) centralized patch management; (iii) operating system appropriate anti-malware software; and (iv) for portable devices, full disk encryption.
  - c. <u>Restrictions</u>. Unless otherwise approved by Customer in writing, Trane will not download, mirror or permanently store any HVAC Machine Data from any Extranet on any medium, including any machines, devices or servers.
  - d. <u>Account Termination</u>. Trane will terminate the account of each of Trane's personnel in accordance with Trane's standard practices after any specific Trane personnel who has been authorized to access any Extranet (1) no longer needs access to HVAC Machine Data or (2) no longer qualifies as Trane personnel (e.g., the individual leaves Trane's employment)
  - e. <u>Third Party Systems</u>. Trane will provide Customer prior notice before it uses any third party system that stores or may otherwise have access to HVAC Machine Data, unless (1) the data is encrypted and (2) the third party system will not have access to the decryption key or unencrypted "plain text" versions of the HVAC Machine Data.
- 3. <u>Customer Data; Confidentiality</u>. Trane shall keep confidential, and shall not access or use any Customer Data and information that is marked confidential or by its nature is considered confidential ("Customer Confidential Information") other than for the purpose of providing the Equipment and Services, and will disclose Customer Confidential Information only: (i) to Trane's employees and agents who have a need to know to perform the Services, (ii) as expressly permitted or instructed by Customer,

- or (iii) to the minimum extent required to comply with applicable law, provided that Trane (1) provides Customer with prompt written notice prior to any such disclosure, and (2) reasonably cooperate with Customer to limit or prevent such disclosure.
- Customer Data; Compliance with Laws. Trane agrees to comply with laws, regulations governmental requirements and industry standards and practices relating to Trane's processing of Customer Confidential Information (collectively, "Laws").
- 5. <u>Customer Data; Information Security Management</u>. Trane agrees to establish and maintain an information security and privacy program, consistent with applicable HVAC equipment industry practices that complies with this Addendum and applicable Laws ("Information Security Program"). The Information Security Program shall include appropriate physical, technical and administrative safeguards, including any safeguards and controls agreed by the Parties in writing, sufficient to protect Customer systems, and Customer's Confidential Information from unauthorized access, destruction, use, modification or disclosure. The Information Security Program shall include appropriate, ongoing training and awareness programs designed to ensure that Trane's employees and agents, and others acting on Trane's, behalf are aware of and comply with the Information Security Program's policies, procedures, and protocols.
- 6. Monitoring. Trane shall monitor and, at regular intervals consistent with HVAC equipment industry practices, test and evaluate the effectiveness of its Information Security Program. Trane shall evaluate and promptly adjust its Information Security Program in light of the results of the testing and monitoring, any material changes to its operations or business arrangements, or any other facts or circumstances that Trane knows or reasonably should know may have a material impact on the security of Customer Confidential Information, Customer systems and Customer property.
- Audits. Customer acknowledges and agrees that the Trane SOC2 audit report will be used to satisfy any and all audit/inspection requests/requirements by or on behalf of Customer. Trane will make its SOC2 audit report available to Customer upon request and with a signed nondisclosure agreement.
- 8. <u>Information Security Contact</u>. Trane's information security contact is Local Sales Office.
- Security Incident Management. Trane shall notify Customer after the confirmation of a Security Incident that affects Customer
  Confidential Information, Customer systems and Customer property. The written notice shall summarize the nature and scope
  of the Security Incident and the corrective action already taken or planned.
- 10. Threat and Vulnerability Management. Trane regularly performs vulnerability scans and addresses detected vulnerabilities on a risk basis. Periodically, Trane engages third-parties to perform network vulnerability assessments and penetration testing. Vulnerabilities will be reported in accordance with Trane's cybersecurity vulnerability reported process. Trane periodically provides security updates and software upgrades.
- 11. Security Training and Awareness. New employees are required to complete security training as part of the new hire process and receive annual and targeted training (as needed and appropriate to their role) thereafter to help maintain compliance with Security Policies, as well as other corporate policies, such as the Trane Code of Conduct. This includes requiring Trane employees to annually re-acknowledge the Code of Conduct and other Trane policies as appropriate. Trane conducts periodic security awareness campaigns to educate personnel about their responsibilities and provide guidance to create and maintain a secure workplace.
- Secure Disposal Policies. Policies, processes, and procedures regarding the disposal of tangible and intangible property containing Customer Confidential Information so that wherever possible, Customer Confidential Information cannot be practicably read or reconstructed.
- 13. <u>Logical Access Controls</u>. Trane employs internal monitoring and logging technology to help detect and prevent unauthorized access attempts to Trane's corporate networks and production systems. Trane's monitoring includes a review of changes affecting systems' handling authentication, authorization, and auditing, and privileged access to Trane production systems. Trane uses the principle of "least privilege" (meaning access denied unless specifically granted) for access to customer data.
- 14. <u>Contingency Planning/Disaster Recovery</u>. Trane will implement policies and procedures required to respond to an emergency or other occurrence (i.e. fire, vandalism, system failure, natural disaster) that could damage Customer Data or any system that contains Customer Data. Procedures include the following
  - (i) data backups; and
  - (ii) formal disaster recovery plan. Such disaster recovery plan is tested at least annually.
- 15. Return of Customer Data. If Trane is responsible for storing or receiving Customer Data, Trane shall, at Customer's sole discretion, deliver Customer Data to Customer in its preferred format within a commercially reasonable period of time following the expiration or earlier termination of the Agreement or, such earlier time as Customer requests, securely destroy or render unreadable or undecipherable each and every original and copy in every media of all Customer's Data in Trane's possession, custody or control no later than [90 days] after receipt of Customer's written instructions directing Trane to delete the Customer Data.

- 16. <u>Background checks</u> Trane shall take reasonable steps to ensure the reliability of its employees or other personnel having access to the Customer Data, including the conducting of appropriate background and/or verification checks in accordance with Trane policies.
- 17. <u>DISCLAIMER OF WARRANTIES</u>. EXCEPT FOR ANY APPLICABLE WARRANTIES IN THE AGREEMENT, THE SERVICES ARE PROVIDED "AS IS", WITH ALL FAULTS, AND THE ENTIRE RISK AS TO SATISFACTORY QUALITY, PERFORMANCE, ACCURACY AND EFFORT AS TO SUCH SERVICES SHALL BE WITH CUSTOMER. TRANE DISCLAIMS ANY AND ALL OTHER EXPRESS OR IMPLIED REPRESENTATIONS AND WARRANTIES WITH RESPECT TO THE SERVICES AND THE SERVICES PROVIDED HEREUNDER, INCLUDING ANY EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR THAT THE SERVICES WILL OPERATE ERROR-FREE OR UNINTERRUPTED OR RETURN/RESPONSE TO INQUIRIES WITHIN ANY SPECIFIC PERIOD OF TIME.

November 2023

# TRANE

### Proposal

### Proposal is valid for 15 days.

Customer must obtain credit approval and release order to production within 60 days of proposal date.

# PROPRIETARY AND CONFIDENTIAL PROPERTY OF Trane U.S. Inc. DISTRIBUTION TO OTHER THAN THE NAMED RECIPIENT IS PROHIBITED

Prepared For: Hardin County Schools

Date: April 1, 2024

Job Name:

Proposal Number: P3-122744-6358-1

New Highland WSHP

Delivery Terms:

OMNIA Quote Number: P3-ce8AAC-24-001 OMNIA Contract Number: OMNIA Region 4 R221505

Freight Allowed and Prepaid - F.O.B. Factory

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Payment Terms: Net 30 Days

Trane U.S. Inc. is pleased to provide the following proposal for your review and approval.

Tag Data - Water-Source Comfort Systems (Qty: 3)

Item	Tag(s)	Qty	Description	Model Number
A1		3	Standard Efficiency WSHP (GEHV)	GEVE

# Product Data - Water-Source Comfort Systems All Units

Copper heat exchanger
Heating and cooling refrigerant circuit with hot gas reheat
Symbio 500 / UC400 Wireless Comm
Condensate overflow sensor
Matte Face Insulation
2" MERV 13 filter
Polymer drain pan
Humidity sensor (Field Installed)
Trane Air-Fi - WCS-SD (display) (Field Installed)
24" hose kit with isolation valve (Field installed)
Factory start up

Refrigerant circuit parts warranty5 year 1st year parts & labor warranty whole unit

Item: A1 Qty: 1 Tag(s): HP-46
Standard efficiency vertical
10 ton nominal size

Item: A2 Qty: 1 Tag(s): HP-45
Standard efficiency vertical
10 ton nominal size

Item: A3 Qty: 1 Tag(s): HP-47
Standard efficiency vertical
15 ton nominal size

Tag Data - Water-Source Comfort Systems (Qty: 44)

ltem	Tag(s)	Qty	Description	Model Number
B1		44	Standard Efficiency WSHP (GEX)	GEHG

## Product Data - Water-Source Comfort Systems All Units

Copper heat exchanger

Heating and cooling refrigerant circuit

Symbio 400B / UC400B Air-FI

Condensate overflow sensor

Matte Faced Insulation

1" filter

Polymer drain pan

Trane Air-Fi - WCS-SD (display) (Field Installed)

24" hose kit with isolation valve (Field installed)

Factory start up

Refrigerant circuit parts warranty 5 year

1st year parts & labor warranty whole unit

Item: B1 Qty: 2 Tag(s):

2 1/2 ton nominal size

Item: B2 Qty: 23

2 ton nominal size

Item: B3 Qty: 5 Tag(s):

1 ton nominal size

Item: B4 Qty: 2 Tag(s):

1 1/4 ton nominal size

Item: B5 Qty: 2 Tag(s):

1 1/2 ton nominal size

Item: B6 Qty: 1 Tag(s):

4 ton nominal size

Item: B7 Qty: 8 Tag(s):

3 ton nominal size

Item: B8 Qty: 1 Tag(s): H042

3 1/2 ton nominal size

**Note:** Smoke detectors, external isolation, auxiliary drain pan, filter rack, bypass line in hose kit, electrical disconnect, and accessories not listed are not included.

ax Status:	Taxable Exempt	IF EXEMPT PLEASE SUBMIT COMPLETED TAX EXEMPTION CERTIFICATE WITH YOUR SIGNED PROPOSAL OR WITH YOUR PURCHASING DOCUMENTS, KEEP YOUR ORIGINAL ON FILE IN THE OFFICE. YOU WILL BE CHARGED TAX IF A VALID EXEMPTION CERTIFICATE IS NOT ON FILE BEFORE EQUIPMENT, PARTS OR SERVICES ARE PROVIDED. SEE <a href="https://www.taxsites.com/state-links.html">www.taxsites.com/state-links.html</a> FOR TAX FORMS.

Sincerely,

Jay Faltin Trane U.S. Inc.

12700 Plantside Drive Louisville, KY 40299

Office Phone: (502) 499-7000

CUSTOMER ACCEPTANCE	TRANE ACCEPTANCE	
Hardin County Board of Education	Trane U.S. Inc.	
1	Submitted by: Matthew Bennett Office: (502) 499-7000	
Jeresa Mayan	Cell: (812) 483-2829	
Authorized Representative's Signature  Tully  More our		
Printed Name	Authorized Representative's Signature	
Sper mon Pent		
Title	Printed Name	
Purchase Order 40840525		
1 1.	Title	
Acceptance Date 411/149	Acceptance Date	

This proposal is subject to your acceptance of the attached Trane terms and conditions.

### TERMS AND CONDITIONS - COMMERCIAL EQUIPMENT

"Company" shall mean Trane U.S. Inc. for sales in the United States and Trane Canada ULC for sales in Canada.

- 1. Acceptance. These terms and conditions are an integral part of Company's offer and form the basis of any agreement (the "Agreement") resulting from Company's proposal (the "Proposal") for the sale of the described commercial equipment and any ancillary services (the "Equipment"). COMPANY'S TERMS AND CONDITIONS AND EQUIPMENT PRICES ARE SUBJECT TO PERIODIC CHANGE OR AMENDMENT. The Proposal is subject to acceptance in writing by the party to whom this offer is made or an authorized agent ("Customer") delivered to Company within 15 days from the date of the Proposal. Prices in the Proposal are subject to change at any time upon notice to Customer. If Customer accepts the Proposal by placing an order, without the addition of any other terms and conditions of sale or any other modification, Customer's order shall be deemed acceptance of the Proposal subject to Company's terms and conditions. If Customer's order is expressly conditioned upon Company's acceptance or assent to terms and/or conditions other than those expressed herein, return of such order by Company with Company's terms and conditions attached or referenced serves as Company's notice of objection to Customer's terms and as Company's counteroffer to provide Equipment in accordance with the Proposal and the Company's terms and conditions. If Customer does not reject or object in writing to Company within 10 days, Company's counteroffer will be deemed accepted. Notwithstanding anything to the contrary herein, Customer's acceptance of the Equipment will in any event constitute an acceptance by Customer of Company's terms and conditions. This Agreement is subject to credit approval by Company. Upon disapproval of credit, Company may delay or suspend performance or, at its option, renegotiate prices and/or terms and conditions with Customer. If Company and Customer are unable to agree on such revisions, this Agreement shall be cancelled without any liability.
- 2. Connected Services. In addition to these terms and conditions, the Connected Services Terms of Service ("Connected Services Terms"), available at https://www.trane.com/TraneConnectedServicesTerms, as updated from time to time, are incorporated herein by reference and shall apply to the extent that Company provides Customer with Connected Services, as defined in the Connected Services Terms.
- 3. Title and Risk of Loss. All Equipment sales with destinations to Canada or the U.S. shall be made as follows: FOB Company's U.S. manufacturing facility or warehouse (full freight allowed). Title and risk of loss or damage to Equipment will pass to Customer upon tender of delivery of such to carrier at Company's U.S. manufacturing facility or warehouse.
- 4. Pricing and Taxes., Within forty-five (45) days following Customer acceptance of the Proposal without addition of any other terms and conditions of sale or any modification, Customer shall provide notification of release for immediate production at Company's factory. Prices for Equipment are subject to change at any time prior to shipment to reflect any cost increases related to the manufacture, supply, and shipping of Equipment. This includes, but is not limited to, cost increases in raw materials, supplier components, labor, utilities, freight, logistics, wages and benefits, regulatory compliance, or any other event beyond Company's control. If shipment is delayed due to Customer's actions, Company may also charge Customer with storage fees. If a release is not received within 6 months following order acceptance, Company reserves the right to cancel any order. Company shall be entitled to equitable adjustments in the contract price to reflect any cost increases as set forth above and will provide notice to Customer prior to the date for which the increased price is to be in effect for the applicable customer contract. In no event will prices be decreased. The price of Equipment does not include any present or future foreign, federal, state, or local property, license, privilege, sales, use, excise, value added, gross receipts or other like taxes or assessments. Such amounts will be itemized separately to Customer, who will make prompt payment to Company. Company will accept valid exemption documentation for such taxes and assessments from Customer, if applicable. All prices include packaging in accordance with Company's standard procedures. Charges for special packaging, crating or packing are the responsibility of Customer.
- 5. Delivery and Delays. Delivery dates are approximate and not guaranteed. Company will use commercially reasonable efforts to deliver the Equipment on or before the estimated delivery date, will notify Customer if the estimated delivery dates cannot be honored, and will deliver the Equipment and services as soon as practicable thereafter. In no event will Company be liable for any damages or expenses caused by delays in delivery.

  6. Performance. Company shall be obligated to furnish only the Equipment described in the Proposal and in submittal data (if such data is issued in connection with the
- 6. Performance. Company shall be obligated to furnish only the Equipment described in the Proposal and in submittal data (if such data is issued in connection with the order). Company may rely on the acceptance of the Proposal and submittal data as acceptance of the suitability of the Equipment for the particular project or location. Unless specifically stated in the Proposal, compliance with any local building codes or other laws or regulations relating to specifications or the location, use or operation of the Equipment is the sole responsibility of Customer. If Equipment is tendered that does not fully comply with the provisions of this Agreement and Equipment is rejected by Customer, Company will have the right to cure within a reasonable time after notice thereof by substituting a conforming tender whether or not the time for performance has passed.
- 7. Force Majeure. Company's duty to perform under this Agreement and the Equipment prices are contingent upon the non-occurrence of an Event of Force Majeure. If the Company shall be unable to carry out any material obligation under this Agreement due to an Event of Force Majeure, this Agreement shall at Company's election (i) remain in effect but Company's obligations shall be suspended until the uncontrollable event terminates or (ii) be terminated upon 10 days' notice to Customer, in which event Customer shall pay Company for all parts of the Work furnished to the date of termination. An "Event of Force Majeure" shall mean any cause or event beyond the control of Company. Without limiting the foregoing, "Event of Force Majeure" includes: acts of God; acts of terrorism, war or the public enemy; flood; earthquake; tornado; storm; fire; civil disobedience; pandemic insurrections; riots; labor/labour disputes; labor/labour or material shortages; sabotage; restraint by court order or public authority (whether valid or invalid); and action or non-action by or inability to obtain or keep in force the necessary governmental authorizations, permits, licenses, certificates or approvals if not caused by Company; and the requirements of any applicable government in any manner that diverts either the material or the finished product to the direct or indirect benefit of the government.
- 8. Limited Warranty. Company warrants the Equipment manufactured by Company for a period of the lesser of 12 months from initial start-up or 18 months from date of shipment, whichever is less, against failure due to defects in material and manufacture and that it has the capacities and ratings set forth in Company's catalogs and bulletins ("Warranty"). Equipment manufactured by Company that includes required start-up and sold in North America will not be warranted by Company unless Company performs the Equipment startup. Exclusions from this Warranty include damage or failure arising from: wear and tear; corrosion, erosion, detenoration; modifications made by others to the Equipment; repairs or alterations by a party other than Company that adversely affects the stability or reliability of the Equipment; vandalism; neglect; accident; adverse weather or environmental conditions; abuse or improper use; improper installation; commissioning by a party other than Company; unusual physical or electrical or mechanical stress; operation with any accessory, equipment or part not specifically approved by Company, refrigerant not supplied by Company; and/or lack of proper maintenance as recommended by Company. Company shall not be obligated to pay for the cost of lost refrigerant or lost product. Company's obligations and liabilities under this Warranty are limited to furnishing replacement equipment or parts, at its option, FCA (Incoterms 2000) factory or warehouse (f.o.b. factory or warehouse for US domestic purposes) at Company-designated shipping point, freight-allowed to Company's warranty agent's stock location, for all nonconforming Company-manufactured Equipment (which have been returned by Customer to Company). Returns must have prior written approval by Company and are subject to restocking charge where applicable. Equipment, material and/or parts that are not manufactured by Company ("Third-Party Product(s)") are not warranted by Company and have such warranties as may be extended by the respective manufacturer. CUSTOMER UNDERSTANDS THAT COMPANY IS NOT THE MANUFACTURER OF ANY THIRD-PARTY PRODUCT(S) AND ANY WARRANTIES, CLAIMS, STATEMENTS, REPRESENTATIONS, OR SPECIFICATIONS ARE THOSE OF THE THIRD-PARTY MANUFACTURER, NOT COMPANY AND CUSTOMER IS NOT RELYING ON ANY WARRANTIES, CLAIMS, STATEMENTS, REPRESENTATIONS, OR SPECIFICATIONS REGARDING THE THIRD-PARTY PRODUCT THAT MAY BE PROVIDED BY COMPANY OR ITS AFFILIATES, WHETHER ORAL OR WRITTEN. COMPANY MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, INCLUDING WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE.ADDITIONALLY, COMPANY MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND REGARDING PREVENTING., ELIMINATING, REDUCING OR INHIBITING ANY MOLD, FUNGUS, BACTERIA, VIRUS, MICROBIAL GROWTH, OR ANY OTHER CONTAMINANTS (INCLUDING COVID-19 OR ANY SIMILAR VIRUS) (COLLECTIVELY, "CONTAMINANTS"), WHETHER INVOLVING OR IN CONNECTION WITH EQUIPMENT, ANY COMPONENT THEREOF, SERVICES OR OTHERWISE. IN NO EVENT SHALL COMPANY HAVE ANY LIABILITY FOR THE PREVENTION, ELIMINATION, REDUCTION OR INHIBITION OF THE GROWTH OR SPREAD OF SUCH CONTAMINANTS INVOLVING OR IN CONNECTION WITH ANY EQUIPMENT, THIRD-PARTY PRODUCT, OR ANY COMPONENT THEREOF, SERVICES OR OTHERWISE AND CUSTOMER HEREBY SPECIFICALLY ACKNOWLDGES AND AGREES THERETO. No warranty liability whatsoever shall attach to Company until Customer's complete order has been paid for in full and Company's liability under this Warranty shall be limited to the purchase price of the Equipment shown to be defective. Additional warranty protection is available on an extra-cost basis and must be in writing and agreed to by an authorized signatory of the Company. EXCEPT FOR COMPANY'S WARRANTY EXPRESSLY SET FORTH HEREIN, COMPANY DOES NOT MAKE, AND HEREBY EXPRESSLY DISCLAIMS, ANY WARRANTIES, EXPRESS OR IMPLIED CONCERNING ITS PRODUCTS, EQUIPMENT OR SERVICES, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF DESIGN, MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, OR OTHERS THAT ARE ALLEGED TO ARISE FROM COURSE OF DEALING OR TRADE.
- 9. Indemnity. To the fullest extent permitted by law, Company and Customer shall indemnify, defend and hold harmless each other from any and all claims, actions, costs, expenses, damages and liabilities, including reasonable attorneys' fees, resulting from death or bodily injury or damage to real or personal property, to the extent caused by the negligence or misconduct of their respective employees or other authorized agents in connection with their activities within the scope of this Agreement. Neither party shall indemnify the other against claims, damages, expenses or liabilities to the extent attributable to the acts or omissions of the other party. If the parties are both at fault, the obligation to indemnify shall be proportional to their relative fault. The duty to indemnify will continue in full force and effect, notwithstanding the expiration or early termination hereof, with respect to any claims based on facts or conditions that occurred prior to expiration or termination.

- 10. Insurance. Upon request, Company will furnish evidence of its standard insurance coverage. If Customer has requested to be named as an additional insured under Company's insurance policy, Company will do so but only subject to Company's manuscript additional insured endorsement under its primary Commercial General Liability policies. In no event does Company waive any rights of subrogation.
- 11. Customer Breach. Each of the following events or conditions shall constitute a breach by Customer and shall give Company the right, without an election of remedies, to terminate this Agreement, require payment prior to shipping, or suspend performance by delivery of written notice: (1) Any failure by Customer to pay amounts when due; (2) any general assignment by Customer for the benefit of its creditors, or if Customer becomes bankrupt or insolvent or takes the benefit of any statute for bankrupt or insolvent debtors, or makes or proposes to make any proposal or arrangement with creditors, or if any steps are taken for the winding up or other termination of Customer or the liquidation of its assets, or if a trustee, receiver, or similar person is appointed over any of the assets or interests of Customer; (3) Any representation or warranty furnished by Customer in connection with this Agreement is false or misleading in any material respect when made; or (4) Any failure by Customer to perform or comply with any material provision of this Agreement. Customer shall be liable to the Company for all Equipment furnished and all damages sustained by Company (including lost profit and overhead).
- (Including lost profit and overhead).

  12. Limitation of Liability. NOTWITHSTANDING ANYTHING TO THE CONTRARY, IN NO EVENT SHALL COMPANY BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT CONSEQUENTIAL, PUNITIVE, EXEMPLARY DAMAGES (INCLUDING WITHOUT LIMITATION REFRIGERANT LOSS, BUSINESS INTERRUPTION, LOST DATA, LOST REVENUE, LOST PROFITS), OR CONTAMINANTS LIABILITIES, EVEN IF A PARTY HAS BEEN ADVISED OF SUCH POSSIBLE DAMAGES OR IF SAME WERE REASONABLY FORESEEABLE AND REGARDLESS OF WHETHER THE CAUSE OF ACTION IS FRAMED IN CONTRACT, NEGLIGENCE, ANY OTHER TORT, WARRANTY, STRICT LIABILITY, OR PRODUCT LIABILITY. In no event will Company's liability in connection with the provision of products or services or otherwise under this Agreement exceed the entire amount paid to Company by Customer under this Agreement.
- The transmission of COVID-19 may occur in a variety of ways and circumstances, many of the aspects of which are currently not known. HVAC systems, products, services and other offerings have not been tested for their effectiveness in reducing the spread of COVID-19, including through the air in closed environments. IN NO EVENT WILL COMPANY BE LIABLE UNDER THIS AGREEMENT OR OTHERWISE FOR ANY INDEMNIFICATION, ACTION, OR CLAIM, WHETHER BASED ON WARRANTY, CONTRACT, TORT OR OTHERWISE, FOR ANY BODILY INJURY (INCLUDING DEATH), DAMAGE TO PROPERTY, OR ANY OTHER LIABILITIES, DAMAGES OR COSTS RELATED TO CONTAMINANTS (INCLUCING THE SPREAD, TRANSMISSION, MITIGATION, ELIMINATION, OR CONTAMINATION THEREOF) (COLLECTIVELY, "CONTAMINANTS LIABILITIES") AND CUSTOMER HEREBY EXPRESSLY RELEASES COMPANY FROM ANY SUCH CONTAMINANTS LIABILITIES.
- 14. Nuclear Liability. In the event that the Equipment sold hereunder is to be used in a nuclear facility, Customer will, prior to such use, arrange for insurance or governmental indemnity protecting Company against all liability and hereby releases and agrees to indemnify Company and its suppliers for any nuclear damage, including loss of use, in any manner arising out of a nuclear incident, whether alleged to be due, in whole or in part to the negligence or otherwise of Company or its suppliers.
- loss of use, in any manner arising out of a nuclear incident, whether alleged to be due, in whole or in part to the negligence or otherwise of Company or its suppliers.

  15. Intellectual Property: Patent Indemnity. Company retains all ownership, license and other rights to all patents, trademarks, copyrights, trade secrets and other intellectual property rights related to the Equipment, and, except for the right to use the Equipment sold, Customer obtains no rights to use any such intellectual property. Company agrees to defend any suit or proceeding brought against Customer so far as such suit or proceeding is solely based upon a claim that the use of the Equipment provided by Company constitutes infringement of any patent of the United States of America, provided Company is promptly notified in writing and given authority, information and assistance for defense of same. Company will, at its option, procure for Customer the right to continue to use said Equipment, or modify it so that it becomes non-infringing, or replace same with non-infringing Equipment, or to remove said Equipment and to refund the purchase price. The foregoing will not be construed to include any Agreement by Company to accept any liability whatsoever in respect to patents for inventions including more than the Equipment furnished hereunder, or in respect of patents for methods and processes to be carried out with the aid of said Equipment. The provision of Equipment by Company does not convey any license, by implication, estoppel, or otherwise, under patent claims covering combinations of said Equipment with other devices or elements. The foregoing states the entire liability of Company with regard to patent infringement. Notwithstanding the provisions of this paragraph, Customer will hold Company harmless against any expense or loss resulting from infringement of patents or trademarks arising from compliance with Customer's designs or specifications or instructions.
- 16. Cancellation. Equipment is specially manufactured in response to orders. An order placed with and accepted by Company cannot be delayed, canceled, suspended, or extended except with Company's written consent and upon written terms accepted by Company that will reimburse Company for and indemnify Company against loss and provide Company with a reasonable profit for its materials, time, labor, services, use of facilities and otherwise. Customer will be obligated to accept any Equipment shipped, tendered for delivery or delivered by Company pursuant to the order prior to any agreed delay, cancellation, suspension or extension of the order. Any attempt by Customer to unilaterally revoke, delay or suspend acceptance for any reason whatever after it has agreed to delivery of or accepted any shipment shall constitute a breach of this Agreement. For purposes of this paragraph, acceptance occurs by any waiver of inspection, use or possession of Equipment, payment of the invoice, or any indication of exclusive control exercised by Customer.
- 17. Invoicing and Payment. Unless otherwise agreed to in writing by Company, equipment shall be invoiced to Customer upon tender of delivery thereof to the carrier. Customer shall pay Company's invoices within net 30 days of shipment date. Company reserves the right to add to any account outstanding for more than 30 days a service charge equal to the lesser of the maximum allowable legal interest rate or 1.5% of the principal amount due at the end of each month. Customer shall pay all costs (including atterneys' fees) incurred by Company in attempting to collect amounts due and otherwise enforcing these terms and conditions. If requested, Company will provide appropriate lien waivers upon receipt of payment. Company may at any time decline to ship, make delivery or perform work except upon receipt of cash payment, letter of credit, or security, or upon other terms and conditions satisfactory to Company. Customer agrees that, unless Customer makes payment in advance, Company will have a purchase money security interest in all Equipment to secure payment in full of all amounts due Company and its order for the Equipment, together with these terms and conditions, form a security agreement (as defined by the UCC in the United States and as defined in the Personal Property Security Act in Canada). Customer shall keep the Equipment free of all taxes and encumbrances, shall not remove the Equipment from its original installation point and shall not assign or transfer any interest in the Equipment until all payments due Company have been made. The purchase money security interest granted herein attaches upon Company's acceptance of Customer's order and on receipt of the Equipment described in the accepted Proposal but prior to its installation. The parties have no agreement to postpone the time for attachment unless specifically noted in writing on the accepted order. Customer will have no rights of set off against any amounts, which become payable to Company under this Agreement or otherwise.
- 18. Claims. Company will consider claims for concealed shortages in shipments or rejections due to failure to conform to an order only if such claims or rejections are made in writing within 15 days of delivery and are accompanied by the packing list and, if applicable, the reasons in detail why the Equipment does not conform to Customer's order. Upon receiving authorization and shipping instructions from authorized personnel of Company, Customer may return rejected Equipment, transportation charges prepaid, for replacement. Company may charge Customer any costs resulting from the testing, handling, and disposition of any Equipment returned by Customer which are not found by Company to be nonconforming. All Equipment damaged during shipment and all claims relating thereto must be made with the freight carrier in accordance with such carrier's policies and procedures. Claims for Equipment damaged during shipment are not covered under the warranty provision stated herein.
- 19. Export Laws. The obligation of Company to supply Equipment under this Agreement is subject to the ability of Company to supply such items consistent with applicable laws and regulations of the United States and other governments. Company reserves the right to refuse to enter into or perform any order, and to cancel any order, under this Agreement if Company in its sole discretion determines that performance of the transaction to which such order relates would violate any such applicable law or regulation. Customer will pay all handling and other similar costs from Company's factories including the costs of freight, insurance, export clearances, import duties and taxes. Customer will be "exporter of record" with respect to any export from the United States of America and will perform all compliance and logistics functions in connection therewith and will also comply with all applicable laws, rules and regulations. Customer understands that Company and/or the Equipment are subject to laws and regulations of the United States of America which may require licensing or authorization for and/or prohibit export, re-export or diversion of Company's Equipment to certain countries, and agrees it will not knowingly assist or participate in any such diversion or other violation of applicable United States of America laws and regulations. Customer agrees to hold harmless and indemnify Company for any damages resulting to Customer or Company from a breach of this paragraph by Customer.
- 20. General. Except as provided below, to the maximum extent provided by law, this Agreement is made and shall be interpreted and enforced in accordance with the laws of the state of New York for Equipment shipped to a U.S. location and the laws of the province to which Equipment is shipped within Canada, without regard to its conflict of law principles that might otherwise call for the application of a different state's or province's law, and not including the United Nations Convention on Contracts for the International Sale of Goods. Any action or suit arising out of or related to this Agreement must be commenced within one year after the cause of action has accrued. To the extent the Equipment is being used at a site owned and/or operated by any agency of the Federal Government, determination of any substantive issue of law shall be according to the Federal common law of Government contracts as enunciated and applied by Federal judicial bodies and boards of contract appeals of the Federal Government. This Agreement contains all of the agreements, representations and understandings of the parties and supersedes all previous understandings, commitments or agreements, oral or written, related to the subject matter hereof. This Agreement may not be amended, modified or terminated except by a writing signed by the parties hereto. No documents shall be incorporated herein by reference except to the extent Company is a signatory thereon. If any term or condition of this Agreement is invalid, illegal or incapable of being enforced by any rule of law, all other terms and conditions of this Agreement will nevertheless remain in full force and effect as long as the economic or legal substance of the transaction contemplated hereby is not affected in a manner adverse to any party hereto. Customer may not assign, transfer, or convey this Agreement, or any part hereof, or its right, title or interest herein, without the written consent of the Company. Subject to the foregoing, this Agreement shall be binding upon and inur

shall be deemed to be an original, but all together shall constitute but one and the same Agreement. A fully executed facsimile copy hereof or the several counterparts shall suffice as an original.

21. Equal Employment Opportunity/Affirmative Action Clause. Company is a federal contractor that complies fully with Executive Order 11246, as amended, and the applicable regulations contained in 41 C.F.R. Parts 60-1 through 60-60, 29 U.S.C. Section 793 and the applicable regulations contained in 41 C.F.R. Part 60-741; and 38 U.S.C. Section 4212 and the applicable regulations contained in 41 C.F.R. Part 60-250 Executive Order 13496 and Section 29 CFR 471, appendix A to subpart A, regarding the notice of employee rights in the United States and with Canadian Charter of Rights and Freedoms Schedule B to the Canada Act 1982 (U.K.) 1982, c. 11 and applicable Provincial Human Rights Codes and employment law in Canada.

22. U.S. Government Work.

The following provision applies only to direct sales by Company to the US Government. The Parties acknowledge that Equipment ordered and delivered under this Agreement are Commercial Items as defined under Part 12 of the Federal Acquisition Regulation (FAR). In particular, Company agrees to be bound only by those Federal contracting clauses that apply to "commercial" suppliers and that are contained in FAR 52.212-5(e)(1).

The following provision applies only to indirect sales by Company to the US Government. As a Commercial Item Subcontractor, Company accepts only the following mandatory flow down provisions: 52.219-8; 52.222-26; 52.222-36; 52.222-39; 52.247-64. If the sale of the Equipment is in connection with a U.S. Government contract, Customer certifications to all provided and will provide current, accurate, and complete information, representations and certifications to all government officials of the Small Business Administration, on all matters related to the prime contract, including but not limited to the contracting officer and officials of the Small Business Administration, on all matters related to the prime contract, including but not limited to all aspects of its ownership, eligibility, and performance. Anything herein notwithstanding, Company will have no obligations to Customer unless and until Customer provides Company with a true, correct and complete executed copy of the prime contract. Upon request, Customer will provide copies to Company of all requested written communications with any government official related to the prime contract prior to or concurrent with the execution thereof, including but not limited to any communications related to Customer's ownership, eligibility or performance of the prime contract. Customer will obtain written authorization and approval from Company prior to providing any government official any information about Company's performance of the work that is the subject of the Proposal or this Agreement, other than the Proposal or this Agreement.

23. Limited Waiver of Sovereign Immunity. If Customer is an Indian tribe (in the U.S.) or a First Nation or Band Council (in Canada), Customer, whether acting in its capacity as a government, governmental entity, a duly organized corporate entity or otherwise, for itself and for its agents, successors, and assigns: (1) hereby provides this limited waiver of its sovereign immunity as to any damages, claims, lawsuit, or cause of action (herein "Action") brought against Customer by Company and arising or alleged to arise out of the furnishing by Company of any product or service under this Agreement, whether such Action is based in contract, tort, strict liability, civil liability or any other legal theory; (2) agrees that jurisdiction and venue for any such Action shall be proper and valid (a) if Customer is in the U.S., in any state or United States court located in the state in which Company is performing this Agreement or (b) if Customer is in Canada, in the superior court of the province or territory in which the work was performed; (3) expressly consents to such Action, and waives any objection to jurisdiction or venue; (4) waives any requirement of exhaustion of tribal court administrative remedies for any Action arising out of or related to this Agreement; and (5) expressly acknowledges and agrees that Company is not subject to the jurisdiction of Customer's tribal court or any similar tribal forum, that Customer will not bring any action against Company in tribal court, and that Customer will not avail itself of any ruling or direction of the tribal court permitting or directing it to suspend its payment or other obligations under this Agreement. The individual signing on behalf of Customer warrants and represents that such individual is duly authorized to provide this waiver and enter into this Agreement and that this Agreement constitutes the valid and legally binding obligation of Customer, enforceable in accordance with its terms.

1-26.130-4 (0622) Supersedes 1-26.130-4(1221b)

### **SECURITY ADDENDUM**

This Addendum shall be applicable to the sale, installation and use of Trane equipment and the sale and provision of Trane services. "Trane" shall mean Trane U.S. Inc. for sales and services in the United States, or Trane Canada ULC for sales and services in Canada.

1. <u>Definitions</u>. All terms used in this Addendum shall have the meaning specified in the Agreement unless otherwise defined herein. For the purposes of this Addendum, the following terms are defined as follows:

"<u>Customer Data</u>" means Customer account information as related to the Services only and does not include HVAC Machine Data or personal data. Trane does not require, nor shall Customer provide personal data to Trane under the Agreement. Such data is not required for Trane to provide its Equipment and/or Services to the Customer.

"Equipment" shall have the meaning set forth in the Agreement.

"HVAC Machine Data" means data generated and collected from the product or furnished service without manual entry. HVAC Machine Data is data relating to the physical measurements and operating conditions of a HVAC system, such as but not limited to, temperatures, humidity, pressure, HVAC equipment status. HVAC Machine Data does not include Personal Data and, for the purposes of this agreement, the names of users of Trane's controls products or hosted applications shall not be Personal Data, if any such user chooses to use his/her name(s) in the created accounts within the controls product (e.g., firstname.lastname@address.com). HVAC Machine Data may be used by Trane: (a) to provide better support services and/or products to users of its products and services; (b) to assess compliance with Trane terms and conditions; (c) for statistical or other analysis of the collective characteristics and behaviors of product and services users; (d) to backup user and other data or information and/or provide remote support and/or restoration; (e) to provide or undertake: engineering analysis; failure analysis; warranty analysis; energy analysis; predictive analysis; service analysis; product usage analysis; and/or other desirable analysis, including, but not limited to, histories or trends of any of the foregoing; and (f) to otherwise understand and respond to the needs of users of the product or furnished service. "Personal Data" means data and/or information that is owned or controlled by Customer, and that names or identifies, or is about a natural person, such as: (i) data that is explicitly defined as a regulated category of data under any data privacy laws applicable to Customer; (ii) non-public personal information ("NPI") or personal information ("PI"), such as national identification number, passport number, social security number, social insurance number, or driver's license number; (iii) health or medical information, such as insurance information, medical prognosis, diagnosis information, or genetic information; (iv) financial information, such as a policy number, credit card number, and/or bank account number; (v) personally identifying technical information (whether transmitted or stored in cookies, devices, or otherwise), such as IP address, MAC address, device identifier, International Mobile Equipment Identifier ("IMEI"), or advertising identifier; (vi) biometric information; and/or (vii) sensitive personal data, such as, race, religion, marital status, disability, gender, sexual orientation, geolocation, or mother's maiden name.

"Security Incident" shall refer to (i) a compromise of any network, system, application or data in which Customer Data has been accessed or acquired by an unauthorized third party; (ii) any situation where Trane reasonably suspects that such compromise may have occurred; or (iii) any actual or reasonably suspected unauthorized or illegal Processing, loss, use, disclosure or acquisition of or access to any Customer Data.

"Services" shall have the meaning set forth in the Agreement.

- HVAC Machine Data; Access to Customer Extranet and Third Party Systems. If Customer grants Trane access to HVAC Machine
  Data via web portals or other non-public websites or extranet services on Customer's or a third party's website or system (each,
  an "Extranet"), Trane will comply with the following:
  - a. <u>Accounts</u>. Trane will ensure that Trane's personnel use only the Extranet account(s) designated by Customer and will require Trane personnel to keep their access credentials confidential.
  - b. <u>Systems</u>. Trane will access the Extranet only through computing or processing systems or applications running operating systems managed by Trane that include: (i) system network firewalls; (ii) centralized patch management; (iii) operating system appropriate anti-malware software; and (iv) for portable devices, full disk encryption.
  - c. <u>Restrictions</u>. Unless otherwise approved by Customer in writing, Trane will not download, mirror or permanently store any HVAC Machine Data from any Extranet on any medium, including any machines, devices or servers.
  - d. <u>Account Termination</u>. Trane will terminate the account of each of Trane's personnel in accordance with Trane's standard practices after any specific Trane personnel who has been authorized to access any Extranet (1) no longer needs access to HVAC Machine Data or (2) no longer qualifies as Trane personnel (e.g., the individual leaves Trane's employment).
  - e. <u>Third Party Systems</u>. Trane will provide Customer prior notice before it uses any third party system that stores or may otherwise have access to HVAC Machine Data, unless (1) the data is encrypted and (2) the third party system will not have access to the decryption key or unencrypted "plain text" versions of the HVAC Machine Data.
- 3. <u>Customer Data; Confidentiality</u>. Trane shall keep confidential, and shall not access or use any Customer Data and information that is marked confidential or by its nature is considered confidential ("Customer Confidential Information") other than for the purpose of providing the Equipment and Services, and will disclose Customer Confidential Information only: (i) to Trane's employees and agents who have a need to know to perform the Services, (ii) as expressly permitted or instructed by Customer,

- or (iii) to the minimum extent required to comply with applicable law, provided that Trane (1) provides Customer with prompt written notice prior to any such disclosure, and (2) reasonably cooperate with Customer to limit or prevent such disclosure.
- 4. <u>Customer Data; Compliance with Laws</u>. Trane agrees to comply with laws, regulations governmental requirements and industry standards and practices relating to Trane's processing of Customer Confidential Information (collectively, "Laws").
- 5. <u>Customer Data; Information Security Management</u>. Trane agrees to establish and maintain an information security and privacy program, consistent with applicable HVAC equipment industry practices that complies with this Addendum and applicable Laws ("Information Security Program"). The Information Security Program shall include appropriate physical, technical and administrative safeguards, including any safeguards and controls agreed by the Parties in writing, sufficient to protect Customer systems, and Customer's Confidential Information from unauthorized access, destruction, use, modification or disclosure. The Information Security Program shall include appropriate, ongoing training and awareness programs designed to ensure that Trane's employees and agents, and others acting on Trane's, behalf are aware of and comply with the Information Security Program's policies, procedures, and protocols.
- 6. Monitoring. Trane shall monitor and, at regular intervals consistent with HVAC equipment industry practices, test and evaluate the effectiveness of its Information Security Program. Trane shall evaluate and promptly adjust its Information Security Program in light of the results of the testing and monitoring, any material changes to its operations or business arrangements, or any other facts or circumstances that Trane knows or reasonably should know may have a material impact on the security of Customer Confidential Information, Customer systems and Customer property.
- Audits. Customer acknowledges and agrees that the Trane SOC2 audit report will be used to satisfy any and all audit/inspection
  requests/requirements by or on behalf of Customer. Trane will make its SOC2 audit report available to Customer upon request
  and with a signed nondisclosure agreement.
- 8. Information Security Contact. Trane's information security contact is Local Sales Office.
- Security Incident Management. Trane shall notify Customer after the confirmation of a Security Incident that affects Customer Confidential Information, Customer systems and Customer property. The written notice shall summarize the nature and scope of the Security Incident and the corrective action already taken or planned.
- 10. <u>Threat and Vulnerability Management</u>. Trane regularly performs vulnerability scans and addresses detected vulnerabilities on a risk basis. Periodically, Trane engages third-parties to perform network vulnerability assessments and penetration testing. Vulnerabilities will be reported in accordance with Trane's cybersecurity vulnerability reported process. Trane periodically provides security updates and software upgrades.
- 11. Security Training and Awareness. New employees are required to complete security training as part of the new hire process and receive annual and targeted training (as needed and appropriate to their role) thereafter to help maintain compliance with Security Policies, as well as other corporate policies, such as the Trane Code of Conduct. This includes requiring Trane employees to annually re-acknowledge the Code of Conduct and other Trane policies as appropriate. Trane conducts periodic security awareness campaigns to educate personnel about their responsibilities and provide guidance to create and maintain a secure workplace.
- 12. <u>Secure Disposal Policies</u>. Policies, processes, and procedures regarding the disposal of tangible and intangible property containing Customer Confidential Information so that wherever possible, Customer Confidential Information cannot be practicably read or reconstructed.
- 13. Logical Access Controls. Trane employs internal monitoring and logging technology to help detect and prevent unauthorized access attempts to Trane's corporate networks and production systems. Trane's monitoring includes a review of changes affecting systems' handling authentication, authorization, and auditing, and privileged access to Trane production systems. Trane uses the principle of "least privilege" (meaning access denied unless specifically granted) for access to customer data.
- 14. <u>Contingency Planning/Disaster Recovery</u>. Trane will implement policies and procedures required to respond to an emergency or other occurrence (i.e. fire, vandalism, system failure, natural disaster) that could damage Customer Data or any system that contains Customer Data. Procedures include the following
  - (i) data backups; and
  - (ii) formal disaster recovery plan. Such disaster recovery plan is tested at least annually.
- 15. Return of Customer Data. If Trane is responsible for storing or receiving Customer Data, Trane shall, at Customer's sole discretion, deliver Customer Data to Customer in its preferred format within a commercially reasonable period of time following the expiration or earlier termination of the Agreement or, such earlier time as Customer requests, securely destroy or render unreadable or undecipherable each and every original and copy in every media of all Customer's Data in Trane's possession, custody or control no later than [90 days] after receipt of Customer's written instructions directing Trane to delete the Customer Data.

- 16. <u>Background checks</u> Trane shall take reasonable steps to ensure the reliability of its employees or other personnel having access to the Customer Data, including the conducting of appropriate background and/or verification checks in accordance with Trane policies.
- 17. <u>DISCLAIMER OF WARRANTIES</u>. EXCEPT FOR ANY APPLICABLE WARRANTIES IN THE AGREEMENT, THE SERVICES ARE PROVIDED "AS IS", WITH ALL FAULTS, AND THE ENTIRE RISK AS TO SATISFACTORY QUALITY, PERFORMANCE, ACCURACY AND EFFORT AS TO SUCH SERVICES SHALL BE WITH CUSTOMER. TRANE DISCLAIMS ANY AND ALL OTHER EXPRESS OR IMPLIED REPRESENTATIONS AND WARRANTIES WITH RESPECT TO THE SERVICES AND THE SERVICES PROVIDED HEREUNDER, INCLUDING ANY EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR THAT THE SERVICES WILL OPERATE ERROR-FREE OR UNINTERRUPTED OR RETURN/RESPONSE TO INQUIRIES WITHIN ANY SPECIFIC PERIOD OF TIME.

November 2023

# Attachment C Description of the Premises

The Premises are described as follows:

### **Creekside Elementary School**

151 Horseshoe Bend Road Sonora, KY 42776

### G.C. Burkhead Elementary School

1323 St. John Road Elizabethtown, KY 42701

### **Heartland Elementary School**

2300 Nelson Drive Elizabethtown, KY 42701

### **Lakewood Elementary School**

265 Learning Place Lane Cecilia, KY 42724

### **Lincoln Trail Elementary School**

3970 Bardstown Road Elizabethtown, KY 42701

### **New Highland Elementary School**

110 W.A. Jenkins Road Elizabethtown, KY 42701

### **North Park Elementary School**

1080 S. Logsdon Parkway Radcliff, KY 40160

### **Radcliff Elementary School**

1145 S. Dixie Boulevard Radcliff, KY 40160

### **Rineyville Elementary School**

275 Rineyville School Road Rineyville, KY 40162

### **Vine Grove Elementary School**

309 First Street Vine Grove, KY 40175

### **Woodland Elementary School**

6000 S. Woodland Drive Radcliff, KY 40160

### **Bluegrass Middle School**

170 W.A. Jenkins Road Elizabethtown, KY 42701

INITI	ALED BY:	Owner _	Trane
Attachment C; 0	Qualified Provid	ler Project No	.: 7680317

### **North Middle School**

100 Trojan Way Radcliff, KY 40160

### John Hardin High School

384 W.A. Jenkins Road Elizabethtown, KY 42701

### **North Hardin High School**

801 S. Logsdon Parkway Radcliff, KY 40160

### **Bus Garage**

6269 N. Dixie Highway Elizabethtown, KY 42701

### **Central Office**

65 W.A. Jenkins Road Elizabethtown, KY 42701

### **IT-TV Building**

209 Corporate Drive #102 Elizabethtown, KY 42701

### Attachment D **Notice to Proceed**

## Hardin County Schools GESC BG # 24-193 Trane Project No.: 7680317

Hardin County Board of Education ("Owner") has closed on its financing (the "Financing Closing") of

the STANDARD FORM OF AGREEMENT BETWEEN OWNER AND DESIGN BUILDER AIA141-2004, between Owner and Trane U.S. Inc. ("Qualified Provider") dated May 16, 2024 (together with Addendum No. 1 thereto and all Exhibits and Attachments thereof, the "Agreement") as evidenced by the attached fully executed contract documents for financing of the Stipulated Sum and funding of any escrow account provided for by the financing documents.  The entity providing funding to Owner:		
,, ,		
Company Name:	<u>Baird</u>	
Address:	500 W. Jefferson Street, Suite 2600	
	Louisville, KY 40202	
Contact Name:	Chip Sutherland	
Telephone No.:	(502) 588-8462	
Email:	csutherland@rwbaird.com	
Pursuant to Section 5 of Addendum No. 1 of the Agreement, Owner hereby executes and issues this written Notice to Proceed authorizing Qualified Provider to immediately commence performance of the Work in accordance with the Agreement.  Hardin County Board of Education		
By: Teresa Morgan		
Title: Superintendent		
Dated:		

### Attachment E Hazardous Materials

Pursuant to Section 11 of Addendum No. 1 to the Agreement, the existence of the following Hazardous Materials has been disclosed by Owner and/or otherwise identified prior to the execution of the Agreement:

 Any PCB containing ballasts and mercury containing lamps which are discovered shall be replaced by Qualified Provider and disposed of by Qualified Provider's licensed subcontractor; provided, however, Owner shall at all times remain the owner/generator of the Hazardous Material.

> INITIALED BY: \_\_\_\_Owner \_\_\_\_Trane Attachment E; Qualified Provider Project No.: 7680317