OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA

District Name:	Boons Cou	inh.	District Code:	035	Facility Name:	Camp Ernst Middle School	School Code:	010			
	Boone Cou		-112 F1511701		_ Ivaine.	Company of the Maria	_0000.	Sale May 1000 M NOW SALESSAN			
Project Name: Additions an			d Renovati	ons		REH Project #129-222		Date: March 9, 2023			
PROJECT TYPE: Yes			No		Gross Bu	ilding Area (sf.)					
New Buil	ding										
Addition			Ø.		1	8,954					
Renovation		2									
Provisions for Future Expansion:				The addition wings can all be expanded in the same direction as the current expansion. Fire walls at the new additions permit significant future expansion.							
Proposed Alternates: (1)			None			1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1					
		(2)									
. .			2 2000 90								
Describe	special con	ditions, phasi	ng of proje	ct and alternal	tes, attach a	supplemental sheet, if needed.					
BUILDIN	IG CONSTR	UCTION CH	ARACTER	ISTICS:							
Descripti	on of Buildir	g Structure:									
	Foundation	Cast-in-plac	e concrete								
-	مالم لأباء ومناوعة	: Masonry cav									
Ε,	derior vvalis	. Masonry cav	nty wans								
Ro	of Structure	Steel deck o	n light gau	ge metal trusse	es						
ENERGY	Y EFFICIEN	T DESIGN (K	RS 157.45	0 and KRS 1	<u>57.455)</u> :						
	38.44	_Energy Con	sumption "	'Existing" (kBt	u/sf/yr)						
	34.6	Energy Con	Energy Consumption Target (kBtu/sf/yr)								
YES	NO										
	2	LEED Certif	LEED Certified Other:								
	2	Designed to	meet Ene	rgy Star							
②		Exceeds ASHRAE 90.1(2007) by 10% (Minimum)									
	2	Whole Build	Whole Building Life Cycle Cost Analysis Demonstrating Cost Effective Design								
			(T)		ž.,,,,	d:					
If not yes	to one or m	ore of the ab									
-											
	②	Designed to	be Net-Ze	ero							
	Ø	Designed to	be Net-Ze	ero Ready							
Energy	Efficient De	sign Feature	s: (See L	ist Page 4, or	Use Drop D	Oown List)					
East / W	est Building	Orientation	□ YES	S D NO)	•					
	xterior Wall		8,697 (add	dition area only	v)	Avg. Exterior Wall R-Value:	16.4				
Gross Window / Door Area (sf):		1,038			Avg. Window/Door R-Value:	2					
Gross Roof Area (sf): 19,800						Avg. Roof R-Value:	34.9				
Exterior	Wall Type:	A - face brick	. captured al	r space, board in	sulation and w	vaterproof CMU	Other:				
		ingle roofing over nailable deck with insulation				Other:					
			ource heat pump system with air make up								
	om Lighting:	E - other					_ _ Other:	LED			
Active Daylighting: B - occupancy			y light contro	ol sensors			_ _ Other:				
Passive Daylighting: G-none							_ _ Other:				
On Site Energy Generation:			G - none				Other:				

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OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA

Project: Camp Ernst Middle	- Additions / Renovation	s REH Project	t #129-222	Date: March 9, 2023
Air Purification Systems :	YES D NO) _[2]		
Gray Water System :) [
Low Water Use Fixtures :) 🗆		
0.0	120 2 110			
PLUMBING:				
Type of Sewage Disposal:	Municipal			
HEATING, VENTILATION	AND AIR CONDITION	NG:		
Heating Only:	Heating & Mechanical Ventilation Only	:	HVAC: X	_ A/C Only:
Fuel Source/Backup (if ap		V		
	plicable). Itolie			
ELECTRICAL:				
Source of Electric Power:	Utility Transfomer		Lighting Intensity	(fc.):
Voltage Serving Facility:	277/480 Volts		Std. Classrooms Library/Media Ctr	50 75
voltage derving radiity.	2777400 VOILS	de contraction de la contracti	Science Lab	50
Number of Convenience C			Science Clrm	50
Classrooms	12 per classroom+spec			50
Library/Media Center Business Ed	20 speciality equipmen	t needs	Business Ed	50
Family & Consumer Scien	N/A		Shops Corridors	50 20
r army a consumer color	OI II/A		Stairways	20
Camera System:	N/A		Cafeteria	50
and consequent to the second s			Pre-School Clrm	N/A
			Art Classroom	50
			Gymnasium	50
SPECIAL EQUIPMENT:				
System C	onduit Only	Conduit	& Wiring	Complete with Equipn
Bell Clock				X
Fire Alarm				x
Intercom				X
Telephone			X	
Television		ner en		
Computer Wireless Network			X	
Interactive White bd Voice Amplification			x	
FIXED EQUIPMENT:				
Teacher Cabinet Yes		Ĩ	Custodial Room She	lves
Student Lockers Yes			Science Laboratories	· · · · · · · · · · · · · · · · · · ·
Folding Bleachers			Family & Consumer	The same of the sa
Library Furnishings			Other	
Dry Food Shelves			Other	

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OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA

Project: Camp Ernst Middle - Additions / Renovation REH Project #129-222 Date: March 9, 2023 **INTERIOR FINISH SCHEDULE: N/A AREA FLOOR** WAINSCOT **WALLS CEILING** General Office Corridors **Rubber Tile** N/A Painted CMU Acoustic tile Custodial **Sealed Concrete** Painted CMU N/A Acoustic tile Kitchen Cafeteria Gym Showers/Locker **Toilets** Porcelain Tile N/A **Painted CMU** Acoustic tile Library/Media Cntr Classrooms **Rubber Tile** N/A **Painted CMU** Acoustic tile Music Art Science **Rubber Tile** N/A **Painted CMU** Acoustic tile **FMD** OTHER AREAS Miscellaneous Project Specific Features: Kentucky Registered Architect: Date: 2/22/2023 Signature Robert Ehmet Hayes & Associates, PLLC Kentucky Registered Engineer: Date: 2/22/2023 Signature **Shrout Tate Wilson** Board Designee or Superintendent: Date: Signature

Boone County Board of Education

Energy Efficient Design Features Lists

Exterior Wall Type

- A face brick, captured air space, board insulation and waterproof CMU
- B face brick, captured air space, sprayed insulation on CMU
- C face brick, captured air space, sheathing over metal insulated stud system, interior finish system
- D face brick, ICF poured concrete, interior finish system
- E other, describe

Roofing Type List

- A modified bitumen over rigid insulation
- B EPDM over rigid insulation
- C plastic single ply over rigid insulation
- D metal roofing over nailable deck with insulation
- E asphalt shingle roofing over nailable deck with insulation
- F other, describe

HVAC System Type List

- A two pipe unit ventilator system
- B water source heat pump system with air make up
- C ground source heat pump system with air make up
- D hybrid water source heat pump system with boiler/chiller and well field with air make up
- E variable refrigerant flow (VRF) with air make up
- F hybrid geothermal/variable refrigerant flow (VRF) with air make up
- G variable refrigerant volume (VRV) with air make up
- H hybrid geothermal/variable refrigerant volume (VRV) with air make up
- I chilled beam system
- J hybrid chilled beam/geothermal system
- L other

Classroom Lighting List

- A T8 fluorescent fixtures
- B T5 fluorescent fixtures
- C high energy gas fixtures
- D low voltage systems
- E other

Active Daylight System List

- A classroom fluorescent dimming including dimming switches, ballasts and sensors
- B occupancy light control sensors
- C remote sensor bi-level lighting with no fixtures dimming
- D manual bi-level lighting with no fixture dimming
- E other
- F none

Passive Daylight Systems List

- A upper classroom clerestory lighting with sloped ceiling plane
- B lower classroom clerestory lighting that does NOT require sloping the ceiling place
- C exterior light shelves
- D solar tubes without dimming
- E solar tubes with internal dimmers
- F other
- G none

On Site Energy Generation List

- A solar water heating
- B solar electric generation (small units for demonstration or for limited areas)
- C solar electric generation (to support the entire building's energy needs)
- D wind generation (small units for demonstration or for limited areas)
- E wind generation (to support the entire building's energy needs)
- F other

Dis Nai	trict me: <u>Boone C</u>		District Code:	035	Facility Name:	Camp Ernst Middle Sci	nool	School Code:	010
1	Project Name:	Addition and I	Renovati	ons		REH Project #129	-222	Date: 3/9	9/23
Project Phase: Design Development:			v	Construction	Docum				
1.	Site Developm	ent			\$	221,213			
2.	General Const	ruction			\$	3,500,000			
3.	Heating, Ventil	ation & Air Con	ditioning		\$	2,056,574			
4.	Plumbing (Incl	ude Sprinkler S	ystem)		\$	259,500			
5.	Electrical World	(\$	2,700,213			
6.	Sewage Dispo	sal System			\$				
7.	Total Construc	tion Cost (1-6)							8,737,500
8.	Site Acquisition	n Cost (Purchas	se Price)		\$		-		
9.	Legal Services		,		\$				
10.	Fiscal Agent F	ee			\$				
11.	Bond Discount				\$				
12.	Architect/Engir	eer Fee			\$	400,575	_		
13.	Construction/M	lanager Fee (if	Applicat	ole)	\$		_		
14.	Equipment/Fur	nishings (Not F	ixed)/Co	mputers	\$	300,000	_		
15.	Property & Top	ographic Surve	эу		\$	10,000			
16.	Geotechnical S	Survey & Repor	t		\$	10,000			
17.	Special Inspec	tions			\$	40,000			
18.	Asbestos Abat	ement			\$	(2)	_		
19.	Commissioning	g Fee			\$	15,000			
20.	Plan Review F	ee			\$	10,000			
21.	Printing & Distr	ribution of Bid D	ocs / rei	mb / adv	\$	1,000			
22.	Contingencies	- Minimum 5%	of Line 7	7	\$	436,875			
23.	Testing and Ba	lancing			\$	20,000			
24.	Total Other Co	ost (8-23)							1,243,450
25.	TOTAL	PROJECT COS	ST (line :	7 + line 24)					\$9,980,950
	a.	Gross Square	Foot Ar	ea*					
		Total Cost Pe					\$		
	c.	Total Cost Pe	r Pupil			7	\$		
	d.	Gross Sq. Ft. * Base Bid Ar		Alternates	/				
Kentucky Registered Architect/Engineer: Robert Ehmet Hayes & Associates, PLLC				ssociates, PLLC	Date:	2/22/202	3		
Boa	ard of Education	Designee:		,	(,,		Date:		