# OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA

District Name: Boone Cou	ınty	District Code:	035	Facility Name:	Yealey Elementary School	School Code:	005
Project Name:	Renovations	1			REH Project #129-421-E		Date: July 13, 2023
PROJECT TYPE:	Yes	No	(*)	Gross Bu	ullding Area (sf.)		19
New Bullding					2		
Addition							
Renovation	Ø						
Provisions for Future	Expansion:	None				<del>, :</del>	
Proposed Alternates	: (1	)			2		
	(2	}					
		/	-1   -	too ottoob o	aumniamental about if needed		
Describe special cor	iditions, phasi	ing of proje	ect and alterna	ites, attach a	supplemental sheet, if needed.		
BUILDING CONSTE	RUCTION CH	ARACTE	RISTICS:				
Description of Bulldi	na Structure:						
Foundation	1.1 <del>.2.</del>				4		
Exterior Walls	: Cavity wall,	CMU / bric	k				2
Roof Structure	: Metal deck	wood dec	k	(4)	·		
ENERGY EFFICIEN	T DESIGN (F	(RS 157.4	50 and KRS 1	1 <u>57.455)</u> :	20		
72.16			"Existing" (kB				
64.9			Target (kBtu/s				
YES NO	_ inlongy con	iouii piioi					
	LEED Cert	ified	Othe	r;			
<u> </u>	Designed t						
			).1(2007) by 1	0% (Minimur	m)		
	Whole Buil	ding Life C	Cycle Cost Ana	alysis Demor	nstrating Cost Effective Design		98
	L	ife Cycle C	Cost Analysis S	Software Use	ed:		
If not yes to one or i	more of the at	oove, expla	ain why.				
5.							
	Designed t						
	Designed t	o be Net-2	ero Ready				w
Energy Efficient D	esign Featur	es: (See l	List Page 4, o	r Use Drop	Down List)		
East / West Building	East / West Building Orientation   YES   NO						
Gross Exterior Wall	Area (sf):				Avg. Exterior Wall R-Value:		
Gross Window / Do					Avg. Window/Door R-Value:		
Gross Roof Area (s	f):				Avg. Roof R-Value:	10000000	
Exterior Wall Type:	A - face bric	k, captured a	alr space, board	Insulation and	waterproof CMU	_ Other	
Roofing Type:	C - plastic si	ngle ply ove	r rigid insulation	<u> </u>		_ Other	
HVAC System Type						_	4 pipe fan coil
Classroom Lighting	: E - other					50-000 (a)0000	: LED
Active Daylighting:	E - other		<del></del>			_	Sensor w/ auto dim
Passive Daylighting						_ Other	:
On Site Energy Ge	neration:	F - other				Other	. IIOIIO

# KENTUCKY DEPARTMENT OF EDUCATION

BG-2

702 KAR 4:160

# **OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA**

Project: Yealey Elementary	- Renovations	REH	Project #	129-421-E	Date: July 13, 2023
				×	
Air Purification Systems :	YES □	NO 🗹		,	
Gray Water System:	YES .	NO 🗵			
Low Water Use Fixtures :	YES 🗵	NO □			
Other:					
PLUMBING:	3				
Type of Sewage Disposal	: Municipal				
		ONUNC.			
HEATING, VENTILATION					4/0.0
Heating Only:	Heating & Mechan Ventilation Only	ical:	·	HVAC: xx	_ A/C Only:
Fuel Source/Backup (if ap	oplicable): <u>natura</u>	al gas			
ELECTRICAL:			· constitue	Chaletters to town 2	(f., ).
Source of Electric Power:	Pad mounted trans	former (Duke	Energy)	Lighting Intensity of Std. Classrooms	(tc.): 50
Voltage Serving Facility:	480V			Library/Media Ctr	75
Number of Convenience	Outlote			Science Lab Science Cirm	N/A N/A
Number of Convenience Classrooms	Jutiets; <b>5</b>			Band/Music	50
Library/Media Center	N/A			Business Ed	N/A
Business Ed	N/A			Shops	N/A
Family & Consumer Scien	nc(N/A	.,,		Corridors	30
Onmana Orestaure	Vaa	70		Stairways	50
Camera System:	Yes			Cafeteria Pre-School Clrm	50 75
				Art Classroom	100
				Gymnasium	50
SPECIAL EQUIPMENT:				THE PROPERTY OF THE PROPERTY O	
	Conduit Only		Conduit &	Wiring	Complete with Equipn
Bell					x
Clock		-			<u>x</u>
Fire Alarm					X N/A
Intercom					N/A N/A
Telephone Television	<del></del>				N/A
Computer					N/A
Wireless Network					N/A
Interactive White bd			х	120	
Voice Amplification					x
FIXED EQUIPMENT:					
Teacher Cabinet	x			ustodial Room Shel	
Student Lockers	X			cience Laboratories	
Folding Bleachers	X	<del></del>		mily & Consumer S	
Library Furnishings				ther ther	
Dry Food Shelves	X		U	li i <del>C</del> i	P

## KENTUCKY DEPARTMENT OF EDUCATION

702 KAR 4:160

# **OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA**

Project: Yealey Ele	Date: <b>July 13, 2023</b>						
INTERIOR FINISH SCHEDULE: N/A							
INTERIORTINIO	TOOTILDOLL. NIA						
AREA	FLOOR	WAINSCOT	WALLS	CEILING			
Canada Office	Camad	CMII	CMII	Acoustical			
General Office Corridors	Carpet Rubber	CMU CMU	CMU	Acoustical			
Custodial	Ceramic tile	CMU	CMU	Acoustical			
	Ceramic tile	CMU	CMU	Acoustical			
Kitchen	Rubber	CMU	CMU	Acoustical			
Cafeteria	Wood	CMU	CMU	Acoustical			
Gym		CMU	CMU	Acoustical			
Showers/Locker	Ceramic tile Ceramic tile	CMU	CMU	Acoustical			
Toilets		CMU	CMU	Acoustical			
Library/Media Cnt Classrooms	Rubber	CMU	CMU	Acoustical			
	Rubber	CMU	CMU	Acoustical			
Music	Rubber	CMU	CMU	Acoustical			
Art		CMD ,	CMU	Acoustical			
Science	Rubber	CMU	CMU	Acoustical			
FMD	Rubber	_ CIVIO		Acoustical			
OTHER AREAS							
OTHER AREAS							
			_				
		-					
N	-!! O!!!- <b>-</b> t						
Miscellaneous Pr	oject Specific Featur	es:		and the second s			
Kentucky Registe	ered Architect:			Date: 6/22/2023			
,		Si	gnature				
			yes & Associates, PLLC				
		1		11-14-17-18-18-18-18-18-18-18-18-18-18-18-18-18-			
Kantuala Dagiata	red Engineer	Deangh (	Shober, PE	Date: 6/22/2023			
Kentucky Registe	erea Engineer.		gnature				
			•				
		Snrou	t Tate Wilson				
Board Designee	or Superintendent:			Date:			
	ntans - s nek 1984 <b>-</b> 1.0 se verezenarri (3.0 (5.0 (5.0 (5.0 (5.0 (5.0 (5.0 (5.0 (5	S	ignature				
			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 bl-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 celling 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

# BG-3 STATEMENT OF PROBABLE COST

Dis Nar		Boone C	ounty	District Code:	035	Facility Name:	Yealey Elementary Scho	ool	School Code:	005
F	Project	Name:	Renovations				REH Project #129-4	21-E	Date: 7/	13/23
Pro	ject P	hase:		Design [	Development:	•	Construction I	Docum	ents:	
1.	Site D	Developm	ent			\$	100,000			
2.	Gene	ral Const	ruction			\$	6,718,500			
3.	Heati	ng, Ventil	ation & Air Co	nditioning		\$	2,180,000			
4.	Plum	bing (Incl	ude Sprinkler :	System)		\$	1,115,000			
5.	Elect	rical Worl	<			\$	2,186,500			
6.	Sewa	ige Dispo	sal System			\$				
7.	Total	Construc	tion Cost (1-6)	)			-			12,300,000
8.	Site A	Acquisitio	n Cost (Purcha	ase Price)		\$				
9.	Lega	l Services				\$				
10.	Fisca	l Agent F	ee			\$				
11.	Bond	Discount	31 C			\$				
12.	Archi	tect/Engir	neer Fee			\$	761,370			
13.	Cons	truction/N	lanager Fee (i	f Applicat	ole)	\$				
14.	Equip	oment/Fu	nishings (Not	Fixed)/Co	mputers	\$	738,000			
15.	Prop	erty & Top	ographic Sur	vey		\$				
16.	Geote	echnical S	urvey & Repo	rt		\$				
17.	Spec	ial Inspec	tions			\$	10,000			
18.	Asbe	stos Abat	ement			\$	2,500			
19.	Com	missionin	g Fee			\$	90,000			
20.	Plan	Review F	ee			\$	10,000			
21.	Printi	ing & Dist	ribution of Bid	Docs / re	imb / adv	\$	2,500			
22.	Cont	ingencies	- Minimum 5%	% of Line 7	7	\$	615,000			
23.	Testi	ng and B	alancing			\$	28,250			
24.	Tota	I Other C	ost (8-23)				·-			2,257,620
25.	c .	TOTAL	PROJECT CO	OST (line	7 + line 24)					\$14,557,620
			. Gross Squa					•		
			<ul><li>Total Cost F</li><li>Total Cost F</li></ul>		e root			\$		
			. Gross Sq. F * Base Bid A	t. Area of	Alternates	- Armondo		Ψ		······································
Ke	ntucky	Register	ed Architect/E		Robert Ehme	t Hayes &	Associates, PLLC	Date:	6/22/20	23
Во	ard of	Education	n Designee:	-			Lui.	Date:		