

District Name: Boone County District Code: 035 Facility Name: Boone County Area Technology Center School Code: 980

Project Name: Ventilation System REH Project #129-517-B Date: 11/30/17

PROJECT TYPE: Yes No Gross Building Area (sf.)
New Building ☐ ☒
Addition ☐ ☒
Renovation ☒ ☐

Provisions for Future Expansion: _____

Proposed Alternates:

(1)
(2)
(3)

Describe special conditions, phasing of project and alternates, attach a supplemental sheet, if needed.

BUILDING CONSTRUCTION CHARACTERISTICS: N/A

Description of Building Structure:

Foundation: _____

Exterior Walls: _____

Roof Structure: _____

ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):

90 Energy Consumption "Existing" (kBtu/sf/yr)

86 Energy Consumption Target (kBtu/sf/yr)

YES NO

☐ ☒ LEED Certified Other: _____
☐ ☒ Designed to meet Energy Star
☐ ☒ Exceeds ASHRAE 90.1(2007) by 10% (Minimum)
☐ ☒ Whole Building Life Cycle Cost Analysis Demonstrating Cost Effective Design

Life Cycle Cost Analysis Software Used: _____

If not yes to one or more of the above, explain why. No Owner requirement.

☐ ☒ Designed to be Net-Zero
☐ ☒ Designed to be Net-Zero Ready

Energy Efficient Design Features: (See List Page 4, or Use Drop Down List)

East / West Building Orientation ☐ YES ☐ NO

Gross Exterior Wall Area (sf): _____

Avg. Exterior Wall R-Value: _____

Gross Window / Door Area (sf): _____

Avg. Window/Door R-Value: _____

Gross Roof Area (sf): _____

Avg. Roof R-Value: _____

Exterior Wall Type: E - other, describe

Other: N/A

Roofing Type: F - other, describe

Other: N/A

HVAC System Type: L - other

Other: N/A

Classroom Lighting: E - other

Other: N/A

Active Daylighting: F - none

Other: N/A

Passive Daylighting: G - none

Other: N/A

On Site Energy Generation: F - other

Other: N/A

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REH Project #129-517-B

Date: December 14, 2017

Air Purification Systems : YES ☐ NO ☒

Gray Water System : YES ☐ NO ☒

Low Water Use Fixtures : YES ☐ NO ☒

Other: _____

PLUMBING:

Type of Sewage Disposal: Municipal

HEATING, VENTILATION AND AIR CONDITIONING:

Heating Only: _____ Heating & Mechanical: _____ HVAC: xx A/C Only: _____
Ventilation Only

Fuel Source/Backup (if applicable): N/A

ELECTRICAL:

Source of Electric Power: Utility

Voltage Serving Facility: 120/208/3P and 480/277/3P/4W

Number of Convenience Outlets:

Classrooms N/A

Library/Media Center N/A

Business Ed N/A

Family & Consumer Science N/A

Camera System: N/A

Lighting Intensity (fc.):

Std. Classrooms N/A

Library/Media Ctr N/A

Science Lab N/A

Science Clrm N/A

Band/Music N/A

Business Ed N/A

Shops N/A

Corridors N/A

Stairways N/A

Cafeteria N/A

Pre-School Clrm N/A

Art Classroom N/A

Gymnasium N/A

SPECIAL EQUIPMENT: N/A

System	Conduit Only	Conduit & Wiring	Complete with Equipment
Bell	_____	_____	_____
Clock	_____	_____	_____
Fire Alarm	_____	_____	_____
Intercom	_____	_____	_____
Telephone	_____	_____	_____
Television	_____	_____	_____
Computer	_____	_____	_____
Wireless Network	_____	_____	_____
Interactive White bd	_____	_____	_____
Voice Amplification	_____	_____	_____

FIXED EQUIPMENT: N/A

Teacher Cabinet	_____	Custodial Room Shelves	_____
Student Lockers	_____	Science Laboratories	_____
Folding Bleachers	_____	Family & Consumer Sci	_____
Library Furnishings	_____	Other	_____
Dry Food Shelves	_____	Other	_____

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INTERIOR FINISH SCHEDULE: N/A

AREA	FLOOR	WAINSCOT	WALLS	CEILING
General Office				
Corridors				
Custodial				
Kitchen				
Cafeteria				
Gym				
Showers/Locker				
Toilets				
Library/Media Cntr				
Classrooms				
Music				
Art				
Science				
FMD				
OTHER AREAS				

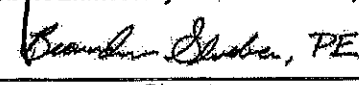
Miscellaneous Project Specific Features:

Kentucky Registered Architect:


Signature
Robert Ehmet Hayes & Associates, PLLC

Date: 12/1/2017

Kentucky Registered Engineer:


Signature
Shrout Tate Wilson

Date: 12/1/2017

Board Designee or Superintendent:


Signature
Boone County Board of Education

Date: 12/5/17

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 plane
- 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

For Reference