

District Name: Mercer County District Code: 421 Facility Name: Mercer County Elementary School Code: _____

Project Name: New Mercer County Elementary School

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

Provisions for Future Expansion: A future addition for another grade level is planned on the Site Plans

Proposed Alternates: (1) _____
 (2) _____
 (3) _____

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

BUILDING CONSTRUCTION CHARACTERISTICS:

Description of Building Structure:

Foundation: Concrete footers and stem walls

Exterior Walls: Load bearing CMU with spray foam insulation and masonry veneer

Roof Structure: 1: Cold formed trusses, metal deck, polyiso insulation, metal roofing
2: Metal joists, metal deck, polyiso insulation, SBS roof membrane

ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):

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

22 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. _____

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): 30,964 SF Avg. Exterior Wall R-Value: 19

Gross Window / Door Area (sf): 4,751 SF Avg. Window/Door R-Value: 3.5

Gross Roof Area (sf): 71,790 SF Avg. Roof R-Value: 30

Exterior Wall Type: B - face brick, captured air space, sprayed insulation on CMU Other: _____

Roofing Type: D - metal roofing over nailable deck with insulation Other: _____

HVAC System Type: C - ground source heat pump system with air make up Other: _____

Classroom Lighting: E - other Other: LED

Active Daylighting: F - none Other: _____

Passive Daylighting: G - none Other: _____

On Site Energy Generation: G - none Other: _____

Air Purification Systems : YES NO

Gray Water System : YES NO

Low Water Use Fixtures : YES NO

Other: _____

PLUMBING:

Type of Sewage Disposal: Force main connected to municipal force main

HEATING, VENTILATION AND AIR CONDITIONING:

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

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

ELECTRICAL:

Source of Electric Power: KU

Voltage Serving Facility: 480

Number of Convenience Outlets:
Classrooms 8
Library/Media Center 12
Business Ed N/A
Family & Consumer Science N/A

Camera System: Yes

Lighting Intensity (fc.):
Std. Classrooms 50
Library/Media Ctr 75
Science Lab N/A
Science Clrm N/A
Band/Music 50
Business Ed N/A
Shops N/A
Corridors 30
Stairways 30
Cafeteria 50
Pre-School Clrm 75
Art Classroom 100
Gymnasium 50

SPECIAL EQUIPMENT:

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

FIXED EQUIPMENT:

Teacher Cabinet	<u>Yes</u>	Custodial Room Shelves	<u>n/a</u>
Student Lockers	<u>n/a</u>	Science Laboratories	<u>n/a</u>
Folding Bleachers	<u>Yes</u>	Family & Consumer Sci	<u>n/a</u>
Library Furnishings	<u>Yes (mobile)</u>	Other	<u>n/a</u>
Dry Food Shelves	<u>Yes</u>	Other	<u>n/a</u>

INTERIOR FINISH SCHEDULE:

AREA	FLOOR	WAINSCOT	WALLS	CEILING
General Office	LVT	NA	Paint	ACT
Corridors	Terrazzo/LVT	Paint	Paint	ACT & Painted Gyp, Acous. Baf
Custodial	Sealed Concrete	NA	Paint	Exposed, No Paint
Kitchen	Flake Epoxy	NA	Paint	Scrubable ACT
Cafeteria	LVT	Paint	Paint	ACT & Painted Gyp
Gym	Wood	Paint	Paint	Exposed, Spray on Acous
Showers/Locker	NA			
Toilets	Porcelain Tile	Porcelain Tile	Paint	ACT
Library/Media Cntr	LVT/Carpet	NA	Paint	ACT
Classrooms	Solid Vinyl Tile	NA	Paint	ACT
Music	Solid Vinyl Tile	NA	Paint	ACT, Acoustical Panels at wall
Art	Solid Vinyl Tile	NA	Paint	ACT
Science	NA			
FMD	Solid Vinyl Tile	NA	Paint	ACT
OTHER AREAS				
STEAM	Solid Vinyl Tile	Paint	Paint	ACT and Baffles

Miscellaneous Project Specific Features: _____

Kentucky Registered Architect:

Beth Bauer
Signature

Date: 8/8/2023

Kentucky Registered Engineer:

Alan J. Hunt
Signature

Date: 8-8-23

Board Designee or Superintendent:

Signature

Date: _____

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
- G - none

For Reference