District Name: Hopkins County PS District Code: 265 Facility Name: James Madison Middle Sch. School Code:

Project Name: James Madison Middle School Cooling Tower Replacement

PROJECT TYPE:	Yes	No	Gross Building Area (sf.)
New Building	☐	☑	
Addition	☐	☑	
Renovation	☑	☐	Cooling Tower Upgrade

Provisions for Future Expansion: N/A

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: Existing Slab on Grade

Exterior Walls: Block / Brick veneer

Roof Structure: Steel / Metal roof

ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):

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

32 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): 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:		Other:
Roofing Type:		Other:
HVAC System Type:		Other:
Classroom Lighting:		Other:
Active Daylighting:		Other:
Passive Daylighting:		Other:
On Site Energy Generation:		Other:

Air Purification Systems : YES ☐ NO ☑

Gray Water System : YES ☐ NO ☑

Low Water Use Fixtures : YES ☐ NO ☑

Other: _____

PLUMBING:

Type of Sewage Disposal: Municipal Utilities

HEATING, VENTILATION AND AIR CONDITIONING:

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

Fuel Source/Backup (if applicable): Electrical

ELECTRICAL:

Source of Electric Power: TVA

Voltage Serving Facility: 480-277 V / 3 Phase

Number of Convenience Outlets:
Classrooms _____
Library/Media Center _____
Business Ed _____
Family & Consumer Science _____

Camera System: _____

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

SPECIAL EQUIPMENT:

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:

Teacher Cabinet _____
Student Lockers _____
Folding Bleachers _____
Library Furnishings _____
Dry Food Shelves _____

Custodial Room Shelves _____
Science Laboratories _____
Family & Consumer Sci _____
Other _____
Other _____

INTERIOR FINISH SCHEDULE:

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: _____ Date: _____
Signature

Kentucky Registered Engineer: Nami Nahid, PE 12/1/2020
Signature

Board Designee or Superintendent: _____ Date: _____
Signature

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
G - none