

District Name: Russellville Independent School District Code: 523 Facility Name: Russellville High School School Code: 022

District  
Project Name: Russellville High School HVAC Renovation

**PROJECT TYPE:** Yes No Gross Building Area (sf.)

New Building ☐ ☒ \_\_\_\_\_

Addition ☐ ☒ \_\_\_\_\_

Renovation ☒ ☐ 82,550

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:**

Description of Building Structure:

Foundation: \_\_\_\_\_

Exterior Walls: \_\_\_\_\_

Roof Structure: \_\_\_\_\_

### **ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):**

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

37.9 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: C - ground source heat pump system with air make up Other: \_\_\_\_\_

Classroom Lighting: E - other Other: LED & T8

Active Daylighting: B - occupancy light control sensors Other: \_\_\_\_\_

Passive Daylighting: G - none 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: \_\_\_\_\_

**HEATING, VENTILATION AND AIR CONDITIONING:**Heating Only: \_\_\_\_\_ Heating & Mechanical: \_\_\_\_\_ HVAC:   X   A/C Only: \_\_\_\_\_  
Ventilation Only

Fuel Source/Backup (if applicable): \_\_\_\_\_

**ELECTRICAL:**Source of Electric Power: Utility (Russellville EPB)Voltage Serving Facility: 120/208V

Number of Convenience Outlets:

Classrooms NALibrary/Media Center NABusiness Ed NAFamily & Consumer Science NACamera System: NA

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	_____	_____	<u>NA</u>
Clock	_____	_____	<u>NA</u>
Fire Alarm	_____	_____	<u>NA</u>
Intercom	_____	_____	<u>NA</u>
Telephone	_____	_____	<u>NA</u>
Television	_____	_____	<u>NA</u>
Computer	_____	_____	<u>NA</u>
Wireless Network	_____	_____	<u>NA</u>
Interactive White bd	_____	_____	<u>NA</u>
Voice Amplification	_____	_____	<u>NA</u>

**FIXED EQUIPMENT:**

Teacher Cabinet	_____	Custodial Room Shelves	_____
Student Lockers	_____	Science Laboratories	_____
Folding Bleachers	_____	Family & Consumer Sci	_____
Library Furnishings	_____	Other	_____
Dry Food Shelves	_____	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:	_____ Signature	Date: _____
Kentucky Registered Engineer:	<i>Risa Miller</i> _____ Signature	Date: 3/13/2025
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 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

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For Reference

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