

**WOODFORD COUNTY BOARD OF EDUCATION
AGENDA ITEM**

ITEM #: 1x1 **DATE:** December 13, 2021

TOPIC/TITLE: New WCHS - BG-2 (Construction Document Phase)

PRESENTER: Jeff Martello

ORIGIN:

- ☐ TOPIC PRESENTED FOR INFORMATION ONLY (No board action required.)
- ☒ ACTION REQUESTED AT THIS MEETING
- ☐ ITEM IS ON THE CONSENT AGENDA FOR APPROVAL
- ☐ ACTION REQUESTED AT FUTURE MEETING: (DATE)
- ☐ BOARD REVIEW REQUIRED BY

- ☒ STATE OR FEDERAL LAW OR REGULATION
- ☐ BOARD OF EDUCATION POLICY
- ☐ OTHER:

PREVIOUS REVIEW, DISCUSSION OR ACTION:

- ☐ NO PREVIOUS BOARD REVIEW, DISCUSSION OR ACTION
- ☐ PREVIOUS REVIEW OR ACTION

- ☐ DATE:
- ☐ ACTION:

BACKGROUND INFORMATION:

For consideration of approval. New WCHS - BG-2 (Construction Document Phase). Outline Specifications Energy Design Criteria.

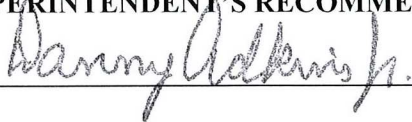
SUMMARY OF MAJOR ELEMENTS:

See above

IMPACT ON RESOURCES: Current BG-3 Reference @ \$60,399,784.52

TIMETABLE FOR FURTHER REVIEW OR ACTION: NA

SUPERINTENDENT'S RECOMMENDATION: ☒ Recommended ☐ Not Recommended



District Name: Woodford District Code: 601 Facility Name: Woodford County High School School Code: 84

Project Name: New Woodford County High School--Phase 1

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

New Building ☒ ☐ 193,782

Addition ☐ ☒ _____

Renovation ☐ ☒ _____

Provisions for Future Expansion: At classroom wings.

Proposed Alternates: (1) Cafeteria Revisions (4) Road Connection-Tyrone Pk. (7) Owner-pref. HVAC Controls Mfr.
(2) Epoxy Terrazzo Flooring (5) Tyrone Pk. ROW work (8) Owner-pref. Access Ctrls. Mfr./Installer
(3) Geothermal HVAC (6) Schoolhouse Rd. ROW work (9) Owner-pref. Door Hdw. Mfrs.

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

BUILDING CONSTRUCTION CHARACTERISTICS:

Description of Building Structure:

Foundation: Loadbearing concrete masonry construction supported on shallow foundations.

Exterior Walls: Load-bearing masonry with masonry veneer and metal panel siding. Metal studs in limited areas.
Precast concrete walls at the storm shelter.

Roof Structure: Sloped lightweight insulating concrete over metal decking and steel joists/beams. Metal decking over
sloped steel joists/beams. Sloped precast concrete double tees with topping slab at storm shelter.

ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):

N/A Energy Consumption "Existing" (kBtu/sf/yr)

32 / 20 (Geo Alt) 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): 81,000 Avg. Exterior Wall R-Value: 22

Gross Window / Door Area (sf): 9,159 / 1,031 Avg. Window/Door R-Value: 2.2/10

Gross Roof Area (sf): 124,200 Avg. Roof R-Value: 30

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

Roofing Type: C - plastic single ply over rigid insulation Other: Metal Roof

HVAC System Type: B - water source heat pump system with air make up Other: Alt - System D

Classroom Lighting: E - other Other: LED

Active Daylighting: A - classroom fluorescent dimming including dimming switches, ballasts and sensors Other: _____

Passive Daylighting: D - solar tubes without dimming 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: City Sanitary**HEATING, VENTILATION AND AIR CONDITIONING:**Heating Only: _____ Heating & Mechanical: _____ HVAC: X A/C Only: _____
Ventilation OnlyFuel Source/Backup (if applicable): Natural Gas**ELECTRICAL:**Source of Electric Power: Pad-mount transformer, Kentucky Utilities Lighting Intensity (fc.):Voltage Serving Facility: 277/480V/3PH/4W

Number of Convenience Outlets:

Classrooms	<u>8</u>
Library/Media Center	<u>18</u>
Business Ed	<u>8</u>
Family & Consumer Science	<u>8</u>

Camera System: Yes

Std. Classrooms	<u>50</u>
Library/Media Ctr	<u>75</u>
Science Lab	<u>50</u>
Science Clrm	<u>50</u>
Band/Music	<u>50</u>
Business Ed	<u>50</u>
Shops	<u>75</u>
Corridors	<u>20</u>
Stairways	<u>20</u>
Cafeteria	<u>50</u>
Pre-School Clrm	<u>N/A</u>
Art Classroom	<u>100</u>
Gymnasium	<u>50</u>

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>N/A</u>	<u>N/A</u>	<u>N/A</u>
Computer	_____	<u>X</u>	_____
Wireless Network	_____	<u>X</u>	_____
Interactive White bd	_____	<u>X</u>	_____
Voice Amplification	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

FIXED EQUIPMENT:

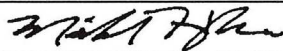
Teacher Cabinet	<u>Yes</u>	Custodial Room Shelves	_____
Student Lockers	<u>Yes (limited)</u>	Science Laboratories	<u>Yes</u>
Folding Bleachers	<u>Yes</u>	Family & Consumer Sci	<u>Yes</u>
Library Furnishings	<u>Yes</u>	Other	<u>Fixed Bleachers</u>
Dry Food Shelves	<u>Yes</u>	Other	_____

INTERIOR FINISH SCHEDULE:

AREA	FLOOR	WAINSCOT	WALLS	CEILING
General Office	LVT		Paint	Acoustical Ceiling Panel
Corridors	VCT		Paint	Painted Gypsum/ACT
Custodial	Sealed Concrete			
Kitchen	Quarry Tile		Paint/FRP	Washable Vinyl Ceiling Tile
Cafeteria	VCT		Paint	Painted Gypsum/ACT
Gym	Clear Stained Maple	Paint	Paint/Acoustical panels	Acoustical Insulation on Deck
Showers/Locker	Sealed Concrete		Paint/Ceramic Tile	Painted Gypsum
Toilets	Ceramic Tile		Paint/Ceramic Tile	Painted Gypsum
Library/Media Cntr	Carpet		Paint	Painted Gypsum/ACT
Classrooms	VCT		Paint	Acoustical Ceiling Panel
Music	VCT		Paint/Acoustical panels	Acoustical Ceiling Panel
Art	VCT		Paint	Acoustical Ceiling Panel
Science	VCT		Paint	Acoustical Ceiling Panel
FMD	VCT		Paint	Acoustical Ceiling Panel
OTHER AREAS				
Auditorium	Sealed Conc./Carpet/Wood		Paint/Acoustical panels	Painted Gyp./Acoustical Panels

Miscellaneous Project Specific Features: _____

Kentucky Registered Architect:



Signature

Date: 12/1/2021

Kentucky Registered Engineer:



Signature

Date: 12/01/2021

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