District Name: Hardin County Schools | District Code: 231 | Facility Name: Central Hardin High School | School Code: 190

Project Name:

**PROJECT TYPE:**

| | Yes | No | Gross Building Area (sf.) |
|---|---|---|---|
| New Building | ☐ | ☑ | |
| Addition | ☑ | ☐ | 119,917 GSF |
| Renovation | ☑ | ☐ | 55,238 GSF |

Provisions for Future Expansion: Yes

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

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

**BUILDING CONSTRUCTION CHARACTERISTICS:**

Description of Building Structure:

Foundation: Spread Footings, Gym Level slab on grade, first/second floor precast hollow core floor planks bearing on CMU and some columns. Mechanical Platforms is concrete over metal deck on bar joists.

Exterior Walls: Brick/or Metal Panel Over CMU backup. Existing to remain.

Roof Structure: Modified Bituminous Membrane Roofing over rigid insulation. Metal Roofing over rigid inuslation and metal deck at the penthouse. EPDM over Canopy Roofs

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

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

35 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: | B - face brick, captured air space, sprayed insulation on CMU | Other: | Metal Panel |
| Roofing Type: | A - modified bitumen over rigid insulation | Other: | EPDM/Metal Roofing |
| HVAC System Type: | C - ground source heat pump system with air make up | Other: | |
| Classroom Lighting: | E - other | Other: | LED w/ dimming |
| Active Daylighting: | B - occupancy light control sensors | 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: City

**HEATING, VENTILATION AND AIR CONDITIONING:**

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

Fuel Source/Backup (if applicable): Gas

**ELECTRICAL:**

Source of Electric Power: Utility - Kentucky Utilities

Voltage Serving Facility: 277/480V, 3P4W

Number of Convenience Outlets:

| | |
|---|---|
| Classrooms | 8 |
| Library/Media Center | 28 |
| Business Ed | 16 |
| Family & Consumer Science | 34 |

Camera System: YES

Lighting Intensity (fc.):

| | |
|---|---|
| Std. Classrooms | 50fc |
| Library/Media Ctr | 75fc |
| Science Lab | 75fc |
| Science Clrm | 50fc |
| Band/Music | 75fc |
| Business Ed | 50fc |
| Shops | 50fc |
| Corridors | 25fc |
| Stairways | 25fc |
| Cafeteria | 50fc |
| Pre-School Clrm | n/a |
| Art Classroom | 100fc |
| Gymnasium | 75fc |

**SPECIAL EQUIPMENT:**

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

**FIXED EQUIPMENT:**

| | | | |
|---|---|---|---|
| Teacher Cabinet | X | Custodial Room Shelves | X |
| Student Lockers | X | Science Laboratories | X |
| Folding Bleachers | X | Family & Consumer Sci | N/A |
| Library Furnishings | X | Other | |
| Dry Food Shelves | X | Other | |

**INTERIOR FINISH SCHEDULE:**

| AREA | FLOOR | WAINSCOT | WALLS | CEILING |
|---|---|---|---|---|
| General Office | Carpet | N/A | Paint | 2X2 APC |
| Corridors | Polished Concrete | N/A | Paint | 2X2 APC, GWB |
| Custodial | Concrete | N/A | Paint, Epoxy | Structure |
| Kitchen | Quarry Tile | N/A | Paint, Epoxy | 2X2 APC Vinyl Face |
| Cafeteria | MCT | N/A | Paint | Painted Structure, 2X2 APC |
| Gym | Wood/Existing | N/A | Paint | Painted Structure |
| Showers/Locker | Concrete | N/A | Paint, Epoxy | 2X2 APC Vinyl Face |
| Toilets | Tile | N/A | Paint, Epoxy | 2X2 APC Vinyl Face |
| Library/Media Cntr | Carpet/LVT | N/A | Paint | 2X2 APC, GWB |
| Classrooms | Polished Concrete | N/A | Paint | 2X2 APC |
| Music | MCT | N/A | Paint | 2X2 APC, GWB |
| Art | Polished Concrete | N/A | Paint | 2X2 APC |
| Science | Polished Concrete | N/A | Paint | 2X2 APC |
| FMD | Polished Concrete | N/A | Paint | 2X2 APC |
| OTHER AREAS | | | | |
| F&CS | Polished Concrete | N/A | Paint | 2X2 APC, GWB |
| Computer | Polished Concrete | N/A | Paint | 2x2 APC |
| ROTC | Polished Concrete | N/A | Paint | 2x2 APC |

Miscellaneous Project Specific Features: N/A

Kentucky Registered Architect:  Signature Date: 8-18-2020

Kentucky Registered Engineer: David Epperson Signature Date: 8-18-2020

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