

Building Name: South Jefferson High School

Location and Site: Huyett Road Charles Town, WV 25414

Building Occupant Name: Jefferson County Schools

Occupancy or function types: High School/ Educational

Size: Total Square Footage – 232,705 ft2

Number of Stories: 2 stories

Total Building Cost - \$33 Million

Project Delivery Method: Design-Bid-Build

Project Team:

Owner - Jefferson County Schools - http://boe.jeff.k12.wv.us/

Architect - Alpha Associates, Incorporated - http://www.alphaaec.com/

MEP - H.F. Lenz Company - http://www.hflenz.com/

CM - Turner Construction - http://www.turnerconstruction.com/



Architecture:

Zoning: R-1 Residential

Exterior walls are brick veneer applied to heavy duty metal stud framing or brick veneer applied to pre-cast concrete panels.

Structural System:

Foundation is reinforced concrete with reinforced concrete retaining walls as needed.

Main substructure is steel framing with Cast-inplace concrete floor slabs.

Roof is supported by metal joists.

Mechanical System:

14 Air handling units ranging from 6,000 to 25,500 CFM

- (6) VAV System with Fan Powered Boxes and VFD
- (8) Constant Volume Air Handlers

Heating System:

Two 4,717 MBH Electric Boilers

- Primary-Secondary Variable Volume Pumping

Electrical System:

480/277 V, 3-phase electric service 480 to 208/120V Transformers Emergency 125 kW Diesel Fueled Generator

Lighting: Generally recessed fluorescent lighting fixtures with acrylic lenses

Jonathon A. Gridley

Mechanical Option

http://www.arche.psu.edu/thesis/eportfolio/2007/portfolios/JAG432/

The Pennsylvania State University

Architctural Engineering