



PAINT BRANCH HIGH SCHOOL MODERNIZATION BURTONSVILLE, MD



DIAB SHETAYH—CONSTRUCTION OPTION <http://www.engr.psu.edu/ae/thesis/portfolios/2011/des295/index.html>

PROJECT INFORMATION:

Function: Education

Building Cost: \$80,973,293

Size: 349,000 Square Feet

Dates of Construction: 12/15/2010—Summer 2012

Delivery Method: Modified CM @ Risk

PROJECT TEAM

Owner: Montgomery County Public School (MCPS)

Architect: Moseley Architects

Construction: Hess Construction +

Manager: Engineering Services

Structural Engineer: Wolfman and Associates, P.C.

MEP Engineer: B2E Consulting Engineers, P.C.

STRUCTURAL

The building is broken up into thirds starting with a three story classroom wing, a two story wing including an auditorium, gymnasium, and a one story lower section which houses lockers and team rooms. It is estimated that about one half of the building is steel bearing and the remaining half is load bearing masonry. All sit on a standard mat foundation systems.



MECHANICAL SYSTEM

The HVAC system being used for the school is a geothermal heat pump system. There are approximately 600 wells that range from 300 to 450 feet below ground. These wells will be installed below completion fields to act as the heat source sink for the system.



ARCHITECTURE

The façade of the building is primarily composed of brick with portions of architectural precast concrete, metal panels, curtain walls, and standard glazed operating windows. The entrance of the building includes large architectural precast panels flanked by stacked brick piers in a circular shape.

