

## Francis Howell North High School



### PROJECT DESCRIPTION

**Client:** Francis Howell School District

**Project:** Francis Howell North High School

**Floor Area:** 487,000 square feet

### ROLE

Value Engineering

HVAC Mechanical Contractor

### PROJECT SCOPE

Wiegmann is installing HVAC systems to serve the entire new high school including 100 classrooms; science, business and computer laboratories; two administration suites; library; commons and cafeteria areas. The project also will include a multi-use gymnasium as well as a fieldhouse complete with multiple locker rooms, an office suite and a weight training room. To meet the varying heating and cooling needs of zones throughout the building, allow for energy conservation and lower operating costs, a variable-air-volume (VAV) system utilizing a central plant will serve chilled water to rooftop air handlers and hot water to reheat terminal units.

Wiegmann is using building information modeling (BIM) to assist in constructability reviews and plan the interplay and layout of all building systems. This streamlines construction, improves communications, helps to minimize field errors and reduces rework.

### PROJECT CHALLENGE

Construction will occur in phases to allow for replacement of the existing building while school operations continue uninterrupted. Due to supply chain volatility and materials costs increasing to an all-time high, pricing came in considerably higher than the original project budget, which was estimated in 2018. Wiegmann collaborated with the design team to value engineer a cost-effective heating and air conditioning solution that reduces the project budget without decreasing performance.

