

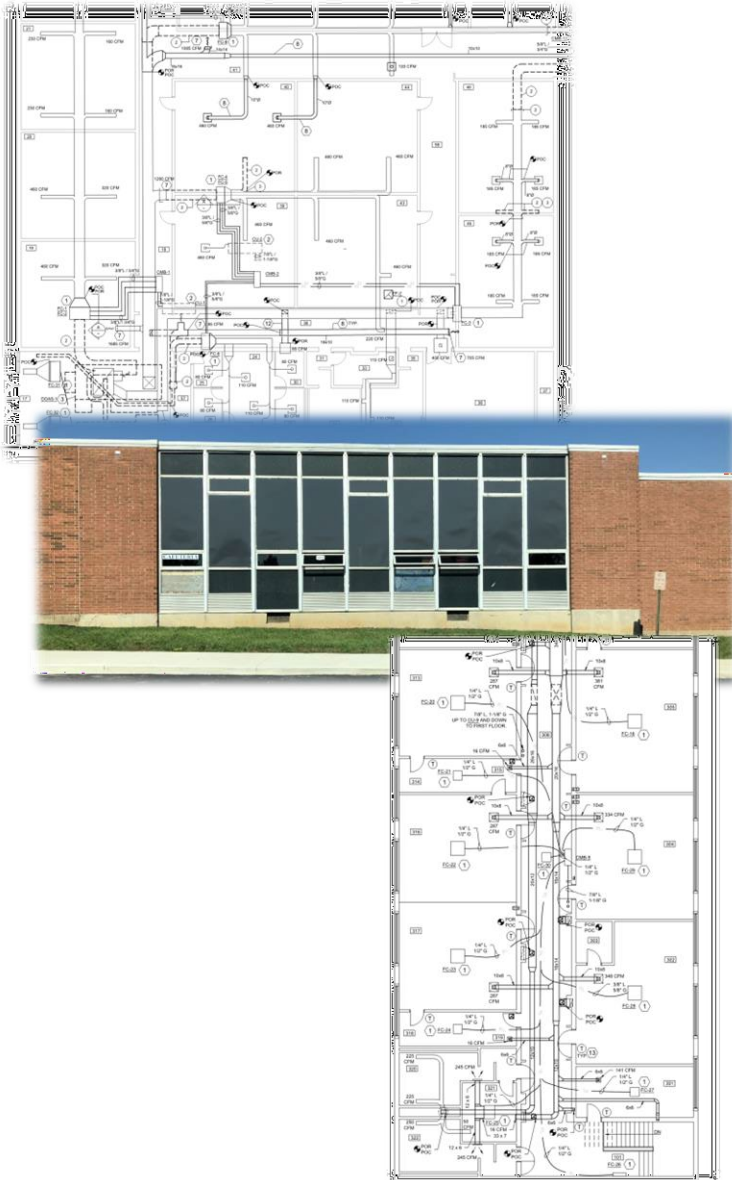
Tipp City Schools Facility Improvements

Tipp City, OH

Construction Completion: 2018

Size: 80,950 SF

Tri-Tech Services: MEP Engineering



Project Description

The Tipp City Exempted Village Schools wanted to replace the middle-school building's mechanical equipment. The project's goals culminated in adding air conditioning to the building and improving its heating efficiency and cost. Tri-Tech provided mechanical and electrical engineering designs, working closely with contractors the school-district chose.

Tri-Tech's mechanical-engineering design included evaluating the existing building loads as well as the heating-and-ventilation system. Tri-Tech's analysis led to its completing a building design that included multiple variable refrigerant-flow systems serving more than ninety fan-coil units throughout the building.

Tri-Tech's evaluating services led to a significant, unanticipated project-cost saving. Tri-Tech's team evaluated the existing building exhaust systems, and its design greatly reduced the amount of air the building exhausted. This meant the anticipated size of dedicated outside air systems could be reduced.

Tri-Tech afforded the owner another project-cost savings after Tri-Tech's analysis of the building electrical service, anticipating adding new building cooling equipment. The original design anticipated an increase from 2,000A to 4,000A. However, Tri-Tech determined a 3,000A service provided adequate capacity for the building. This allowed for the existing utility transformer to remain instead of replacing it, as was originally proposed.

Tri-Tech's electrical design also included new distribution throughout the building to provide power to the new mechanical equipment. The quantity of the units installed throughout the building necessitated a close coordination to provide a complete system.

Tri-Tech worked with the contractors throughout the project to facilitate equipment selection and ordering to satisfy the project's tight timeline and deadlines.