

EQUIPMENT REPLACEMENT EXPERIENCE

Accident Fund/Blue Cross Blue Shield Building, Lansing, MI

The current Blue Cross Blue Shield Building, a 10-story high rise building, was originally designed for the Accident Fund Headquarters in 1986 with current Matrix staff acting as Lead Mechanical and Electrical Designer. Matrix also provided a complete Mechanical, Electrical & Plumbing building renovation including replacing most of the HVAC equipment for Blue Cross Blue Shield conversion in 2010 completed in 2011.

USPFO Readiness Center, Lansing, MI

120,000 square foot project which completely retrofits the mechanical and electrical systems of an existing three-story state office building into a multi-military unit readiness center for the Michigan Air National Guard, and Homeland Security. HVAC systems consist of four VAV air handlers utilizing central chilled water from a salvaged centrifugal chiller and new high efficiency condensing boiler for heating and domestic hot water. Six design alternates were included in the project to allow conformance to a strict budget. Matrix Consulting Engineers, Inc.'s responsibilities included all HVAC, plumbing, fire protection, lighting, power, fire alarm, technology, and raceway systems for data, security, and telecom systems, and data wiring.

General Office Building, Secondary Complex, Dimondale, MI

Two 140,000 CFM air handling units with 350 horse power fans serve almost all of the General Office Building. The fan and motor in each fan was replaced with two plenum fans that will operate in a lead lag arrangement. Since the building could not be shut down during this construction temporary ductwork was added so that one air handling unit served both air handling unit areas during construction. Part of this project also included adding booster pumps in the basement to supply chilled water to the penthouse air handling units. Matrix also commissioned this project to verify everything worked as designed. Before this work was completed the existing building would get warm on hot days after the project the building does not have a problem maintaining temperature.

General Office Building, Secondary Complex, Dimondale, MI

HVAC system consisted of replacing all the domestic water heating equipment including heat exchanger, pumps and controls. Matrix also replaced the entire hydronic heating system including heat exchangers, pumps, expansion tanks, and replaced pumps on the chilled water side. On the air side matrix replaced two air handling units, and also the coil banks, filter racks and drain pans along with some piping in the large built up air handling units.