

CLIENT

**NEW JERSEY
INSTITUTE OF
TECHNOLOGY**

LOCATION:

Laurel Hall
Newark, NJ

CONSTRUCTION VALUE:
\$500,000

DESIGN START:
2011

DESIGN COMPLETE:
2012



PROJECT DESCRIPTION

Control System Upgrade and Chiller Plant Optimization

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The HVAC System for the Laurel Hall dormitory building consists of (3) Air Cooled Chillers, Hot Water Boilers, Primary/Secondary Chilled Water and Hot Water Pumps, and Fan Coil Units dedicated for each suite.

A&J Consulting designed the upgrade of existing HVAC Control System and chilled water pumping system by providing variable frequency drives to replace constant volume chilled water pumps. Individual thermostatic controls were added for the existing Fan Coil Units serving each suite.

Chilled water flow calculations and detailed analyses were performed to program the new controls system to optimize the chiller plant efficiency.