

CLIENT

CONFIDENTIAL

LOCATION:

New York



Building



Rooftop Equipment

CONSTRUCTION VALUE:

\$3.5 Million

DESIGN START:

2000

DESIGN COMPLETE:

2001

CONSTRUCTION

COMPLETE:

2001

THIRD FLOOR VIRAL VACCINE DEVELOPMENT PILOT PLANTS

SCOPE OF WORK

Design MEP Systems and other Building System Upgrades.

PROJECT DESCRIPTION

A&J was prime consultant for a \$3.5 million MEP, architectural, structural, and acoustical renovation of 24,000 sq ft on the third floor of the 211 building, comprising offices, corridors, and laboratories with a clean glassware prep room, cell culture room, infection room, glass wash, sterile glass storage, purification freezer, et. Al. A&J managed and coordinated the activities of the architectural, structural engineering, and acoustical sub-consultants.

The renovation upgraded the space to conform to cGMP requirements, to comply with Class 100k clean room standards, to provide a modern controls system to control temperature, humidity, and pressurization, and to separate movement of personnel and material between infectious and non-infectious areas. Existing systems serving the area were surveyed and evaluated and a complete design and construction concept plan was developed for Client approval.

A 9,000 CFM 100% Outdoor Self-Contained AC unit was installed on the building roof. The unit is equipped with a 30 % pre-filter and a 95% efficiency after filter, DX cooling and steam heating coil. At the supply air outlet HEPA filters were installed. Air is exhausted through exhaust fans.

A new Direct Digital control system with pneumatic dampers, airflow measuring stations, variable frequency devices, and pressure-temperature-humidity sensing devices, controls environmental conditions in all spaces.

Architectural upgrades include new washable ceiling, zero seal doors and epoxy floors. Air locks are provided for every suite with gown changing areas.

New steel dunnage to support the new roof-mounted AC unit was designed. A roof screen was provided around the roof-top equipment. As the building is adjacent to a residential area, sound transmission was a major concern. The acoustical engineering sub-consultant conducted tests and recommendations were incorporated in the design to assure acceptable sound levels at the residential property line.