

## 7<sup>th</sup> Floor DNA Laboratory West Haven, CT

### Project Description:

#### Location

West Haven, CT

#### Owner

VA Connecticut Healthcare Systems

#### Duration

Completed 2005

#### Prime/Sub

Prime

#### Construction Cost

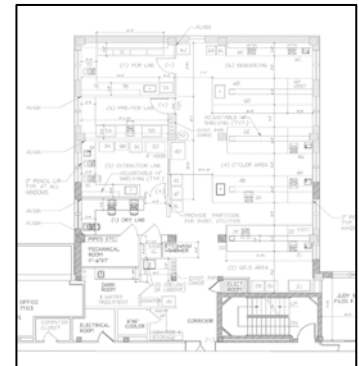
\$1.5 million

AI Engineers, Inc. performed the design to convert 7,000 square feet of temporary Hospital residency space to a DNA research laboratory located on the 7<sup>th</sup> floor of Building # 2 of the West Haven VA Hospital.

The assignment tasks included Architectural design/space programming including laboratory configuration, mechanical, electrical and plumbing design included HVAC with chilled water and secondary DX cooling, secondary heating with ceiling radiant panels, distilled and reverse osmosis water, laboratory gases, waste water and storm water piping, venting, new 480V panels and feeders and re-circuiting existing 240V and 120 V panels for this section of the 7<sup>th</sup> floor. The design was complicated by the limited space available in the ceiling for the necessary ductworks, piping, etc. while maintaining services to other floors with utilities in the ceiling of the remodeled space.

The space layout included isolation rooms for DNA extractors, sequences, etc. to eliminate sample contamination, open-space bench work areas, offices, computer room, dark room, cold room, lunch room and conference rooms.

The air handling equipment was relocated from the existing mechanical room to the roof above this space, however, structural alterations were designed/necessary to support the added loads on the roof.



### Salient Features

- Isolated Air Flow for Laboratories
- Laboratory Space Programming
- Asbestos Abatement Program
- Mechanical Design (HVAC)
- Electrical Design
- Plumbing Design