

Nortel Networks

Probe and Test Lab

Corkstown Road, Ottawa.

Project Statistics

Area description:	Class 10,000 Clean Room
Area size	25,000 sq. ft.
Project budget	\$5,000,000

Responsibilities

Miriton was hired to provide the entire design and management of this multi-phase project.

Services Provided

- ▣ *Project management*
- ▣ *Architectural design*
- ▣ *Structural design*
- ▣ *Mechanical design*
- ▣ *Electrical design*
- ▣ *Construction management and supervision*

Project Objectives

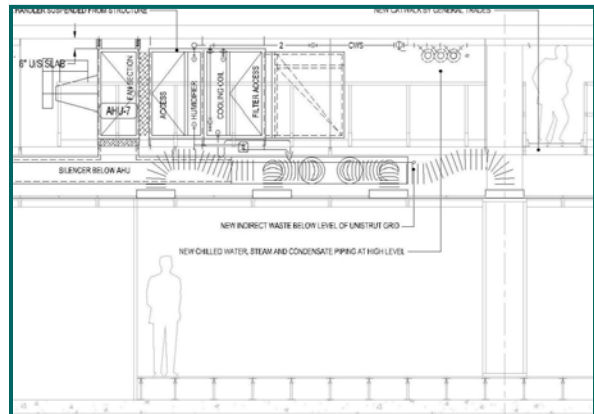
To upgrade and expand a semiconductor testing facility from a 6,000 square foot computer room style configuration, to over 20,000 square feet of class 10,000 cleanroom during a period of peak production.

Challenges

To gut an existing area and construct an intricate, open plan cleanroom, while maintaining uninterrupted testing operations 24 hours a day, seven days per week.

The new cleanroom spaces had to be completely certified and reliable before occupancy.

The cleanroom space had to be able to accommodate any change in the configuration of testing equipment, so that even the most complex pieces could be relocated in a 'plug-and-play' fashion.



Solutions and Successes

- ▣ Developed and implemented a four part build program that allowed construction to rotate around the operation and the operation to be expanded into the newly constructed areas as they became available.
- ▣ Adopted materials and methods that permitted construction without hot work, and reduced the generation of dust during construction.
- ▣ Designed a building structure and system of services that could be progressively expanded as new parts of the cleanroom became operational.
- ▣ Completed all four parts of the cleanroom and ancillary spaces according to the originally conceived schedule.