**Appendix 4: Facilities, Equipment, and Other Resources**

**Cornell Electron Storage Ring (CESR) accelerator facility**

The facilities available for the proposed beam tests include the accelerator infrastructure at Wilson Laboratory: electron and positron linac, full energy synchrotron booster and storage ring with energy range from 1.8 to 5.6 GeV. The storage ring is equipped with state of the art high bandwidth instrumentation for monitoring position and size of the circulating beams, and multi-bunch feedback systems. The integration of beam instrumentation with the accelerator control system provides the capability for a diverse experimental program. The scientific and technical staff has decades of experience developing instrumentation and operating particle accelerators and access to the well equipped CLASSE electronics and mechanical shops. Computing resources available to investigators are likewise state of the art.

Key support services at CLASSE include clerical personnel, purchasing, stockroom, supplies, mailroom, moving and rigging, machine and electronics shops, engineering, vacuum lab, general technicians, technical and publication drafting, computer and network services, and outreach coordination.

**Appendix 5: Existing equipment**

The equipment required for the proposed research is available for the proposed experimental program. The Cornell Electron Storage Ring (CESR) will be available for beam tests. The storage ring is well instrumented to monitor lattice characteristics and the flexible control system allows straightforward implementation of specialized optics. Existing electron cloud detectors, data acquisition systems and related infrastructure will be the basis for developing the new detectors.