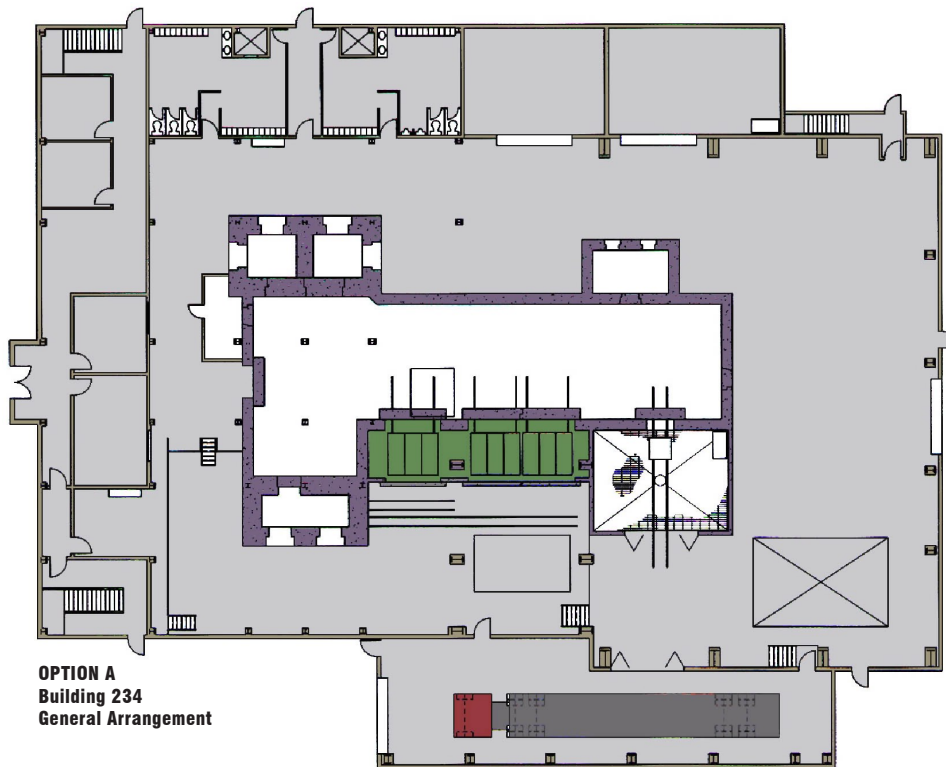
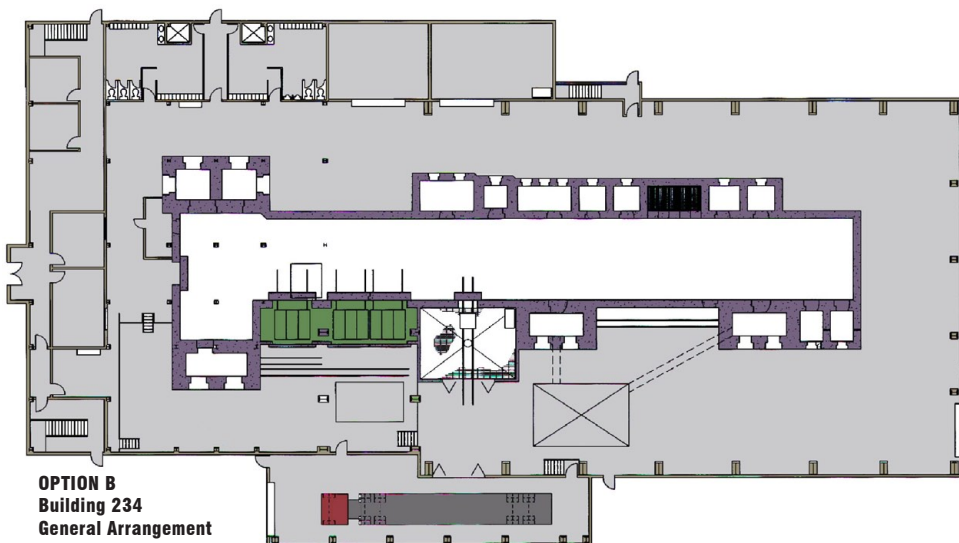


Atomic Energy of Canada, Limited (AECL) developed two optional concepts for refurbishment and upgrade of existing Post-Irradiation Examination (PIE) hot cells at the Chalk River Shielded Facilities (CRSF), which presently consist of three separate building complexes constructed in the 1950's and early 1960's.

Merrick & Company was awarded a contract to extend the concepts adequately to compile a projected cost and implementation schedule for each option. AECL used Merrick's results as one of the decision bases for selection of one option. In a future phase of the CRSF upgrades, detailed engineering design will be prepared for the selected option.



OPTION A
Building 234
General Arrangement



OPTION B
Building 234
General Arrangement

The scope of Merrick's analyses included:

- Additional detailed definition of the options being considered,
- Confirmation that the options fulfill the functional and operational requirements for an upgraded PIE facility, and
- Development of costs and implementation schedules for each option on a comparable basis.

The level of design detail achieved for this project was required to be sufficient to support cost estimates within +50% or 20% of the ultimate project cost (approximately CAD 60 million).

Merrick considered comparative data from other facility refurbishments and the experience of staff and equipment subcontractors with past involvement in major refurbishment, reconfiguration, and decontamination operations at operating hot cell and nuclear fuel recycle facilities.

Option A comprised extensive refurbishment and rearrangement of two of the three existing facilities, but with minimal new construction. Option B included shutting down all but one of the existing facilities, plus a major extension of the third, including 16 new cells.