

LAC NEW PRESERVATION FACILITY GATINEAU, QUEBEC, CANADA

Lead developer
Financial advisor
Lead equity investor

Location	Gatineau, Canada
Client	Library and Archives Canada
Project Value	C\$330 million
Builder	PCL Constructors Eastern Inc.
Architect	B+H Architects
Services	ENGIE Services Inc.
Financial Close	April 2019
Completion Date	May 2022
Contract terms	Design, build, finance, operate and maintain for 33 years



Library and Archives Canada's Gatineau 2 Project involves the design, construction, financing, facility maintenance, and lifecycle of a new archival facility behind – and physically connected to – LAC's existing Preservation Centre. The new facility is a specialized, flexible, and sustainable building, with objectives aligned to meet the Government of Canada's priorities to invest in sustainable federal infrastructure and Canadian culture.

At the leading edge of technology, the new state-of-the-art facility will be the world's largest that is equipped with an automated storage and retrieval system for archival collections. The centre will provide 21,500 cubic metres, or the equivalent of about 8.5 Olympic swimming pools, of collection storage capacity in two highly controlled environments across six vaults

It will also be the first Net Zero Carbon archival centre in the Americas. In addition to the new facility works, Plenary Properties Gatineau will be responsible for facility maintenance, lifecycle, energy retrofitting, and shelving optimization at the existing Preservation Centre.

DESIGN FEATURES

In order to protect the invaluable collection materials from flooding, the vaults are located well above grade, directly above program spaces and staff areas on the ground floor.

The risk of water damage is further mitigated by the "buffer zone" surrounding the concrete vaults in the interior on all sides, as well as with roof drainage that draws rainwater away from the vault ceilings to prevent water accumulation.

Inside the vaults, strict requirements for temperature and humidity serve to maximize the storage life of the collection. These environmental set points are achieved through individually dedicated mechanical systems, with backup capacity to provide continuous support in the event of a temporary outage.

INNOVATIONS

The Gatineau 2 Project also includes shelving optimization and energy efficiency initiatives to maximize storage space and reduce the environmental impact of LAC's operations.

Greenhouse gas emissions in the pre-existing Preservation Centre, which will be connected to the new facility by a pedestrian bridge, will be reduced by 80%.

In keeping with the government's efforts to promote environmental stewardship, additional sustainable performance considerations have been integrated into the Project Agreement.

The refit of specific storage spaces will support LAC's commitment to reducing its physical footprint and greening its activities by using efficient systems and adapted shelving structures.

LOCAL ECONOMIC IMPACTS

The construction project will be a significant boost to the local economies of Gatineau and the broader National Capital Region (NCR) by directly and indirectly creating and supporting over a thousand person years of employment during construction.

At the peak of construction, between 150 and 200 workers are expected on site daily. The majority of the labour force will be sourced from the NCR.