



Université Laval rainwater management plan

Université Laval covers a surface area of 1.9 km² in Québec City. The storm sewers feed into the city's own system. Stormwater volume is restricted to prevent overloading the municipal infrastructure.

In 2011 Université Laval undertook a large-scale program to upgrade its sewer system. A cleaning and diagnosis program made it possible to update plans and model the various systems. In recent years deficiencies have been found in the sewer systems, particularly for stormwater during heavy rain. A master plan was drawn up and submitted in 2013. Stormwater retention solutions were developed to limit runoff and prevent overflow. In addition, all new surfaces (roofs, parking areas, streets, etc.) are assessed for their impact on overall water runoff on campus. To control runoff, stormwater retention basins have been built :

- Open retention basin near the Golf campus
- Stormwater retention basins, 2500 m³, under parking lot 209
- Stormwater retention basins, 400 m³, under parking lot of De Koninck building
- Stormwater retention basins, 500 m³, under parking lot of Pouliot building
- Stormwater retention basins, 145 m³, Kruger building
- Stormwater retention basins, 100 m³, COPL Building
- Stormwater retention basins, 250 m³, F.-Vandry Building
- Stormwater retention basins, 500 m³, close to the Vandry building (under construction in 2020)

High performance greenhouses located on the campus (2575, rue Marie-Fitzbach) collect and use rainwater in their systems.

Green roofs have been design on four of the campus' buildings, benefiting from rainwater and contributing to rainwater management :

- C.-De Koninck Building
- A.-M.-Parent Building
- Félix-A-Savard Building
- A.-Vachon Building

It should be noted that when roads and parking areas are rebuilt, impermeable surfaces are minimized to promote the natural seepage of water into the ground and thus prevent additional loads on the existing systems. Whenever possible retention at source is encouraged for these new structures.

Source : Patrick Jobin, Coordonnateur en technique du bâtiment, réseau de vapeur
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