



SOLENO

Mastering Storm Water

1ST
DEVELOPER
OF SUSTAINABLE SOLUTIONS
FOR MASTERING STORM WATER



RONA IBERVILLE : CONDITION OF ITS STORM SEWER SYSTEM FIVE YEARS LATER

A simple, compliant and economical solution provided by Soleno.

In August 2011, a complete storm sewer system was built under the parking lot of Rona Ferronnerie Houle Inc., a new hardware store located on Conrad Gosselin St. in the Iberville borough of Saint-Jean-sur-Richelieu. Five years have passed since this system was installed. During a planned inspection by Soleno Service of that underground infrastructure, we could confirm that the use of Soleno's HDPE products was the right solution for this project.

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THE CONTEXT

As part of the construction in 2011 of its new hardware store in Iberville, Rona Ferronnerie Houle Inc. had to build a parking lot that met municipal requirements for the proper management of storm water. Generally, municipal regulations are designed to restrict the flow of storm water exiting private land to prevent the overloading of collecting sewers. To meet regulatory requirements, proposed solutions usually include the construction of an open-air or underground retention basin.

THE SOLUTION

Among the many solutions offered by Soleno, oversized Solflo Max HDPE pipes, known for their durability, light weight and savings resulting from their speedy on-site installation, were selected for this project. The underground installation of an oversized storm water sewer made from Solflo Max under the parking lot was done by CBC 2010. Nearly 220 m (722ft) of Solflo Max pipes, 900 mm (36 in) and 1200 mm (48 in) in diameter, along with chimney of 600 mm (24 in) in diameter, attached directly on the pipes, have been installed.

THE BENEFITS

For this type of project, Soleno engineers regularly spec the oversizing of HDPE pipes and their direct attachment to the manholes. This solution always provides substantial savings; it reduces the amount of required pipes and limits excavation due to the use of existing trenches. In addition, the technique developed by Soleno allows for the direct installation of chimney-type manholes on the pipes. In most cases, their diameter can be the same as the connections, avoiding oversizing of the manhole, which lowers the cost of the entire system. This solution not only enables the capture of storm water, but also their storage, eliminating the need to create a retention basin.



SYSTEM SUSTAINABILITY

A complete storm sewer system made of high-density polyethylene (HDPE), a light, performing and durable material, ensures a perfect system seal. Also, HDPE is resistant to corrosion, abrasion, de-icing salts and vibration, ensuring the sustainability of infrastructure. This material has a clear advantage over concrete, thanks to its cost and its reduced environmental footprint. Five years after its installation, the bituminous coated material around the manholes in the parking lot of Rona Ferronnerie Houle Iberville is still in excellent condition, evidence of a durable product and a quality installation.

For more information and to learn more about our services and products, please visit www.soleno.com. Other case studies are also available.