

New Sewage Pumping Station

Year of Construction: 2021

Location: Innisfil, ON

Product Installed: Ecoraster E50

Category: Stormwater Management

CASE STUDY

CHALLENGE

The project required a durable surface capable of supporting maintenance vehicle traffic while minimizing long-term site servicing requirements. Traditional unreinforced gravel surfaces would have likely experienced rutting and displacement over time due to repeated vehicle loading and season environmental conditions.

SOLUTION

A gravel-filled Ecoraster E50 permeable pavement system was selected by the engineer to address these requirements. The modular cellular confinement panels confine the aggregate infill, preventing migration and rutting while maintaining permeability. Once installed, the cells were filled with gravel to create a reinforced permeable pavement surface capable of supporting vehicle loads while allowing water infiltration.

SPECIAL NOTE

Ecoraster E50 was integrated into the design and easily adapted to the project layout. The panels feature an integrated interlocking connection system, allowing them to be quickly joined together during installation. Curved curbs surrounding the building were accommodated by cutting the panels to fit the required geometry before filling the cells with gravel.

With a load capacity of 800 tonnes per square metre, the system provides the durability required for maintenance vehicle access. Its high permeability supports stormwater infiltration, reducing surface runoff and promoting groundwater recharge. Manufactured from recycled LDPE, the system also contributes to sustainable site design and performs reliably in cold climates such as Ontario.

