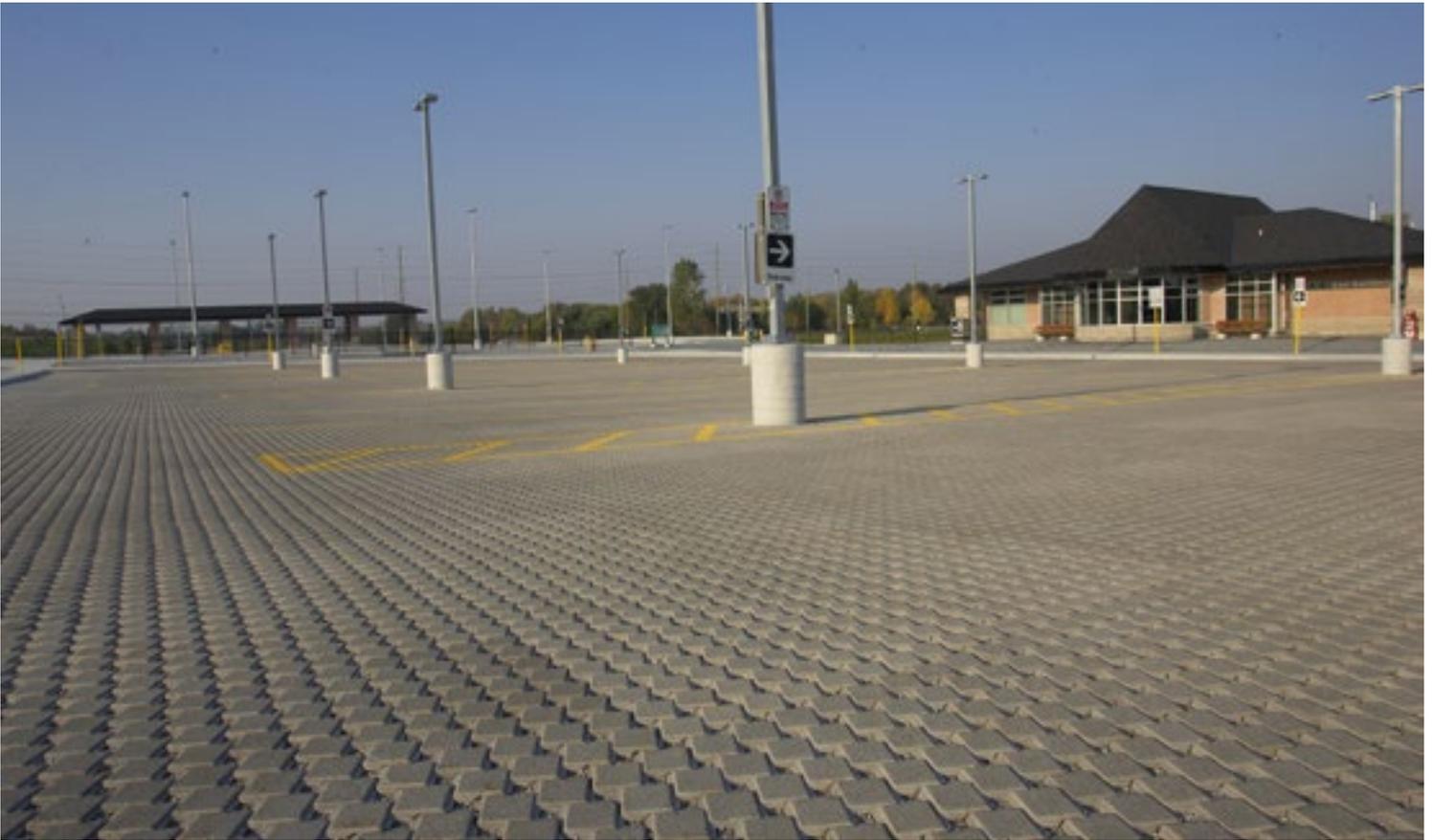


EAST GWILLIMBURY GO STATION



CHALLENGE:

The East Gwillimbury GO Station is located in the Greater Toronto Area of Southern Ontario. It is a station stop on the Barrie line train that has been in service since November 1, 2004.

Like many places around the country, stormwater and flooding are a topic of discussion. In East Gwillimbury, the winter weather is very well known for heavy snow and ice that when slush/snow mounds freeze it blocks the catch basins so the melted snow water creates pools of water resulting in hazardous conditions for pedestrians.

INFLUENCE:

Encouraged by environmental cause, the budget and life-cycle of pavers versus asphalt is what it came down to. With research conducted, it was shown that the average life of quality concrete unit pavers is in excess of 30+ years in comparison to 10 years maximum with an asphalt surface. Although the initial cost to install pavers in the parking lot is more than the cost of asphalt, in a long-term status it can easily be recognized that a permeable paver system will sustain a longer life-cycle.

LOCATION:

East Gwillimbury, Ontario

ENGINEER:

Cansult Limited

INSTALLER:

Premier Interlocking

PRODUCT:

Ecoloc®

EAST GWILLIMBURY GO STATION

SOLUTION:

The 30,000 sq. ft. parking lot was successfully installed with Unilock's permeable Ecoloc paving stones.

The contracted installer, Premier Interlocking, used an asphalt spreader to place 50-75 mm of HPB (High Performance Bedding) material, on top of the granular base before mechanically installing the paving stones. The HPB bed facilitates rapid infiltration of rainwater to the granular base below. After all the pavers had been installed and compacted to 'seat' them into the HPB, the voids were filled with the HPB using a power sweeper. After the final sweeping, lines were painted for the 'Kiss & Ride' zone of the parking lot. The entire job was completed with a six man crew in one week and was available for immediate use.

In the base design of this project, the granular sub-base was shaped to allow water to move easily through the loose granular layer to the sub-base and permeate into the sub-base, therefore the melting snow on the pavers was able to drain immediately and dry the surface, eliminating the pools of water.

In instances where there is heavy rainfall and the water cannot move through the granular quickly enough, the tapered sub-base directs the water to a sub-surface drain which discharges into a retention pond.

