



Greenford Park, Middlesex

Industrial Stormwater Installation Meets Discharge Constraints

Project Profile:

- Phased development.
- Storage under access roadway.
- Almost 2000 m³ of storage required.

Product Profile:

- Storage / attenuation applications.
- Soakaways.
- Under car parks / roads and porous pavements.
- Very strong (up to 40 tonnes/m²).
- High void ratio (95%).
- Low cost.
- Optional volume, size, shape and depth.

On a redeveloped industrial park in Greenford, Middlesex, rainwater discharge constraints by Thames Water raised potential problems due to the runoff from the large paved areas of car park and roadway. By utilising Hydro's Stormcell® system, engineering consultants Waterman Partnership were able to locate the required storage tanks without taking up valuable site space.

Stormcell® is a matrix system of polypropylene, hexagonal vertically aligned tubes, which can withstand vertical loading of up to 40 tonnes/m² (transient). Its modular design and standard block and panel sizes allow it to be installed where conventional tanking is not feasible. Its inherent structural strength also reduces sub-base preparation requirements.



Stormcell® awaiting installation on site at Greenford Park.

Thus on the Greenford Park site, two tanks have been installed, one of c. 1200 m³ under a car park, and another of c. 640 m³ under an access roadway. The car park is essentially flat, and drained by surface channel drainage, while the roadway has a fall of 1 in 100 and is drained by gulleys. A petrol interceptor is sited between the tanks and the outlet to the watercourse.

In each tank, the 1m x 2m x 480mm blocks of Stormcell® have been installed over a bed of gravel and the distribution pipework. The plastic matrix of vertically aligned hexagonal polypropylene tubes has a void ratio of 95% (3-4 times that of granular materials).



The Stormcell® storage tank nearly completed.

Developers of the Greenford Park site were Harvester Properties Limited, consultant engineers on the stormwater control were Waterman Partnership, main contractor was John Mowlem & Co. plc and groundworks sub-contractor was Hiretest Ltd.

Should there be a requirement for stormwater treatment on any scheme, Hydro can, as part of a complete Stormwater Package supply oil and grit separators which will operate in conjunction with Hydro-Brake® Flow Control and Stormcell® or separately.