

# Water management right on track

To help our urban landscapes become more resilient to climate change and subsequent severe weather events, making space for water to capture and control stormwater run-off and re-use it to create Green Infrastructure, should all be part of the design process for any project.



Surface water  
management



Biodiversity



Placemaking

## CASE STUDY

### Project

Walthamstow Stadium  
development, Chingford,  
London

### Client

Tamdown

### Application

Stormwater capture and  
attenuation, Green infrastructure

### Product

Permavoid, Permachannel,  
Permafilter, Biomat

 **Polypipe**



Before 294 homes could be built to create one of London's most prestigious new developments, stormwater run-off problems at the former greyhound track site in Walthamstow needed addressing as part of the project design. With the Environment Agency stating that there was a requirement to make space for water to reduce 80% of the surface water run-off, Polypipe stepped in to work with the Designer to design a system to meet the criteria. Whilst at the same time – creating a system that also included Green Infrastructure to make places for people to relax and enjoy and attract biodiversity – whilst treating and managing water for re-use.



Beforehand, the original site would simply discharge surface water, unrestricted and directly into the adjacent river, taking with it surface contaminants whilst also contributing to an already high water table.

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Using our **Permavoid Geocellular system**, the site captures and stores **1.5 million litres** of stormwater via a permeable paving installation – capable of managing a 1-in-100-year storm event. Complemented by Polypipe Permachannel and Permavoid Biomat, surface water run-off is captured, treated and attenuated at a controlled rate.

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However, the success of the project doesn't simply lie in achieving the Environment Agency's objectives; making space for water also allowed us to deliver a project that included Green Infrastructure. Providing lush, green gardens for people to look out on, to walk around, sit and relax amongst – and, ultimately, feel good about.

The result exceeded the original requirement and delivered a project that makes space for water, helps alleviate the strain on sewers and nearby water courses, creates places for people to enjoy and helps to maintain a cleaner, healthier environment.