PROVEN PERFORMANCE

BBA accredited sustainable drainage system
Primary School, Birmingham
THE CHALLENGE
Crocketts Community School in Smethwick, Birmingham, is an ‘Exemplar Schools Project’, demonstrating a commitment to the highest affordable levels of sustainable construction. Children at the school worked closely with architects on the new designs for the school building from the beginning of the project. The build needed to include the use of a ‘Green Roof’, recycled building materials, solar and wind energy and a Sustainable Drainage System (SDS). A stipulation of the project’s planning conditions was that porous paving must be used for the hard play and multi-use games areas (MUGA).

OUR SOLUTION
In consultation with the client and contractor teams, ULTISuDS was proposed to provide a safe and durable playing surface that would incorporate rainwater storage and partial infiltration. Rainwater falling onto the hard play and MUGA areas passes through the porous asphalt layers and is stored within the Granular Reservoir layer beneath. Over time rainfall passes through the systems heavy duty filtration geotextiles and dissipates into the underlying sub grade. However, during a heavy storm event rainwater can build in the low point of the system, where a deeper stone layer and two drainage sumps are provided. These sumps, in turn, connect to a flow control chamber to restrict the volume of water discharging from the site, preventing flooding or excessive pressure on existing storm water drainage. The school’s Green Roof and other surfaces drain separately into a tank located below the system.

RESULTS AND BENEFITS
Testing undertaken by Coventry University has demonstrated that any surface water pollutants are effectively retained by the system layers, thereby discharging cleaner water into the environment. As rainwater passes through the ULTISuDS system, pollutants are effectively trapped at source to prevent solid particulates, heavy metals and organics from entering either ground water or the existing drainage network.

For more details contact your enquires@tarmac.com or call 0800 1 218 218