

## ACO Provides Sustainable Drainage to Supermarket

*ACO Qmax and ACO KerbDrain help Waitrose store meet its future proofing objectives*



A Waitrose store in Stratford-upon-Avon has utilised ACO Water Management's Qmax® slot drainage system and KerbDrain®, a combined kerb and drainage system, to effectively manage surface water on the new car park and the approach to the store. ACO worked closely with structural engineers BJB Consultancy and highways contractors Fitzgerald to help create an effective solution, in line with the scheme requirements.

Retailer Waitrose, part of the John Lewis Partnership, is committed to promoting good practice and doing everything possible to ensure its environmental impacts are minimised. By putting in place agendas such as the Responsible Development Framework, the company is dedicated to future proofing Waitrose against the impacts of climate change.

Large supermarket car parks pose a particular problem when it comes to surface water run off and for this Waitrose project, structural engineers

BJB Consultancy designed a system which utilised both permeable paving, to deal with primary rainfall, and ACO's Qmax® slot drainage to manage heavy downpours and exceedance due to its high-flow inlet and channel capacity.

ACO worked closely with BJB and contractors McLaren to deliver the most effective solution, hydraulically checking the area first – treating the paving as if it had become impermeable - to establish the parameters and necessary requirements.

### **Project:**

New Waitrose supermarket in Stratford Upon Avon.

### **Objective:**

Provide sustainable water management system to effectively manage surface water during heavy downpours and on the approach to the Waitrose store.

### **Solution:**

ACO Qmax slot drainage system is installed in the supermarket car park providing a backup solution for the permeable paving by managing heavy downpours and exceedance. ACO KerbDrain provides effective surface water drainage to the new road specifically built to accommodate increased traffic volumes.



ACO's Qmax® 225 was selected, as the slot drainage can be easily integrated into a SuDS application and allows for the fast, efficient removal of water from the surface, as well as eliminating carry over in storm conditions. As a back up solution for the permeable paving, the Waitrose site required a high capacity attenuation system. Qmax® was perfectly suited – water can be stored at source within the product, allowing for a much slower and more controlled discharge of water to surrounding drainage networks, so that they do not become overwhelmed, leading to possible flooding.

Commenting on the project, Barry Coney, Associate at BJB Consulting said: "It was of the utmost importance that the surface water

management system installed on this site would work alongside the design and provide support to the car park's permeable paving. ACO was able to provide a high-quality solution that met this requirement, but was also discreet and did not detract from the aesthetics."

To accommodate increased traffic volumes generated by the store, it was essential to build a new road and roundabout system as part of the scheme. Highways contractors Fitzgerald approached ACO to provide a surface water management system that would suit the application. ACO's KerbDrain® system was selected; a one-piece combined kerb and drainage solution specifically developed to form an integral part of any modern, sustainable surface

water management scheme. The versatility of KerbDrain®, including its selection of depths – from 255mm to 480mm – allows engineers and designers to create a solution to optimise the specific hydraulic and performance requirements of a road's drainage scheme, making it much more efficient.

Rob King of ACO commented, "When designing a surface water management scheme it is crucial that all the individual requirements of the site are taken into account. For example, with this project it was important that there was a proven system in place that could intercept and attenuate high volumes of surface runoff, in the event of the permeable paving being overwhelmed. For this, Qmax® was the perfect product for the job; providing reliable performance as part of the wider SuDS system and can easily cope with the design requirements of this scheme. In addition, the company's KerbDrain® is ideal for the highways infrastructure."

For more information on ACO's range of surface water management systems, visit: [www.aco.co.uk](http://www.aco.co.uk)



ACO Qmax® Slot drainage system manages exceedance during heavy downpours.



#### ACO Technologies plc

ACO Business Park,  
Hitchin Road,  
Shefford,  
Bedfordshire  
SG17 5TE  
Tel: 01462 816666  
Fax: 01462 815895

#### ACO Water Management Contacts:

e-mail Sales: [customersupport@aco.co.uk](mailto:customersupport@aco.co.uk)  
e-mail Technical: [technical@aco.co.uk](mailto:technical@aco.co.uk)  
website: [www.aco.co.uk](http://www.aco.co.uk)

#### ACO Building Drainage Contacts:

e-mail Customer Enquiries: [abdccommercial@aco.co.uk](mailto:abdccommercial@aco.co.uk)  
e-mail Technical: [abdtechnical@aco.co.uk](mailto:abdtechnical@aco.co.uk)  
website: [www.acobd.co.uk](http://www.acobd.co.uk)

