

Detention Pond Access Route

Waverley Gate, Rotherham, UK



Product: Sudspave 40

Application: Grassed Utility Services Access Route

Client: Harworth Group plc

Contractor: CR Reynolds



Project Story

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The Waverley project in Rotherham is Yorkshire's largest ever brownfield mixed-use plan, transforming 740 acres of the former Orgreave coal mining site into a sustainable development that includes up to 3,890 homes, shops, restaurants, a school and leisure and community facilities, including parks and 310-acres of green open space.

To prevent downstream flooding, surface water run-off from a sloping area of the housing development is detained in a large attenuation pond prior to controlled release into local lakes and streams. A reinforced grass perimeter route employing ABG Sudspave 40 permeable cellular paving has been installed for service and emergency vehicles to access the pond. The rootzone filled grass-seeded paving units have been colonised by clover and wildflower species, in keeping with the embankments of the pond. The Sudspave also provides a green corridor pedestrian/cycle route around the site and away from the busy local roads.

Attenuation ponds are a common feature on residential developments and the design forms part of the overall SuDS plan for managing storm water run-off across this area of the site to reduce downstream flooding. The pond also provides attractive amenity space for the new housing estate's residents.

The design proposed by ABG includes Abgrid Geogrid and Terrex NW geotextile which combine to reduce the required DoT Type 3 sub-base thickness, whilst also providing layer separation and bio-filtration of surface water. The pond also utilises ABG's Claymat clay liner, installed to retain water within the basin.