



Sel Environmental
Real Innovation.

case study: counters creek.

Counters Creek Flood Alleviation Scheme, London



The Counters Creek flood alleviation scheme (CCFAS) was developed following widespread basement flooding caused by intense rainfall events between 2004 and 2007 in the Counters Creek Catchment, London.



Counters Creek Flood Alleviation Scheme, London



Utilising retrofit SuDS can ease the load on existing sewer networks and reduce the potential for flooding. Flows into the sewer can be dramatically reduced by temporarily storing surface water where it falls,



Green Organisation Green Apple Award for Sustainability in 2017



Following the successful installation and operation of the Counters Creek Flood Alleviation Pilot SuDS Schemes, SEL are delighted to have had involvement in the delivery of a further six retrofit flood alleviation projects in the heart of London.



Phase 2 Schemes



Wendell Road W12 9RT

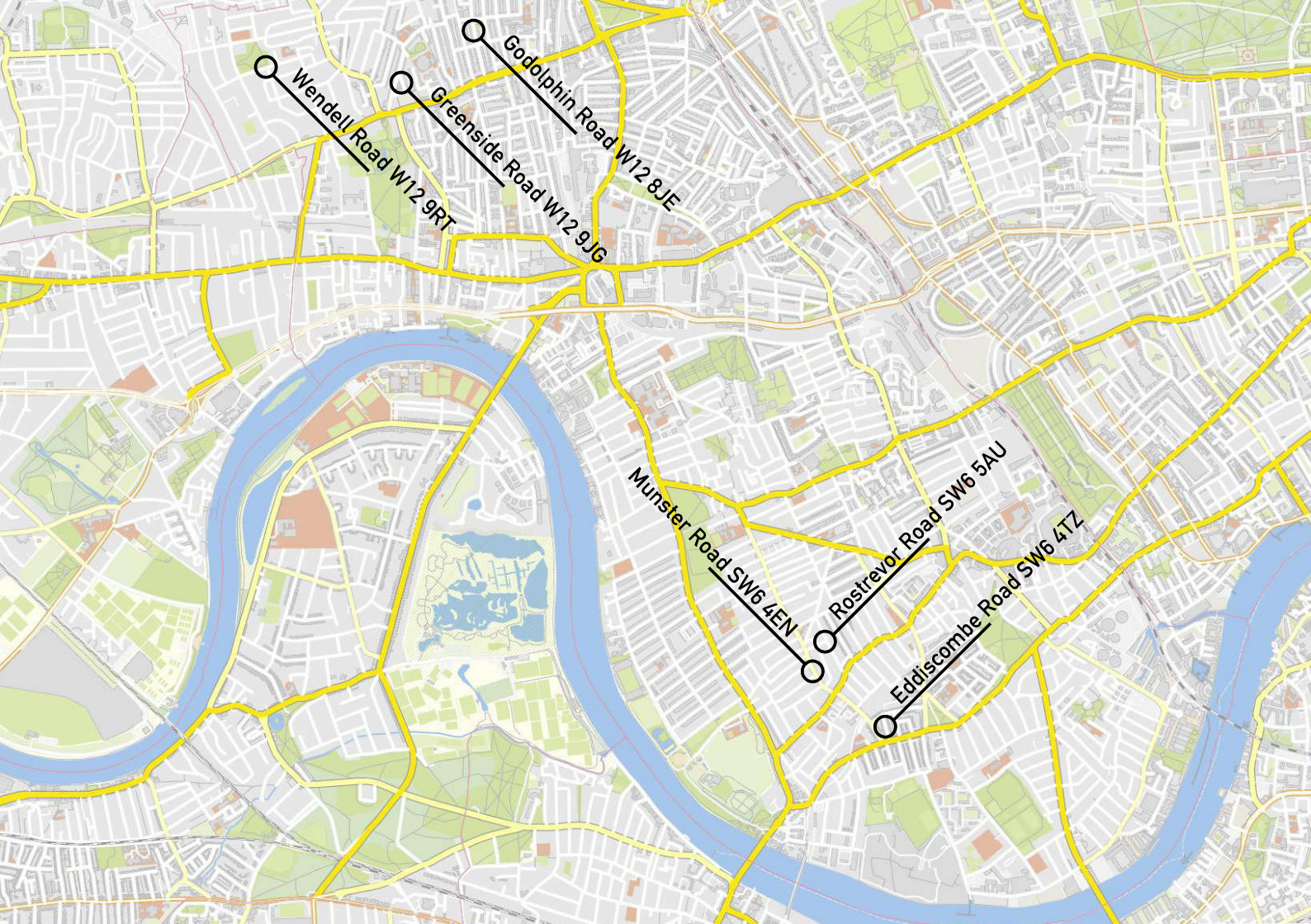
Greenside Road W12 9JG

Godolphin Road W12 8JE

Rostrevor Road SW6 5AU

Munster Road SW6 4EN

Eddiscombe Road SW6 4TZ



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Phase 2 Works



Existing on street car parking bays
were excavated to formation level.





High strength shallow Permavoid attenuation units were installed to the base of the excavation to create surface water attenuation volume within the road construction.





The PermaVoid tanks were sealed with a high grade impermeable membrane to the base and sides to allow surface water to percolate directly into the attenuation system from the surface.



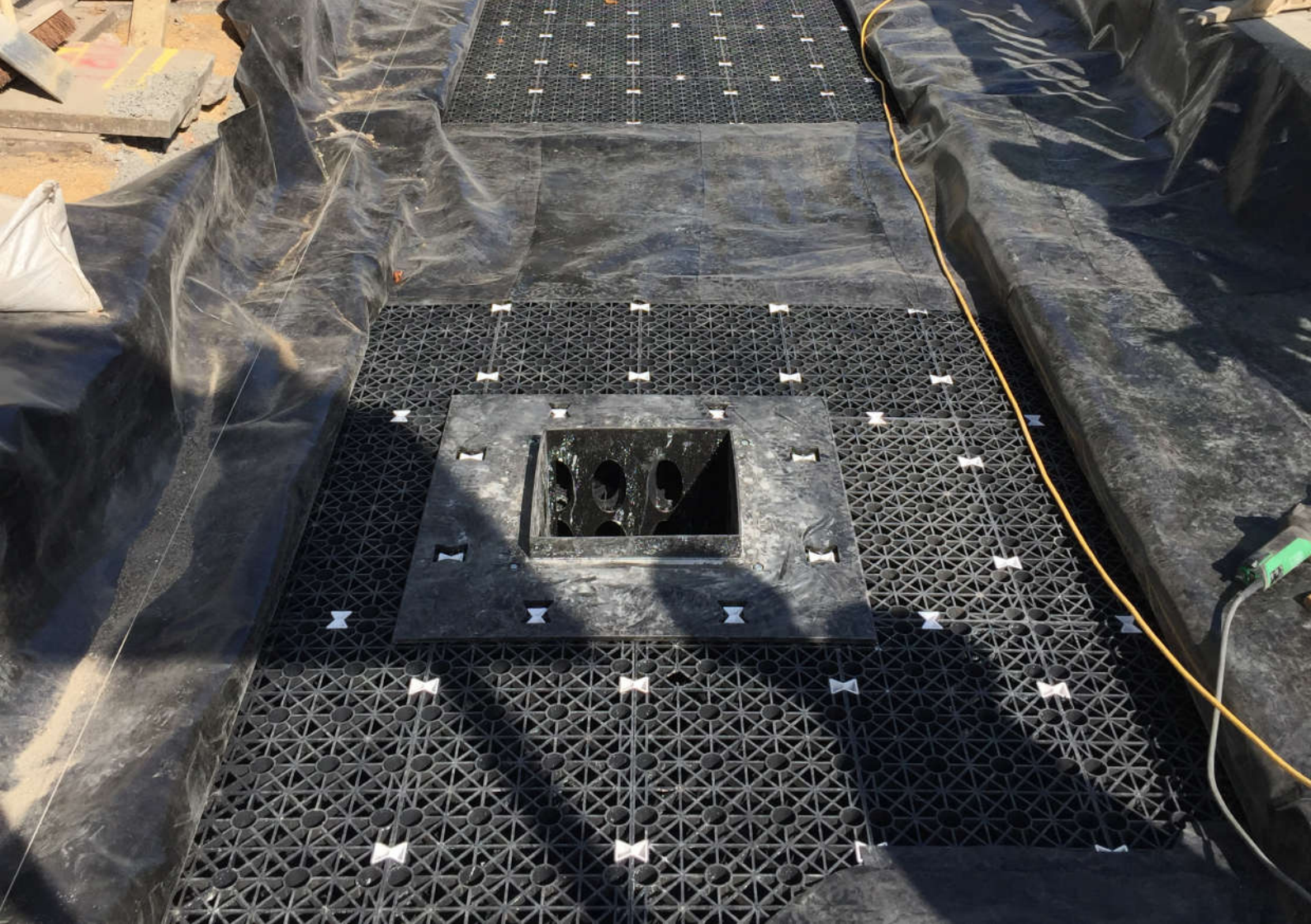


In order to navigate existing services such as water, gas and electricity lines, the attenuation system was skilfully separated into a series of tanks such that services remained accessible for maintenance, and were not buried.





Integrated PVOD components were utilised for flow restriction in order to maximise the storage in the Permavoid tanks and reduce the discharge rate to sewer, even in such a tight space.





A layer of PermaFilter oil retaining and degrading geotextile was installed on top the Permavoid tanks to provide an additional level of water treatment, such that water stored within the attenuation system was suitable for the passive irrigation of surrounding greenery such as trees and rain gardens.





A layer of permeable concrete was installed on top the PermaFilter geotextile, to provide a sturdy permeable base for the permeable paving surface.





On street parking bays were finished with permeable paving, to complete the fully permeable retrofit SuDS solution.



Green Infrastructure



In addition to the permeable car parking bays, engineered tree pits and rain gardens that store and take up water for growth will be installed.





Sel Environmental Ltd, Canal House, Bonsall Street, Blackburn, BB2 4DD.

01254 589987

info@selenvironmental.com

www.selel.co.uk