

Royal Ascot

Standing water, Parade Ring



Groundwater was collecting along a section of Royal Ascot's world-famous Parade Ring, resulting in saturated soil conditions which in turn adversely effected the growth of the signature hedge, which is a major decorative feature of this most prestigious venue. The area requiring drainage was sandwiched between the semi-permeable surface of the parade ring and a concrete viewing stand which meant that access was limited and that great care had to be taken to ensure that no damage was caused to surfaces, fencing or the hedge itself.

System Design

We designed a 30 metre long, linear formation of ECO-90s™ at 2 metre centres. The total installation consisted of 60 primary ECO-90s™ at a depth of 6 metres. The ECO-90s™ penetrated a thick layer of clay near the surface before reaching layers of unsaturated sand below. The ground was almost immediately relieved from saturation leaving the hedgerow to thrive in soil no longer burdened with standing groundwater. The Clerk of the Course was delighted with the outcome and, we guess, so was the hedge.

£500,000
**PROFESSIONAL
INDEMNITY COVER**

Where we supply and install an ECO-90™ engineered drainage solution we offer an insured warranty, covered by up to £500,000 Professional Indemnity cover. Higher cover is available as required.

In some instances, such as natural turf where we offer our own ECO-90™ drainage design solution and install, we offer a two year defect warranty. This means we will return to site to remedy any problems at our expense.

The ECO-90™

Transforming Drainage Design & Scope

The ECO-90™ is an internationally patented product with unique characteristics that solve a multitude of drainage problems. We launched it in the UK under licence in 2012, since when we have completed over 300 successful installations, from commercial and residential new builds to car parks and cemeteries. We also have our 'Hall of Fame' installs.

Made from high density polyethylene (HDPE), standard drainage extrusion, the unique ECO-90™ design uses a multiple open chamber system that creates lateral (horizontal) water transfer to soil stratas to a depth of over 12 metres (go to www.groundwaterdynamics.co.uk for full information).

Our ethos is that the time has come for a new drainage solution that:

- does not move large amounts of storm water from A to B in conventional horizontal pipes creating problems "down the line", including the flooding of water treatment facilities that then discharge into critical marine, river and stream ecosystems
- improves the carbon footprint by removing external energy requirements to deal with storm water, with no need for pumps moving water or the energy requirements of treatment works
- stimulates plant growth, creating ECO-90's™ CARBON NEGATIVE standard
- does not take storm water directly off the surface into deep borehole systems creating possible pathways for contaminants.

Instead, we have introduced a drainage system that takes ground water, indirectly, laterally through the ground into an installation of multiple ECO-90s™, **changing the drainage characteristics of soils which previously were unable to accommodate positive infiltration rates.** That's the game changer.

"The ECO-90™ design requires no maintenance, has no mechanical moving parts and needs no external energy requirement to function. It uniquely harnesses soil based gravitational pressure, porosity and waters enthusiasm to keep on moving."

"The unrivalled result is that a ECO-90™ installation uses the entire volume of soil to a depth of 12m below the ground for water drainage, creating a massive volume of earth to deal with storm water. For new build sites this results in less area for drainage, more for building and higher GDVs."



Edgbaston CC



Gleneagles



Royal Ascot



Silverstone