DuPont[™] Ground Grid

A COST-EFFECTIVE POROUS PAVING SURFACE SOLUTION

Case Study – Access Road



Application: Access Road 40m long 3.75m wide

Product:

110mm x 50mm (110mm cell opening)

Infill: 25-35mm angular gravel

The customer objective was to create a long term solution to an uneven access road surface with drainage problems.

Poor drainage and constant temporary 'topping-up' had resulted in a surface that was very uneven and prone to pot holes. A permanent solution to both stabilise the road and solve the drainage problem, was required. Poor drainage was adding to the unevenness of the surface by causing 'wash-away'.

To tarmac the area was ruled out as too expensive and would have required extensive drainage work to the sub-base. DuPont[™] Ground Grid was selected as the most cost effective solution to provide permanent stabilisation and would act as a SUDs solution for water run off and natural filtration of the water by passing through the gravel and fabric cell walls of the DuPont[™] Ground Grid.

As the main sub base was sound, a mechanical excavator was used to remove just the top 75mm surface of the existing road. A layer of 20mm to dust limestone was used to fill the pot holes and level the sub-base. Drainage channels, running way from the road were created along the side every 10 metres.

The DuPont[™] Ground Grid was then laid, and the joints stapled every two cells. A weight was applied to the grid before filling to ensure that it was in contact with the ground. This prevents gravel going under the grid during the filling, which could cause the grid to lift. The grid was mechanically filled with 25mm-35mm angular stone then surcharged with the same aggregate.

Access road before – uneven and prone to pot holes.



Pot holes were filled with 20mm to dust limestone.



● POND The miracles of science[™]

Case Study – Access Road



Drainage channels were created every 10 metres.



Joining the grids with staples.



Ensure the grid is in contact with the ground before filling, to prevent lifting of the grid.



Filling the grid.



Completed section of the access road.

TM and ® are registered trademarks or trademarks of E.I. du Pont de Nemours and Company or its affiliates. © Copyright 2008 DuPont. All rights reserved.