

GEOWEB ACCESS ROAD INSTALLATION WILMINGTON, DE

GEOWEB® CASE STUDY

INITIAL CONCERN

An access road was required inside an electrical substation in Delaware. The owner did not want to risk having any ponding water inside the substation, so they were interested in a permeable solution. The subgrade had a low shear strength and it was challenging to build an access road without using a graded aggregate that would enhance compaction of the stone layer. The engineer and owner approached ACF Environmental for assistance with a solution that would allow water to drain through the stone layer while at the same time stabilizing the aggregate layer.

INSTALLATION / SOLUTION

Geoweb was chosen as the permeable pavement for this specific application, due to its ability to provide load support while also offering three dimensional cellular confinement to contain the stone. The installation involved the ground being cleared and leveled. A monofilament geotextile was installed over the subgrade, the Geoweb was then installed over the geotextile. Number 2 stone was placed within the Geoweb and over filled by approximately 2 inches. The contractor used Atra® keys to join adjacent Geoweb sections together and rebar was used to aide in the deployment of the Geoweb. Once the Geoweb was filled, the rebar was removed and the installation was complete.



Geoweb installation



Visible ponding that Geoweb will protect against after installation



Complete installation

RESULTS

The client was happy with the result and is now protected against ponding caused by the access road that could be detrimental to the power plant. In addition to this protection, the load support that the Geoweb now provides the access road will eliminate any ruts or degradation of the surface causing further issues due to vehicular traffic.