GEOWEB®

VEGETATED SWALES & DRAINAGE DITCHES







With an overlying TRM, the GEOWEB confinement system stabilizes topsoil infill to resist continuous low-flow channels and high-flow intermittent channels.

VEGETATED CHANNELS

GEOWEB vegetated channels are a more aesthetic and economical solution than rip-rap for stormwater channels. With an overlying TRM, the GEOWEB confinement system stabilizes topsoil infill to resist continuous low-flow channels and high-flow intermittent channels—allowing vegetation with velocities as high as 30 ft/sec (9 m/sec). GEOWEB vegetated channels are a natural, low-maintenance way to protect stormwater drainage ditches and swales from the erosive effects caused by storm events.

GEOWEB Channels may also be designed with permeable aggregate or hard-armor concrete infill to resist moderate-high, continuous flows.

■ AGGREGATE CHANNELS

For moderate flow channels, the GEOWEB system allows a significantly smaller D50 size for the same protection as larger rip-rap (up to 10X). This allows more economical aggregate to be used, and is easier to install and less maintenance than large rip-rap.

CONCRETE CHANNELS

For higher velocity and continuous flows, GEOWEB concrete channels are flexible hard-armored systems, limiting potential for settlement cracks.

Hydraulic design parameters established for GEOWEB channels are incorporated in Presto Geosystems' design modeling tools.



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GEOWEB Vegetated Swale Cross-Section.

The GEOWEB cellular confinement network stabilizes topsoil infill to resist low-flow channels for stormwater drainage ditches and swales.

Grass Channel Protected From Erosion and Scour with the GEOWEB 3D Geocell Confinement System.

The Presto GEOWEB® Channel Protection System was utilized for a streambed stabilization / revegetation project for the City of Los Angeles Parks & Recreation Department. The GEOWEB system was designed to protect the infill on mild 4h:1v channel slopes from occasional heavy flows during rain events and subsequent scouring.

GEOWEB channels can be designed with vegetation to resist velocities up to 30 ft/sec (9 m/sec) —as well as aggregate for permeability, and concrete for hard-armoring to resist higher velocities.

Request a FREE Project Evaluation

