Stabilization of slopes of bridge embankments



Stabilization of a slopes in order to construct embankments for a bridge

The challenge

The construction of a highway bridge above a railway can lead to the creation of highly inclined slopes; moreover they consist of local sand.

 The rains, in particular over the slopes, caused the problems of erosion which could influence on the stability of the structure and to the sub-base of the road

About GeoGlobe® Europe

Being aware of the geological, ecological, economic and human challenges of our century, GeoGlobe® Europe company designs and manufactures geosynthetic systems for soil stabilization and erosion control and puts its know-how and its experience in service of the Earth Stabilization.

Being dynamic, GeoGlobe® Europe

consists of a team of specialists with a permanent and consistent participation in the world's geosynthetic committees.

GeoGlobe® Europe continuously invests in research and development of technologies whose effectiveness is proven in long

Based on many years of experience in studying and realization of geosynthetic solutions applied in the infrastructure projects and terrain stabilization, we focus on the feasibility and durability of the solutions.

GeoGlobe® Europe takes care to

GeoGlobe® Europe takes care to offer today's customized solutions harmoniously combining the technical performance at the level of civil engineering with the human pledge including the socioeconomic development and the ecological engineering in respect to the environment for a more stable future.



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The Solution

To stabilize the slopes with GeoGlobe® and to fill the cells with the local vegetated soil.

The old method

Two things can be done, either by concrete walls which are too expensive and are disfiguring the landscape can be constructed, or steep slopes which demand a very large surface area can be created. Moreover, it is necessary even in this case to use very expensive materials that are difficult to optimally compact because of the inclination of the slope resulting in a risk of landslides.

GeoGlobe® method and its advantages

To stabilize the slope of the embankments with units of GeoGlobe® filled with vegetated topsoil in order to limit the effects of erosion, to ensure the stability of the sub-base of the road and to allow the establishment and development of the vegetation in harmony with the landscape.

The technology - simple, durable, ecological and economical

After the units of GeoGlobe® are expanded and firmly anchored to the top of the slope, in a proximity to the asphalt, the infill material is directly poured from a truck. Some of the cells are manually planted with seasonal or permanent plants.

The result

After a short time, the slope is covered with vegetation which makes the terrain stable and prevents the erosion. It is proven that even long period after the installation of the cells, it is practically impossible to discern the confinement system because the whole slope is covered with an abundant vegetation of different species.



