



Reinforcement of a channel alongside a road

The challenge

- Following the heavy rains, the water streams beyond the road – shoulders and causes internal erosion through infiltration of water on the sides of the channels, under the sub- base layer and under the asphalt edge which may collapse.
- The traffic of vehicles has become dangerous because the slightest deviation of the vehicles over the road – shoulders can cause a serious accident.

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 terms.

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 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.



The Solution

To create and reinforce channels alongside the road with GeoGlobe® filled with concrete.

The alternative methods

- To install pre-fabricated concrete plates- an alternative which is not viable because of the very high logistics costs. Moreover, the concrete plates are not flexible. They crack, break and do not solve the problem which is causing erosion or gully.
- To locate rocks: an inefficient method because the problem of the hydraulic erosion is not taken into account and does not allow cleaning of the channel bed in any season.



GeoGlobe® approach

Faced with the need to control the erosion caused by water infiltration under the road and at the road-shoulders, the channels should be reinforced. Thus providing the stability and security to the road structure.

The technology – simple, economical, durable, reinforces the security

After giving the terrain a form of a trapezoid channel, a GeoGlobe® layer of up to 10 cm high, filled with concrete, is installed on a layer of geotextile.



The result

The water even at high speed flows, doesn't cause erosion and instability of the terrain. The channel can now be easily cleaned after the rainy season. All of this contributes to the security of the road traffic because the vehicles can use the road-shoulder, without a fear of overturning.

