

GEDIMINAS HILL
VILNIUS, DZŪKIJA, LITHUANIA**Reinforced Soil Walls and Slope Reinforcement****Problem**

Gediminas Hill, topped by the historical Gediminas Tower, is one of the most important symbols of Lithuania. It is situated in the very center of Vilnius. After the removal of the trees on hill sides, the stability of the slope got compromised. Due to severe rainfalls in 2017, the slopes of the picturesque hill started to collapse, leaving deep scars on the sides of the hill. The severe damage on the slopes resulted in the forced closure of the historical monument in November 2017. It became evident that without rapid intervention further landslides could have occurred, threatening even the stability of the monumental tower.

Solution

In cooperation with state officials, local geologists and experts, Maccaferri was invited to propose solutions for the soil reinforcement measures.

Due to the importance of the site being listed as a UNESCO heritage site, very high requirements were set in terms of aesthetic appearance, durability, and environmental impact of the solution. No drilling operations were allowed.

After different options were weighed out, Terramesh System was chosen to create a drainage layer in addition to the reinforcement function.

For this specific case, a customized solution was developed, as Terramesh System had to be fully covered with vegetative soil to completely hide the structural solution and maintain the earlier look of simple and smooth green slopes. For this purpose, MacMat R Steel was applied to provide surficial stability and a secure base for vegetation on the sides of the hill.

The durability and high-quality requirements were met by using Maccaferri's PA6 advanced polymer protection, which is the best-performing polymeric coating on the market, and guarantees an expected lifetime of at least 120 years.

The works resulted in a beautiful and natural-looking green slope, very appreciated by the client and the visitors.

Client: LIETUVOS NACIONALINIS MUZIEJUS**Designer / Consultant:** UAB HIDROTERRA**Contractor:** UAB REKREACINE STATYBA**Products used (Qty.)**

- Terramesh	1.124 m2
- Gabions	132 m3
- MacMat R	2.800 m2

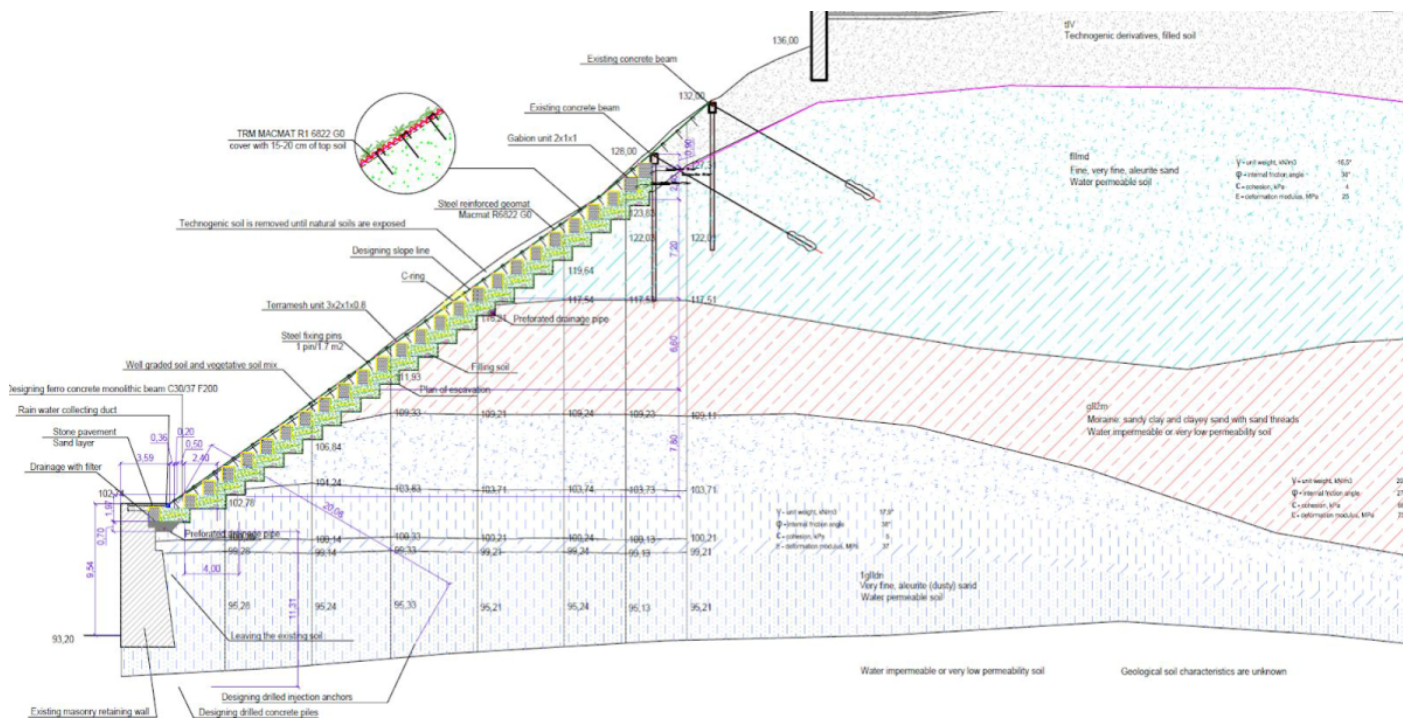
Date of construction: 07/2017 - 09/2017[Google Maps](#)[Google Earth](#)**Gediminas Hill - before the works****The landslide to be restored**



During the installation



Works completed



Design Solution proposed by Maccaferri