

## ALAPLI LANDSLIDE TERRAMESH SYSTEM PROJECT ZONGULDAK, KARADENİZ, TURKEY

### Reinforced Soil Walls and Slope Reinforcement

#### Problem

A retaining structure was needed on Alaplı-Akçakoca Road Km: Between + 700-5 + 850 and (Devrek-Zonguldak) Junction-Beycuma- (Devrek-Ereğli) Junction Road Km: 1 + 000 (Including Connections to the Existing Road) against stability problems that may occur due to elevation difference. At the same time, measures had to be taken against the erosive forces of the waves.

#### Solution

Considering the problem and the wishes of the client, it has been concluded that among the Maccaferri solutions, the most suitable solution for this project is the Terramesh System retaining wall and mattress gabion with geosynthetic reinforcement. Terramesh System was determined as the solution when the parameters of ease of finding stones in the application area, application speed, the technical approach to the solution of the slope problem, being economical, architectural appearance, earthquake resistance and need for a flexible structure are considered.

At the same time, by combining the mattress gabion and Terramesh system applications due to its location at the seaside, other negativities observed in classical retaining structures exposed to waves, especially different settlements caused by wave movements, will be prevented. Terramesh system and mattress gabions are units made of double twisted PVC coated steel wire mesh with hexagonal mesh in certain dimensions and manufactured in a factory environment. These units, which are filled with stones of certain sizes according to the opening, work as a whole as they are connected to each other during the assembly phase and provide great advantages with the flexibility of being produced from wire.

**Client:** KARAYOLLARI 15. BÖLGE MÜDÜRLÜĞÜ

**Designer / Consultant:** MACCAFERRI TURKEY

**Contractor:** ANKARA İNŞAAT A.Ş.

#### Products used (Qty.)

- Terramesh	2.470 m <sup>2</sup>
- ParaGrid	N/A
- Reno Mattress	730 m <sup>2</sup>

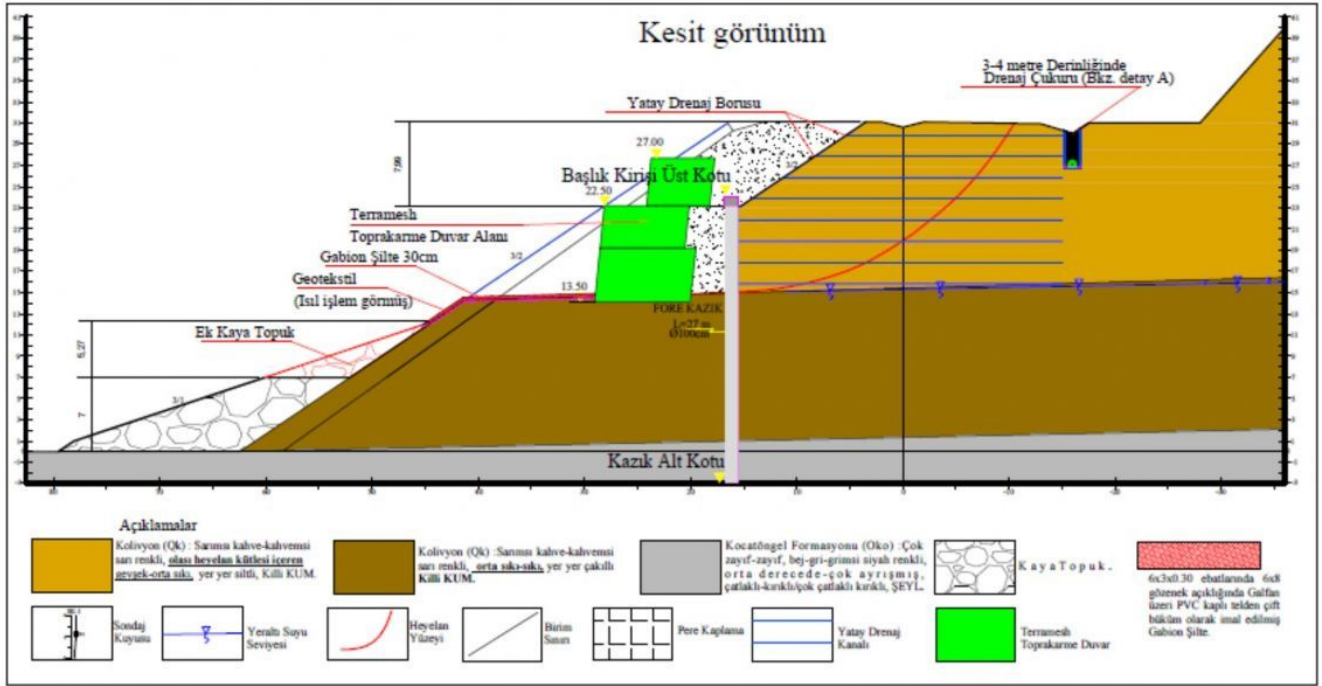
**Date of construction:** 06/2017 - 09/2017



Application Phase



After The Application



Cross-section