

## D1 DUBNA SKALA-TURANY, SO 235-00 RETAINING WALL SLOVAKIA, SUČANY

### REINFORCED SOIL STRUCTURES

**Product:** MacRes®

#### Problem

Retaining wall 235-00 is located in the Martin town district. Retaining wall is creating an embankment of motorway D1 101-00. Concurrently along the wall is led a relocation of the small river Sučanka which has an inlet and an outlet portal at the motorway.

#### Solution

Retaining wall 235-00 is formed by system MacRes— reinforced soil structure with precast concrete facing panels reinforced with polymer geostrips. The wall is simple, inclination of wall is 90°. On the top of the wall is placed massive coping which is holding safety guardrail and 4,0 m high noise barrier.

Retaining wall is designed in the length of 760.00 m on the right side of the D1 motorway in the direction of Sučany. Height of retaining wall is between 3.0 - 8.0 m above the terrain.

Type of wall is mostly made up mostly of basic type panel 1,5 x1,5 m. Due to the big coping and collision with polymeric reinforcement, the top panels are made with steel links and are part of the coping. A horizontal joint was created under top panels in order to split the coping and lower part of the wall.



Start of construction

Date: October 2012



During construction

Date: April 2013

Client:

NATIONAL MOTORWAY AUTHORITY

Main contractor name:

VÁHOSTAV-SK, a.s.

Consultant:

DOPRAVOPROJEKT a.s.

Used product:

MacRes® - face area: 5 000m<sup>2</sup>

Construction info:

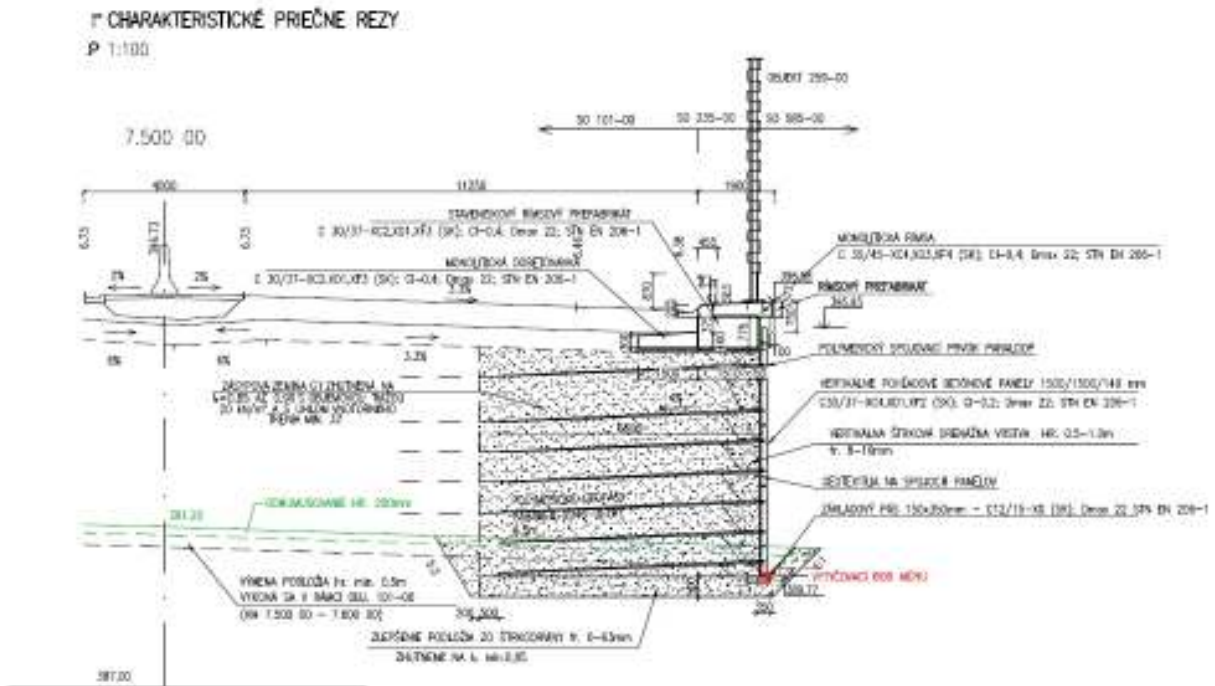
Construction start date: September 2012

Construction end date: September 2014



During construction

Date: May 2013



Typical cross-section



After construction

Date: September 2014