MACCAFERRI

CASE HISTORY

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TERRAMESH SYSTEM AT NAGAR

NAGAR, MAHARASHTRA, INDIA

Reinforced Soil Walls and Slope Reinforcement

Problem

A road widening and construction of approach road walls was planned for the overbridge at Ahmednagar. During the construction of overbridge, the client, Ram Infrastructures Limited considered the option of Terramesh system for the construction of approach road walls.

The maximum height of the wall required was 6.5m above ground level and the client preferred to provide an innovative solution which was simple to construct.

The native soil was having relatively good characteristics.

Solution

Terramesh (back to back) with a gabion facia was adopted as a solution. Terramesh was selected over other types of reinforced soil wall systems due to its flexibility, speed in construction, environmental friendliness and cost effectiveness.

The Terramesh of 2.7/3.7mm dia, PVC coated, sizes of 5.5x2x1 and 3x2x1 were used for 6.5m and 2m height respectively. As the in-situ soil was relatively good, the same soil was used as structural fill.

Terramesh System is a versatile modular system used for soil reinforcement applications. Terramesh structures rely upon the steel mesh placed horizontally within the slope with backfill compacted upon it. The gabion type facing element of the Terramesh system is fully integrated with the steel mesh reinforcement. The double twist wire mesh reinforcement takes advantage of the friction acting along the surface of the wire and, more importantly, the mechanical interlocking properties of the backfill.

Client: Ram Infrastructures Limited

Designer / Consultant: Maccaferri (Designer) / Techno Gem

Contractor: Ram Infrastructures Limited

Products used (Qty.)

- Terramesh	1,360 sqm facia area

Date of construction: 10/2009 - 03/2010

Photo 1: During construction - Filling TMS units

Photo 2: During construction - Checking vertical

Photo 3: During construction

Photo 4: During construction

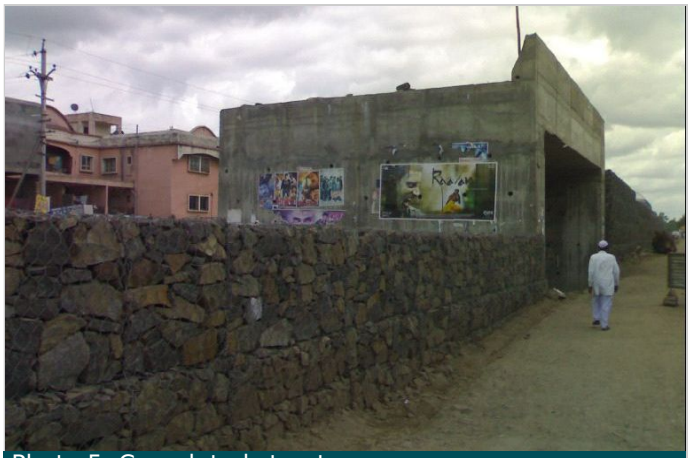


Photo 5: Completed structure

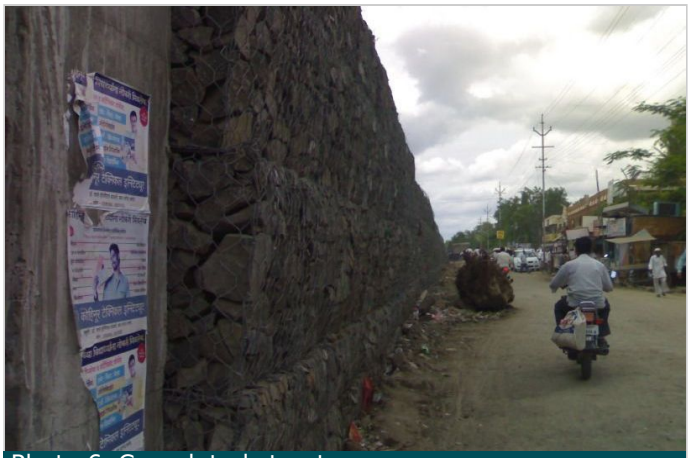
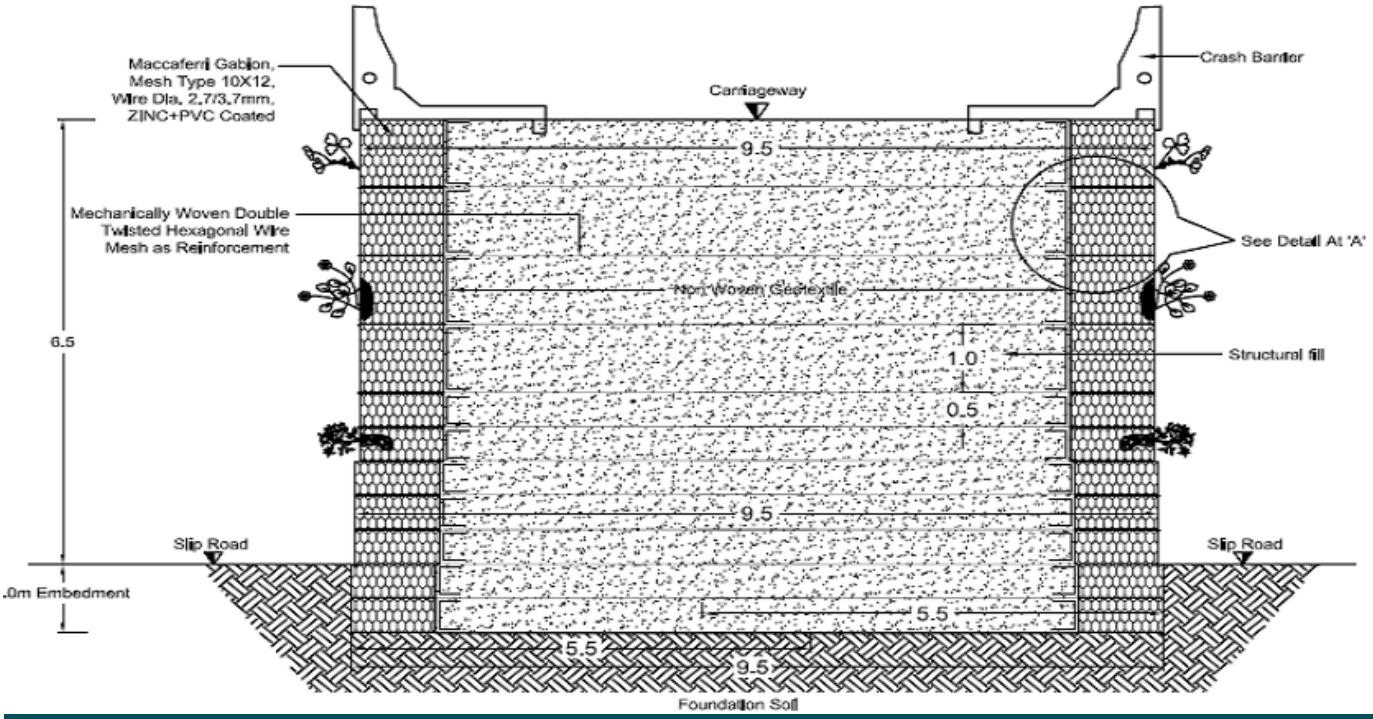


Photo 6: Completed structure



Cross sectional drawing

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