

## CAMANAVA FLOOD WALL

### DAMPALIT, MALABON CITY, NATIONAL CAPITAL REGION, PHILIPPINES

#### BASAL REINFORCEMENT

##### Problem

A polder dike was constructed in Dampalit, Malabon City, Philippines to solve unending flood problems in the CAMANAVA (Caloocan-Malabon-Navotas-Valenzuela) area. However, the dike must be improved since massive flooding still occurred during heavy rains.

In this, Department of Public Works & Highways (DPWH) engineers designed a road embankment to support the polder dike. However, the embankment's footprint was located on existing fish ponds with soft soils. This scenario can cause large differential settlement on the road atop the proposed embankment if not addressed.

##### Solution

After analysis of site conditions, Maccaferri engineers proposed its high-strength MacTex woven geotextile, which served as basal reinforcement to minimize differential settlement of the road. The design was approved by DPWH engineers and therefore was incorporated in the project.

**Client:** Department of Public Works and Highways

**Designer / Consultant:** Department of Public Works & Highways

**Contractor:** MarkBuilt Construction

**Products used (Qty.)**

- MacTex W1 48 rolls

**Date of construction:** 07/2009 - 11/2009



Existing Site Condition



During Construction



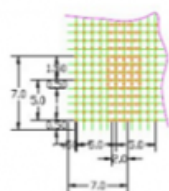
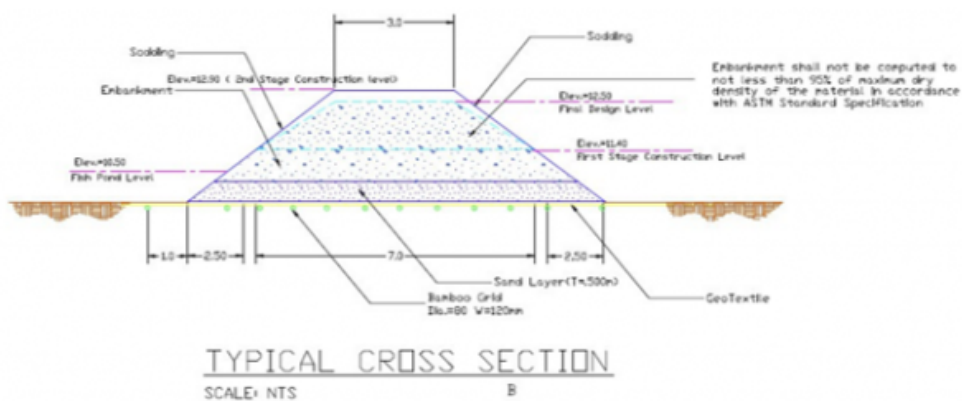
During Construction



Project Completed



Project Completed



**PLAN OF BAMBOO GRID WITH GEOTEXTILE**  
SCALE: NTS



**DETAIL OF BAMBOO GRID WITH GEOTEXTILE**  
SCALE: NTS

## Typical Cross Section Detail

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