

## BRIDGE AND RIVERBANK PROTECTION AT KOK RIVER MAELALOS DISTRICT, CHIANGRAI PROVINCE PROVINCE, THAILAND

ENVIROMENTAL /HYDRAULIC & EROSION CONTROL /SLOPE PROTECTION/  
**Product:** Gabion & Reno Mattress

### Problem

A bridge was constructed across 50m width of Kok river at the northern part of Thailand. Strong current from the river could cause severe damage to the bridge if it is not protected properly. The bridge abutment which is located at the river bank must be protected from erosion. The surrounding area at the bottom of the bridge pillar must also be protected to prevent under ground scouring.

### Solution

The Department of Rural Road (DRR) with the assistance from Maccaferri technical team came up with erosion protection system using Maccaferri gabion and reno mattress. The combination of Maccaferri reno mattress and Maccaferri non woven geotextile was installed at the bridge abutment and also along the river bank as erosion protection. Gabion was installed at the toe of the riverbank as toe protection against scouring. Due to the 1V:1.75H slope, a proper securing was provided to the reno mattress to prevent sliding of the structure.

Client name:

DEPARTMENT OF RURAL ROAD (DOR), THAILAND

Main contractor name:

S.CHIANGRAI CO., LTD.

Consultant:

NA

Product used:

648 CUBIC METER GABION  
2828 SQUARE METER RENO MATTRESS

Construction info

Construction date: OCTOBER 2007

Construction end: JANUARY 2008



Before construction

Date: Oct 2007



During construction

Date: Nov 2007

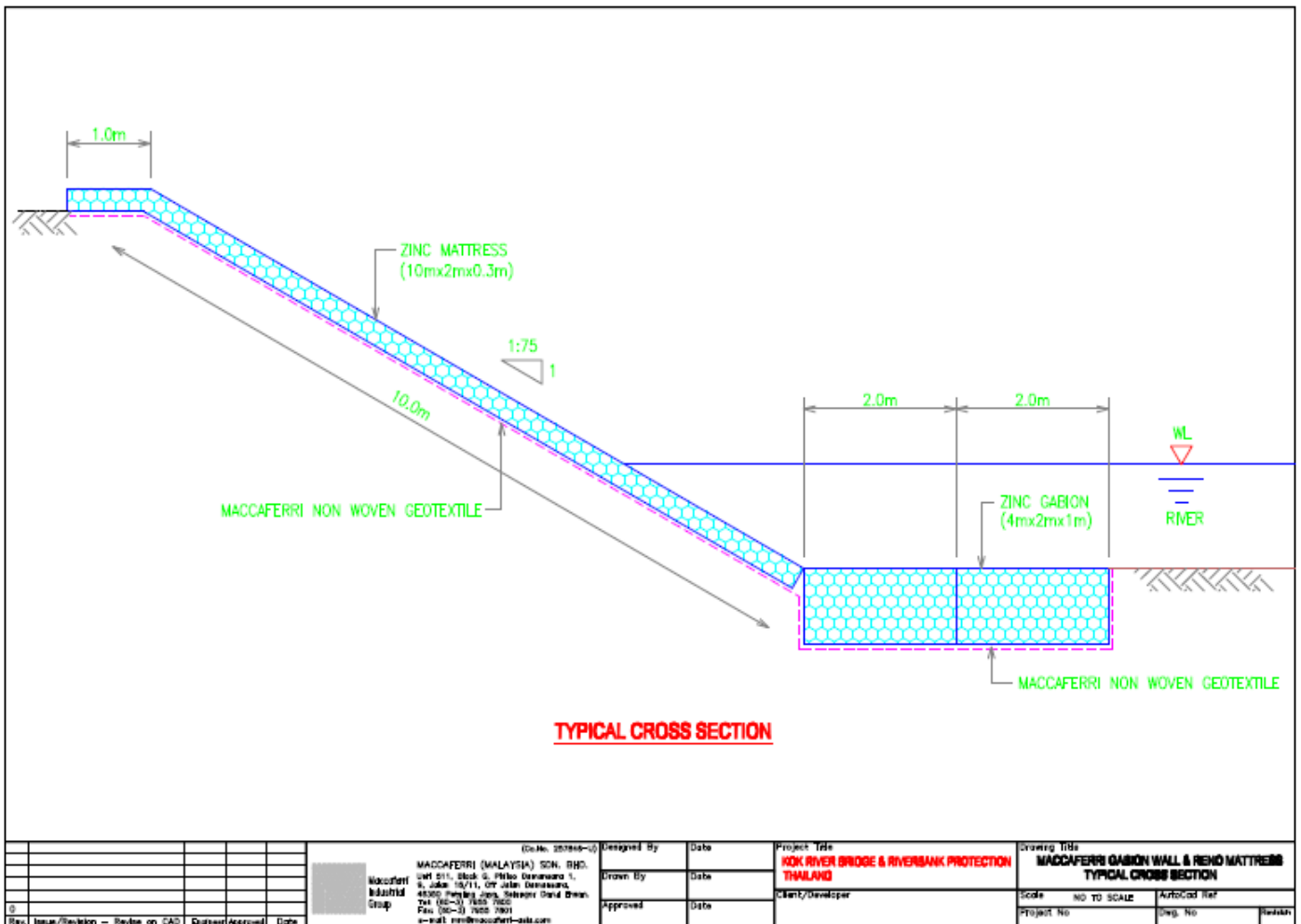


During construction

Date: Dec 2007



Date: Jan 2008



**Project section**

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