

### CAPALABA DETENTION BASIN REDLAND BAY, QLD, AUSTRALIA

#### ENVIRONMENTAL/HYDRAULIC STRUCTURES/DETENTION BASIN

**Product:** Maccaferri Gabions, Reno Mattresses

Capalaba is situated in Redland Bay, 5 km from Moreton Bay in Queensland.

A large turf farm in Capalaba was re-developed into an industrial estate, with its catchment area discharging into an adjacent creek, called Coolwynpin Creek.

The re-development of the site increased the percentage of hard surfaces, and hence the amount of run-off. To ensure post-development discharge conditions were compatible with pre-development conditions, a containment pond was designed by Ross Campbell & Associates using Maccaferri gabions and Reno mattresses.

Maccaferri Pty Ltd supplied the PVC/Zinc coated gabions and Reno mattresses to McTaggart Stone Constructions, the sub-contractor for the gabion and Reno mattress works.

Maccaferri gabions were chosen for this application because of its robustness, long-term durability and its ability to dissipate water flows. The main functions of the pond is to allow sedimentation and stormwater detention, and also to minimise any disturbances to the hydraulic and environmental equilibrium downstream of Coolwynpin Creek.



End perspective of pond

Date: 2003



Side perspective of gabion energy dissipator

Date: 2003

Contractor name:

PENSAR

Sub-Contractor name:

McTAGGART STONE CONSTRUCTIONS

Consultant name:

ROSS CAMPBELL & ASSOCIATES

Product used:

PVC/ZINC COATED GABIONS - 1900M<sup>3</sup>

PVC/ZINC COATED RENO MATTRESSES - 300M<sup>2</sup>

Construction date:

2003



Completed containment pond

Date: 2003

#### Maccaferri Pty Ltd

22 Powers Road, Seven Hills, NSW, 2147 - Australia

PO Box 575, Seven Hills, NSW, 1730

Tel. (+2) 8825 6300 - Fax (+2) 8825 6399

E-mail: sales@maccaferri.com.au - Web site: www.maccaferri.com.au

The information presented herein is, to the best of our knowledge and belief, correct and is subject to periodic review and revision. The validity of the information relative to the subsoil, hydraulic and other engineering conditions must be ascertained by a suitably qualified person. No warranty is either expressed or implied. Unauthorised reproduction or distribution is prohibited. Copyright is vested in Maccaferri or Maccaferri's Principal where applicable.