

CRONULLA BUSINESS PARK SYDNEY, NEW SOUTH WALES, AUSTRALIA

ENVIRONMENTAL/GEOTECHNICAL ENGINEERING/GABION WALLS

Product: Maccaferri Galmac+PVC Coated Gabions

Problem

The 460m long embankment slope on the seaward side of the new Cronulla Business Park needed protection to stop the toe from eroding during wet weather. The highly erodible dune type material would easily lose its integrity once saturated and could ultimately lead to instability of the entire embankment. A solution was required that would blend in with the natural landscape and provide the necessary toe protection to the large embankment.

Solution

Given the fine and even particle size of the dune sands, a solution that would accommodate differential foundation settlements, be porous enough to dissipate water pressures through the structure and be durable enough to withstand salt spray given the close proximity to the surf beach, was required. Maccaferri Galmac (95% Zinc 5% Aluminium Mischmetal Alloy) +PVC Coated Gabions were specified as the toe protection. ESD Landscape Contractors was awarded the landscape and Gabion component of the project. Maccaferri not only supplied the Gabions for the project, but also offered intensive on-site installation training, which was gratefully accepted by Robert Griffith of ESD. Maccaferri was able to demonstrate the ease of construction of Gabions if a few simple procedures are followed, namely; The Maccaferri pneumatic lacing tool and high strength "C" shaped rings can be used to assemble the units which almost halves assembly time, timber or steel temporary formwork attached to the visible faces ensures a straight face and the Maccaferri pre-formed bracing wires ensure that potential bulging of the front face is kept to an absolute minimum. By utilizing these techniques, the contractor was able to complete up to 28m³ of Gabions per day with a 4 man team. Not only was production incredibly fast, but the wall was of such a high aesthetic standard that it was increased in length by a further 200m.

Client name:

CRONULLA BUSINESS PARK

Main contractor name:

ESD LANDSCAPE CONTRACTORS PTY LTD, THE
EDGE IN CONSTRUCTING

Landscape Architect:

MATHER & ASSOCIATES PTY LTD

Product used:

GALMAC+PVC COATED GABIONS

Construction date:

APRIL 2007



On-Site Installation Training

Date: April 2007



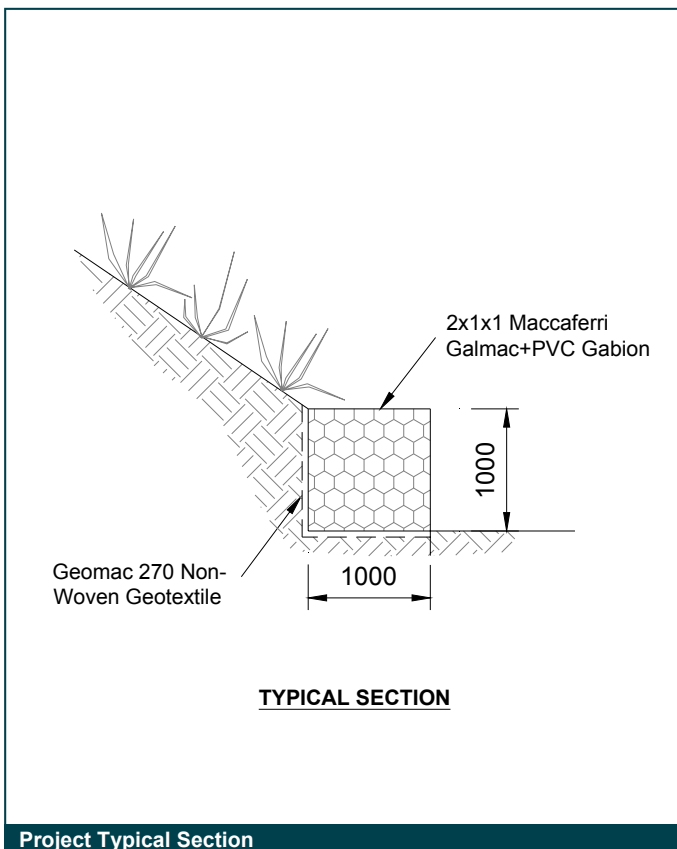
During Construction

Date: April 2007



During Construction

Date: Aug & May 2007



Project Typical Section



During Construction

Date: Aug 2007

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.