

Project: Dunsborough Seawall
Date: May 2012
Client: Shire of Busselton
Location: Dunsborough, WA



ELCOROCK® Geotextile Sand Containers

Dunsborough is a coastal town in the South West of Western Australia, approximately 250 kilometres south of Perth on the shores of Geographe Bay. The Dunsborough foreshore car park was established as a gravel coastal car park in the 1970s. Over the years this car park was progressively upgraded and protected from coastal erosion by a rock seawall. As a result of the coastal protection, down-drift erosion to the east of the car park was becoming an issue. As part of a wider foreshore development it was decided that the rock seawall should be removed and modifications to the foreshore use and access should be made.

Shore Coastal was engaged by the City of Busselton to undertake the coastal engineering investigation, detailed design and specification for foreshore works. These works included the detailed design and specification for a 180m length of geotextile sand container revetment, the removal of the existing car park, controlling eastward migration of the Dugulup Brook entrance and reinstatement of the beach and dunes. This design forms a natural soft coastline which should act exactly as the existing dune system in surrounding areas. Geofabrics supplied the following specified materials for the construction of the revetment for the project:

- 1,000 no. 0.75m³ ElcoROCK standard bags
- 400 no. 0.75m³ ElcoROCK vandal deterrent bags
- 30 no. 2.5m³ ElcoROCK standard bags
- 120 no. 2.5m³ ElcoROCK vandal deterrent bags
- 4,000m² of ElcoMAX 600R

Applicants were invited to tender for the project in February 2012. Neo Infrastructure was awarded the contract and construction commenced in April. Geofabrics were invited by Neo Infrastructure to attend site meetings with the client and designers at key times to provide any support required for the installation of the ElcoROCK system.

The project required a temporary bund to be constructed on the beach along to allow construction of the revetment to take place. Significant drainage works and the reinstatement of a local park also formed a major part of the project.



Neo Infrastructure completed the construction work ahead of schedule in time for the winter storms of 2012. The new seawall in Dunsborough has successfully withstood these and has resolved the annual beach erosion problem at the end of Dunn Bay Road.



Images above show completed project. Pictures taken from on top of buried revetment and showing reinstated park.

Reference: www.seaeng.com.au

How ELCOROCK® works.

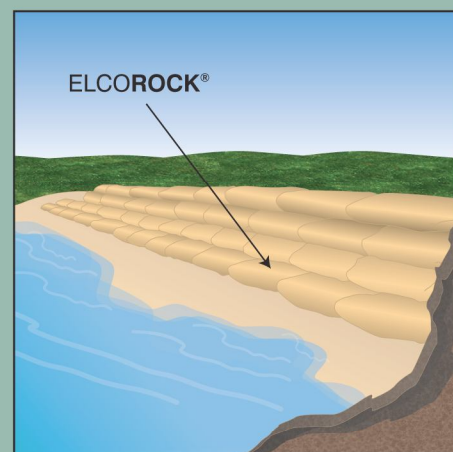
The ELCOROCK® shoreline protection system consists of sand-filled geotextile containers which form a stabilising, defensive barrier in coastal areas. The system provides enhanced public amenity, allowing greater public access at reduced risk for the asset owner.

A world-leader in geosynthetic erosion protection, the ELCOROCK® system effectively combats erosive forces in coastal regions and inland waterways. The robust containers are manufactured in Australia using a nonwoven geotextile with enhanced filtration and extreme UV resistance.

After 20 years of use in the harsh Australian environment, the system's resilience and strength has been proven many times over. ELCOROCK® structures have withstood UV damage, coastal abrasion, vandalism and even Category 5 cyclones. The system is supported by extensive R&D and world class design modelling.

ELCOROCK® structures provide a cost-effective alternative to traditional coastal structures made from concrete, rock armour, steel and timber. The system also enhances the environment by providing a stable base for marine growth.

Geofabrics supports the ELCOROCK® system with ongoing R&D, installation systems and design support.



ELCOROCK® Application

Quality - Support - Expertise

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