

MEGADITCH™ SYSTEM

Problem

The South Coast of NSW experienced and received well above average rainfall for the month of June 2013. The deluge caused major localised flooding in the residential coastal fringes within the boundaries of the Shoalhaven City Council. Following severe flooding a private property owner at Raglan Street, Culburra Beach approached the Civil Engineering Department of the council to find an effective stormwater management solution and minimize further erosion.



Solution

The MegaDitch™ specifically designed expandable channel lining system was chosen by the Shoalhaven City Council as a water flow control capability and competitively priced alternative to a Concrete Box Culvert design. The system is engineered with adjustable sidewalls to conform to the variety of slopes and grades plus specific water flow velocities. The base and wall sections are connected for maximum expandability including multiple units to fit flat bottom channel profiles with variable lengths and widths.

The Raglan Street project was specifically designed and proposed using site specific engineering criteria. The council requested the channel length to be divided into three sections over a total length of 128m incorporating two separate culverts for residential property access at fixed locations. Using the Mannings Coefficient for flow a base width of 1.83m and wall height of 600mm was calculated and selected.

A major benefit of the engineered adjustable sidewalls was specific to this application and installation was that the variable wall height over the entire channel length.

The Shoalhaven City Council ultimately made a decision to select the MegaDitch™ HDPE product due to its ease of installation. The lightweight, deep-ribbed product design provides strength and flow control to minimize further channel erosion.

The innovative solution, also being cost effective, met the end of year financial funding timetable with the Council's following supportive comments:

I like to thank Geofabrics Australasia for the professionalism and high level of service provided throughout this project. The supply and installation of the MegaDitch™ was carried out smoothly with constant support from Geofabrics staff. It has been a good experience dealing with Geofabrics and hopefully continue to work together in future projects to come. Regards, Ali.

Project Details

- ◆ **PROJECT:** Raglan Street Channel Lining
- ◆ **DATE:** 2013
- ◆ **CLIENT:** Shoalhaven City Council
- ◆ **LOCATION:** Culburra Beach



SmartDitch is manufactured in the USA. It is a safe, economical, long-lasting, and environmentally sound irrigation channel lining solution. For more information on the SmartDitch and the MegaDitch HDPE Channel Lining Systems contact:



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