At a NZRA conference, Geofabrics highlighted the benefits of Megaflo® Panel Drainage. Otago Racing Club liked the concept and Geofabrics suggested a trial for drainage at Wingatui. The area outside the course proper takes the run off from a raised area in front of the grandstand. As the home straight is crowned, water was not reaching the drainage system and the natural fall of the land meant it became very wet in winter.

The main issue was the drain had to fit between the outside fence and the main irrigation system which runs alongside the straight. Megaflo® Panel Drainage system was accepted for this application and with funding from NZ Racing Board, Racing Safety and Development Fund, work was able to start.

A 500mm deep trench was carefully worked between the fence and the irrigation system along the 330m length of the straight using a small digger with a 200mm trenching bucket. Megaflo® was installed against one side of the trench and back filled with aggregate. An existing drain at either end of the straight was used as a dispersing drain.

Megaflo® geocomposite panel drainage system is a cost efficient alternative to conventional round pipe drainage and consists of a perforated HDPE core, wrapped in bidim® non-woven geotextile to prevent soil ingress into the drainage system.

Installation is faster due to the slim 40mm profile of Megaflo® Panel Drain using a narrower trench which results in little disruption to the surrounding area.

In the Wingatui area where 25mm of rain over 25 minutes is not unheard of, the Megaflo® Panel Drain’s ability to rapidly collect and remove water will ensure effective drainage under the most challenging conditions.

Wayne Stevens, Race Course Manager said, “Since the installation, we have received significant rainfall and I am happy to report, when looking through our inspection holes, the Megaflo® is working well. I found Megaflo® easy to install and
was ideal because of the limited space we had to work with. I would have no hesitation in using Megaflo® again”.

Megaflo® has been used successfully in the Ascot Racecourse, Perth and Belmont Racecourse in Western Australia.

Megaflo® installation before and after

Completed race club

How Megaflo® works.

Megaflo® is a flat panel drainage system that outperforms other drainage systems when it comes to effective subsurface drainage, particularly in narrow trench areas.

Megaflo® is used under sports fields, as roadside drains, within landfill or mining applications as well as behind retaining walls.

Megaflo® has a slotted surface to allow water infiltration and is supported by a ribbed panel which maintains filtration properties and prevents damage during installation. It has the ability to quickly collect and remove water. Compared to a 100mm round pipe, Megaflo® has twice the inflow capacity, and takes 60 per cent less time to drain. This extends the life span of the road pavement.

Megaflo® has a panel shaped core which fully encloses the waterway, and its slim profile makes it faster and more cost-efficient to install. It can also be used either vertically or horizontally to remove excess water and prevent water pressure build-up.