

# Filterra® Bioscape

Kayelene Place, Ōmokoroa

CONSULTANT:

CB Civil

SPECIFIER:

Maven

CLIENT:

WBOPDC (Western Bay of Plenty District Council)



In a tight space where conventional systems wouldn't fit the Filterra® Bioscape was the perfect solution.

## TREATMENT SOLUTIONS UTILIZED:

205m<sup>2</sup> Filterra® Bioscape

While the footprint is smaller, the site has a lot of challenges and restrictions. Consideration has to be taken during design since the Council Stormwater reserve is right next to the stream as the receiving environment, high rainfall events can increase the water level on the stream and surcharge into the Filterra® Bioscape system. Future water level rise can also surcharge into the Filterra® Bioscape system. Raising the Filterra® Bioscape can also cause flooding on the upstream catchment so had a restricted level where the Filterra® Bioscape can fit. There is also a flooding risk on the Stormwater Council reserve, a high bund was designed to prevent any flooding from washing/scouring the system.

## PROJECT PARTNERS:

Western Bay of Plenty District Council, Maven, CB Civil and Vitruvius Ltd

## BENEFITS OF THE FILTERRA® BIOSCAPE FOR THIS SITE:

- Originally the treatment system specified was a Rain Garden and Swales. The original Rain Garden footprint needed to be approx. 1,315m<sup>2</sup>. The council-owned stormwater reserve land was not big enough for the 1,315m<sup>2</sup> of rain garden. Also, the Rain Garden had to be installed next to the road, however, since the roads are next to steep land, the rain gardens need a structural retaining wall which increases the cost significantly.
- The specified Filterra® Bioscape only needed 205m<sup>2</sup> of footprint, which now can be fitted solely in the Stormwater Council reserves.
- The Filterra® Bioscape can treat at the same level as the Rain Garden but at a fraction of the footprint.
- The single location of the system and reduced footprint reduces the cost of maintenance and overall lifecycle to the council.
- Using native plants on the Filterra® Bioscape to promote Te Mana O Te Wai.
- Working together with the council, we will install a display to educate the local community on what the system is for and create ownership with the community.

## TARGET CONTAMINANTS AND MAINTENANCE:

Targeting sediment, heavy metals and nutrients.

The maintenance is simple and easy only requiring the replacement of the layer of mulch on top every 6 months.



Filtterra® Bioscape is a collaborative approach with stakeholders to deliver a water-sensitive urban design solution that is only a fraction of a traditional rain garden.

