

Spray Avenue Industrial Precinct STORMWATER HARVESTING & REUSE PROJECT

This innovative project is being constructed as part of Council's commitment to the environment and improving our local streets.

The environmental and community benefits of this project include:

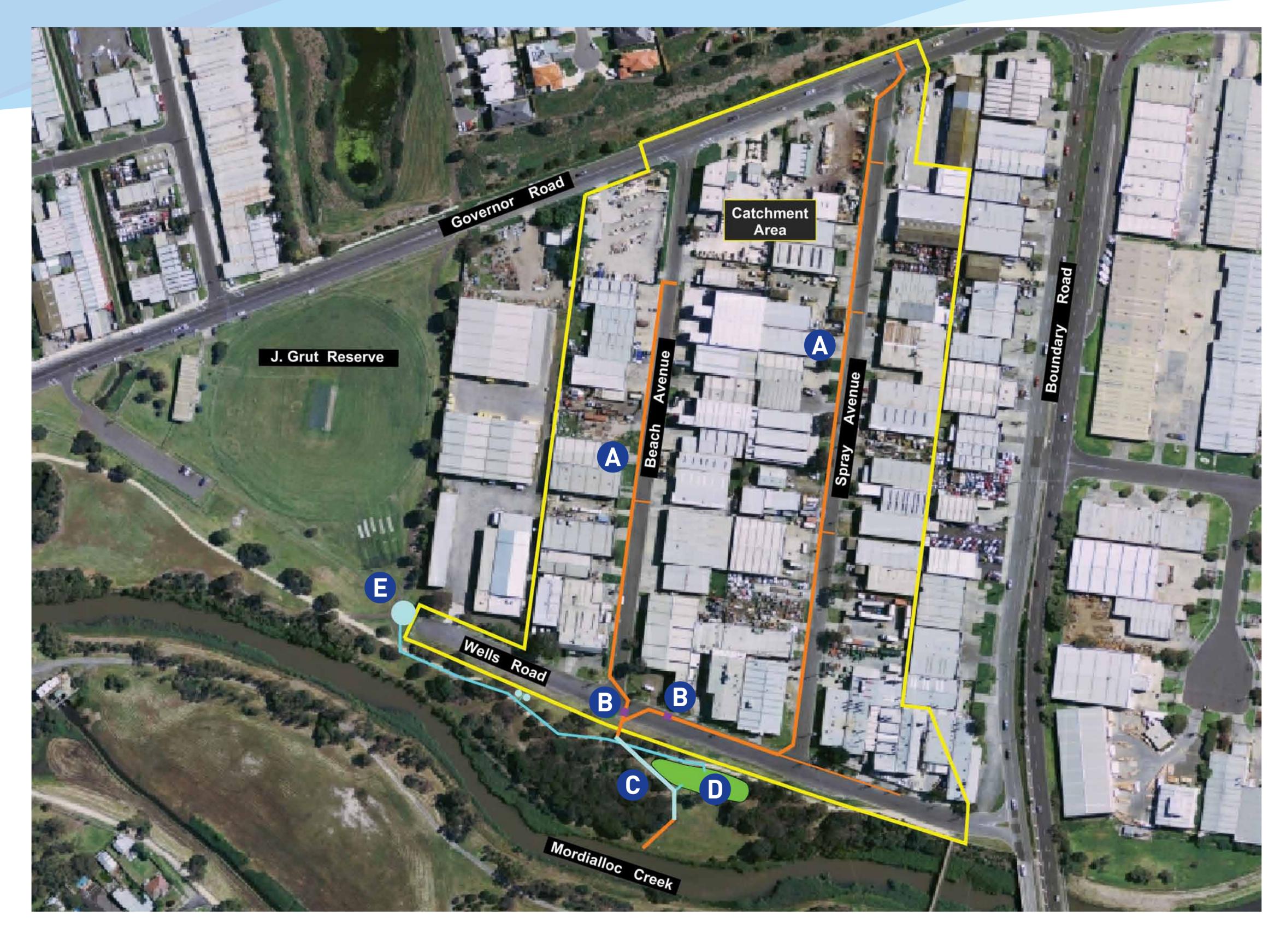
- An innovative approach to removing pollutants from industrial stormwater.
- Reusing harvested stormwater to irrigate street trees and the turf wicket at J Grut Reserve.
- Improving the quality of the remaining stormwater flowing into Mordialloc Creek.
- Increased flood protection for surrounding properties.
- 1 km of reconstructed roads and the installation of new footpaths.

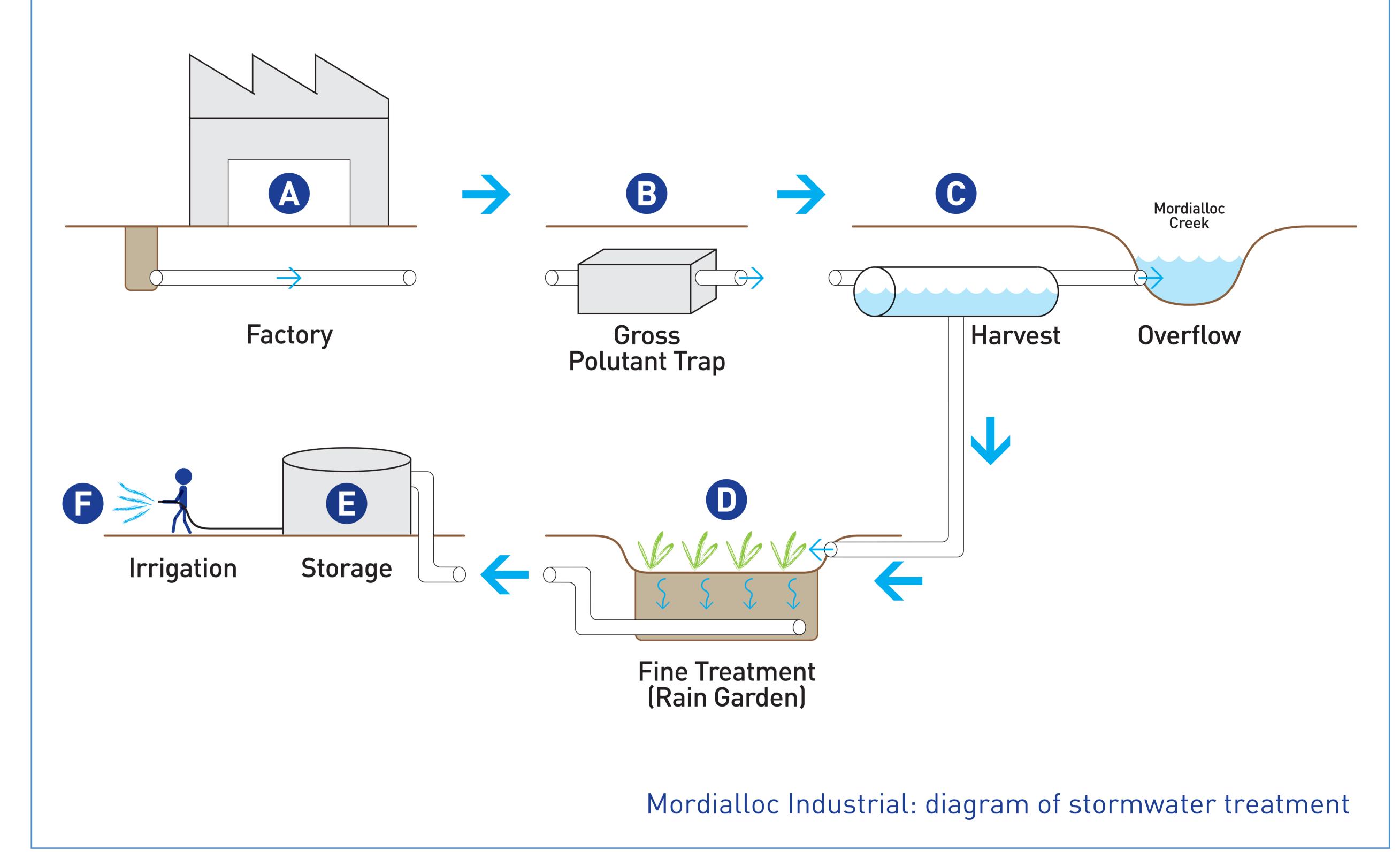
Stage 1 was constructed during 2011 at a cost of \$1M and included:

- The reconstruction of Beach Avenue.
- Components A, B & C shown right.

Stage 2 will complete the project by 2012 at a cost of \$1.7M and includes:

- The reconstruction of Spray Avenue and Wells Road.
- Components A, D & E shown right.







A Stormwater Catchment Area

This project harvests stormwater runoff from a 10 Hectare industrial area compromising of local roads, industrial roofs and paved areas.



B Gross Pollutant Traps

Many of the stormwater pits along the roads have been specially designed by Kingston to capture course pollutants such as litter and silt.

Two large stormwater pollutant traps have also been installed under Beach Avenue to trap material bypassing the pits.



G Stormwater Harvesting System

Newly constructed drains along Spray Avenue and Beach Avenue direct stormwater runoff into a into a 187,000 Litre underground storage system in the reserve.

The storage consists of 61m of 2.4m diameter pipes with major storms overflowing into Mordialloc Creek.



D Fine Treatment System

Stormwater is pumped from the underground system into a large vegetated bioretention system (commonly known as a 'rain garden').

The rain garden consists of four cells and layers of engineered soil and sand that filters out fine pollutants such as heavy metals, nitrogen and phosphorus.



Rainwater Tanks & Reuse

Treated stormwater is then pumped from the rain garden into a 240,000 Litre storage tank.

The system has been designed to capture around 4 Mega Litres each year or enough water to fill 90 domestic swimming pools.