



The team at Wild and Love Early Learning Village in Pukekohe have a goal to be sustainable each and every day, and the design of their childcare centre reflects this. Food scraps from the kitchen go into worm farms or compost bins, as much food as possible is grown in-house using the village's garden, and the architects and engineers were challenged to use sustainable designs during the build.

Car parks are often a large area on any project. Typically made from concrete or asphalt, they can generate lots of stormwater runoff that could need attenuating and treating. Using a permeable surface for a car park reduces stormwater runoff, reduces total site coverage helping with planning, and could even remove the need for expensive detention and treatment systems by using the ground's natural infiltration.

The stability and longevity of a permeable surface is important, especially in a car park where slow-moving and turning wheels can cause damage. Grasscrete™ is a 150mm thick, reinforced concrete slab that is poured in situ with voids that are then filled with grass. The concrete bears the weight of the vehicles, stopping differential settlement of pavers or compacting of the soil.

Covering 515m², engineers chose to use Grasscrete™ to cover the entire carpark. A catchpit is designed to capture large storm events, but the majority of stormwater will infiltrate into the ground. As a result, the project didn't require detention tanks or stormwater treatment devices. Stormwater360 worked with Pavecraft during the installation, and Wild and Love's gardeners work to keep the grass healthy and weed-free to continue infiltration stormwater.



515m²

Carpark coverage.

150mm

Reinforced permeable concrete slab poured in situ.