

THE TERRACOTTEM ADVANTAGE

LANDSCAPES THAT FEEL RIGHT



One of the low grassy mounds that together with the right overstorey, have transformed the feeling of central Cairns.

When you have someone putting landscapes together, who understands that it's not just about the pieces but the way they all come together, then you get outdoor spaces that feel special. This is the way landscape architect Jeremy (Jez) Clark and his team at Cairns Regional Council tackle their projects, and the results speak for themselves...

Cairns is an interesting place to work. It's a regional city, set in northern Queensland. It enjoys a tropical climate and it's neatly positioned as a stepping off point for tourists – Australian and international – who want to see the Great Barrier Reef or more of Far North Queensland. Dig a little deeper into the local scene and you discover that the tropical climate is almost Jekyll and Hyde-like. There is a distinctly soggy season when between two and three metres (yes metres) of rain are dumped onto the city; cyclones visit periodically; and there's a long spell each year known as The Dry when the rain does not fall. Add those tourists to this scenario - paying visitors who hope to find Cairns looking a bit like Hawaii or Fiji - and you can begin to appreciate the set of challenges faced by Jez and the team. Oh, and one more thing, before Jez arrived nine years ago to take on these very Cairn-centric challenges, his landscape architecture practice was in London.

"My partner and I had been looking for a sea change, and after visiting Cairns on holiday we returned to live here. In England I worked on schools and large-scale residential projects, but I began work here on traffic islands and median strips. Before long they realised we could do more and the design team was formed."

The new space functions on one level as a transport hub: on other levels it offers shady gathering places and revels in Cairns' tropical setting. At the time, much of the city's outdoor spaces were remnants from previous eras so the team systematically began pulling together a master plan and a tree plan. Various projects were tackled along the way – the International Tennis Centre, the Port Douglas Waterfront and Cairns' main thoroughfares.



This was clearly an opportunity for some thoughtful landscape architecture to have a powerful impact on the development of a relatively immature city. It was also fortunate that these design skills were meshed into the fabric of the Council's team, something that has definitely contributed to a local response.

"Often a regional council doesn't have the resources, so one of the big design firms is called in which often has its own house style." In this case the Cairns in-council team were able to contribute a strong sense of 'local' in their response to the design.

Take the Lake Street precinct. Before its recent re-development, it was an open, European-style plaza with little shade on offer and metal street furniture that literally cooked in the tropical sun. The new design has function, beauty and local context. "I believe a landscape should be experiential: I don't think that was how it was approached in the 1990s." The plaza retains its role as a transport link and meeting place at the junction of the city's two key thoroughfares, but it's now much greener thanks to thousands of plants, among them, established trees standing six and seven metres tall. The species list is varied but it deliberately reflects the flora of the region. The bench seats, bins and signage were locally designed and made, and the paving was also locally quarried, cut and finished. "It's part of our local geological history."

The reaction to the new look Lake Street has been understandably positive. "People have been stunned by the number of trees that have gone in." Down Lake Street's west side, lush green plantings speak of nearby rainforests; down the other, a brilliant display of flower and foliage colour hints at the reef offshore. For those who are interested, interpretive signage has been placed to boost an appreciation of the greater Cairns hinterland.



Cairns sees many tourists, and tropical plantings like this are a part of what everyone wants to experience. The fact that this or any council managed planting project in Cairns does so well is thanks to staff expertise. Soils are assessed honestly and where the water table threatens to have a negative impact, aeration pipes are laid. Precious high value assets – the whopping trees – are braced till they are deemed ready to meet their first cyclone. Planting crate-modules are used wherever compaction is expected to be a problem. And everything green is put in both with irrigation and TerraCottem, because during The Dry, it gets really dry. "The grass browns right off and the dust flies around."

This has been a local project run by local council with locally designed and built street furniture. Even the paving stone is quarried nearby.

Put it all together – good design and honest implementation – and you have an approach that works well. It's a great improvement for the locals and when the visitors arrive during The Dry, they are greeted by the tropical setting they expect.





THE TC ADVANTAGE

TC Advantage is a package deal. It's about supplying TerraCottem (more about that in a minute), along with all the training, technical specification and compliance needed to turn a tricky project into a genuine long-term success. So when anyone has a <u>turf</u>, <u>street tree</u>, <u>revegetation</u> or <u>whatever</u> project to tackle, bringing in the TC Advantage expertise means you get: advice on which TerraCottem product to specify; training so that it's applied for maximum benefit; and monitoring to ensure compliance within the project's specs.

As for TerraCottem, it's a brilliant soil conditioning treatment because it works on various fronts at the same time...

To start with, it uses two main mechanisms to encourage substantial root development – polymers and root growth precursors. The polymers are a little like water-holding crystals except that TerraCottem's hydroabsorbent polymers have been carefully selected and well researched. This means that instead of just one polymer with a narrow water-holding and water-releasing ability, there is a group of them providing the same function over a wide range, for years. To put it crudely, more water can be stored and released under a broader variety of conditions. (To put it precisely for specification purposes: TerraCottem has an absorption capacity of a minimum of 4500 g H2O/100 g in distilled water using Method of Analysis CEN EN 13041, with a minimum of 90% of the water contained in the polymers being plant available.)

As for the root growth precursors, by definition a precursor is a chemical compound which leads to another. The precursors found in TerraCottem do exactly this, and for a very good reason. If you put growth hormones into soil, they rapidly biodegrade. But if you put precursors into the root zone, the plants get a kick-start by synthesising their own growth hormones. And this conducive environment – for optimum cell division and elongation – stays like this for 12 months.

Then there is a nicely varied collection of plant nutrients – soluble mineral fertilisers, in a format suited to the early growth phase of a plant; slow-release fertilisers, designed to offer a constant source of food over many months; and synthesised organic fertilisers which focus on the soil, stimulating microbiological activity and general soil health.

Add this all together and the result is fast and furious root establishment. This means greater accessibility to water, fewer losses, and, given the reciprocal dynamic between roots and canopy, noticeably vigorous growth. In the longer term, the soil conditioning power of TerraCottem means that plantings are buffered from stress. It's great stuff.



