Trees in the urban landscape



'i-Tree' is software that can measure the value and purpose of trees within an urban environment. With its findings, we can make better long term decisions for our towns and cities, and be better informed when making planning decisions explains Farrells partner John Letherland

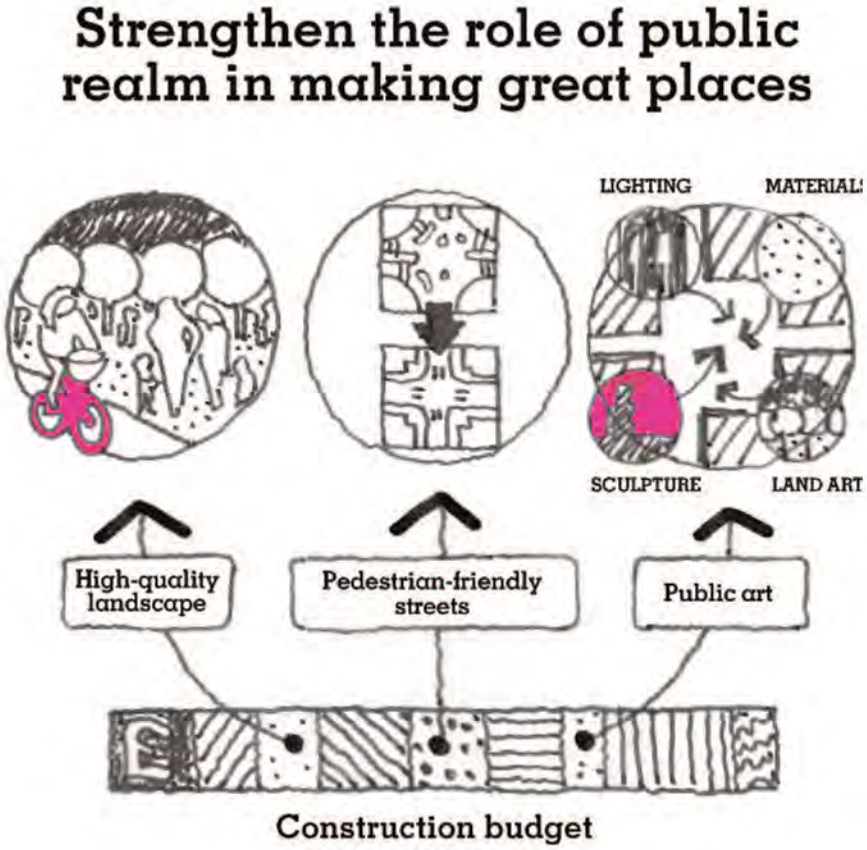
"In order to create the kind of high-quality places we all want, a major cultural change is needed where the focus of everyone involved moves towards the wider context of what is already there and its all-important setting and context. Liveable cities are only ever successful when they are well planned with high-quality public realm where the pedestrian is king. Landscape is the primary infrastructure and ordinary everyday buildings are the ones that deserve more attention. This requires a change in values and a change in mindset as it is all too easy to focus on the kinds of "one-off" new buildings which are reported about in the trade media and recognised with awards." – The Farrell Review

Amongst the many recommendations made in The Farrell Review, one of the most important calls for a holistic reappraisal of the urban spaces we design and inhabit. Underlying this is a proposal to re-think the existing system of design review to become PLACE reviews, with PLACE being an acronym for the five key elements of the built environment: Planning, Landscape, Architecture, Conservation and Engineering. The main objective behind this aspect of the Review is to promote and encourage joined up thinking across all aspects of the built environment and the key institutions that influence it.

In an expert panel meeting during the consultation process of the Farrell Review the group underlined the importance of no longer considering the 'human habitat' in isolation, but instead recognise it all as one overall ecosystem. We must no longer look at the built environment as something composed of simply an arrangement of buildings, and thus we must be more than just architects alone - we have to be planners too, approaching the planning and design of our built environment in an integrated way, joining up all elements of the built environment.

"It is interesting to contemplate a tangled bank, clothed with many plants of many kinds, with birds singing on the bushes, with various insects flitting about, and with worms crawling through the damp earth, and to reflect that these elaborately constructed forms, so different from each other, and dependent upon each other in so complex a manner, have all been produced by laws acting around us." – Charles Darwin, On the Origin of Species, 1859

Sustainability, like health, is now a public issue and something that should be weaved into everything we do as built environment professionals. At last week's Trees, People and the Built Environment Conference, Luciana Schwander Ferreira from the University of Sao Paulo noted that a city is "imposed" upon its environment. This statement was made in particular refer- >>>



Conclusion 2B.1_PublicRealm – Illustration from the Farrell Review

©FarrellReview
farrellreview.co.uk

ence to Sao Paulo, and extreme example, but nevertheless it brings home the fact that the natural environment is, in a way, the first infrastructure that we are adapting to become a human habitat; we should therefore be integrating with it, not in spite of it. We need protect the existing natural environment through effective legislation to prevent it being demolished or to ensure re-planting happens to compensate if it does.

The role of urban trees is a vital part of placemaking, and therefore integral to the way we design our towns and cities. As well as green spaces, such as parks, gardens, heaths and commons, the urban landscape also includes our streets, squares and waterways that make up the urban/public realm. Quality in our streets and squares is so often overlooked by design professionals when creating our built environment; even worse, when it comes to reducing budgets, these are the things that get 'value engineered' first.

However, our streets and pavements are some of the most highly valued spaces in our towns and cities -

"80 per cent of the spaces in cities are roads and streets...streets are not just for movement but they are places too" – Peter Jones (Urban Design and Landscape workshop).

Trees simply make our towns and cities a better place to be, as well as bringing health, food, oxygen, fuel, environmental and climatic benefits as well as sustenance and habitats for other species. It is no surprise that if a place works holistically, we will want to go there, especially if it is leafy and colourful, with textures, sounds and fragrances rather than relentless cold grey, hard surfaces. As people are attracted to a place, so then are businesses, shops, cafes and so on, that take advantage of the increased footfall and provide opportunities to linger.

As the economy revives, the house prices go up and so, slowly, a humble tree can play its part the regeneration of a neighbourhood.

If we can start to see the landscape as part of our built environment, can we also start to see trees as part of our architecture? Trees are a force for good, a gift from nature to our urban environments, 'soft-machines' that filter pollution, create shade and provide shelter, and even have foundation systems that stabilise the ground and assist in sustainable drainage systems. Our towns and cities are defined by the density of buildings, and the ratio between development and open space; can we instead see trees and green spaces (and not the lack of them) as a defining factor of cities?

Although the value of trees has long been recognised, we have not (until recently) been able to measure their multiple ecosystem benefits accurately. 'i-Tree' is state of the art software that can measure the value and purpose of trees within an urban environment. After successful implementation in the US, the project was piloted in UK in 2012 and adjusted to our climate and ecosystems. With the findings from initiatives such as these, we can make better long term decisions for our towns and cities, and be better informed when making planning decisions.

"Landscape should be seen as the primary infrastructure which creates value directly and indirectly. Government and built environment professionals need to reprioritise the importance of its role and perception in placemaking. This applies at all scales, from streets to parks to regional planning." – The Farrell Review



Farrells Masterplan for Royal Albert Dock which includes tree lined streets and squares, and an ecological corridor which provides a buffer to the road ©Farrells