



Liverpool  
City Council



Dr Juliet Staples

# Liverpool's Renaturing Urbanisation

1. Soft ground tree planting
2. Hard landscape tree planting
3. Urban carbon sinks



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 730426



Amenity spaces



Infill in verges



Housing organisations

Work was delivered in-house and in partnership.

Multiple benefits including:

carbon storage, oxygen production, air quality, habitat, flooding, cooling/shading, sense of place, wellbeing and mental health, reduced need for mowing etc.



# Trees in Soft Ground City Parks



Mixed Orchard



City Park

Work was delivered in-house.

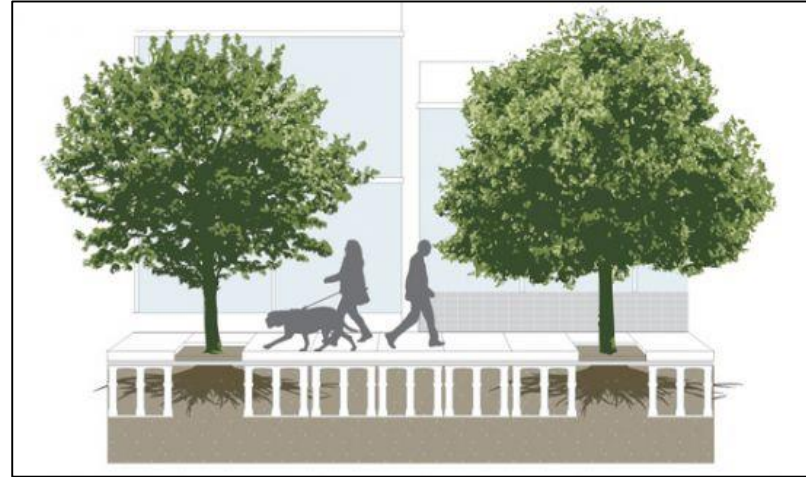
Additional benefits included:

Provision of free fruit, places for outdoor learning, engagement with Friends of Parks Groups



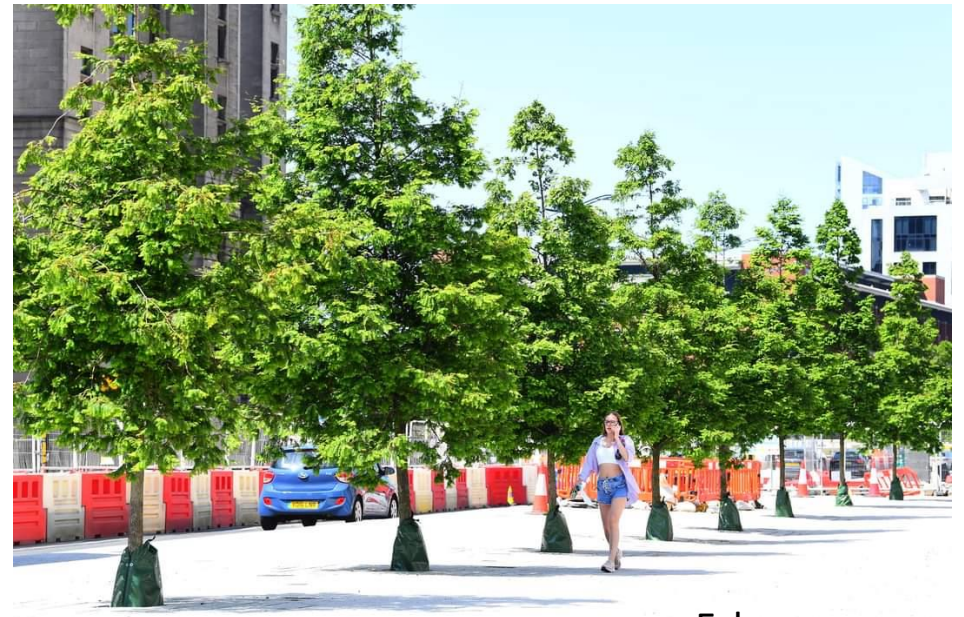
# Trees in Hard Landscapes

## Major Highways Schemes SuDs



Delivered by contractors.  
20 Tree Sustainable Urban Drainage (SuDs)  
Expected benefits:

- Reduce final discharge volume
- Improve discharge water quality
- Slow the flow
- Add shade/cooling/biodiversity
- Demonstrator NBS legacy
- 580m<sup>2</sup> permeable paved area





# Trees in Hard Landscapes

## Major Highways Schemes



Filter trees with 82m<sup>2</sup>  
permeable paved area

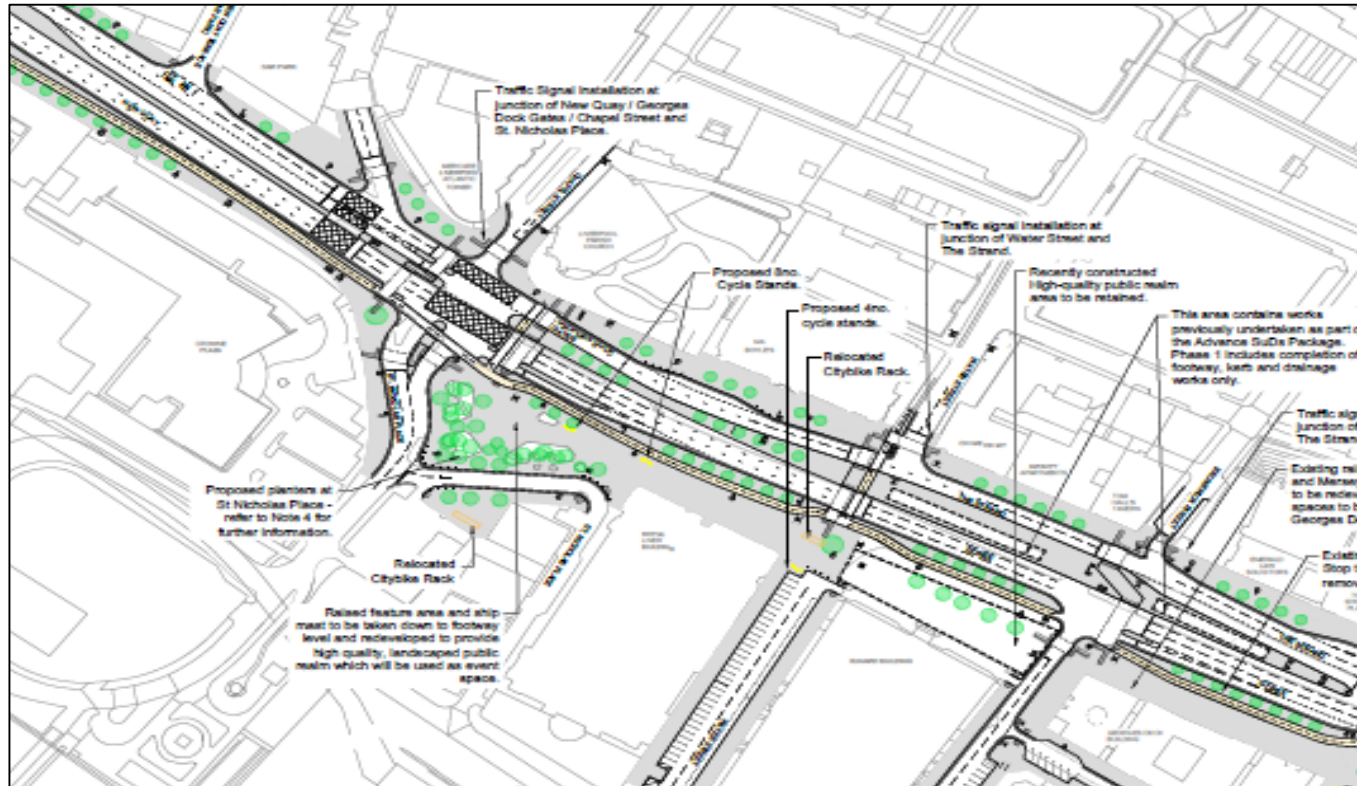


Shade and cooling trees with 80m<sup>2</sup>  
permeable paved area

# Trees in Hard Landscapes

## Major Highways Schemes Filter Planting

130 other trees being planted in 9 - 47m<sup>3</sup> silva cells as part of the Strand City Connectivity works, many will be performing a filter function.





# Trees in Hard Landscapes - Smaller Schemes



Removal of concrete parking space



Trees and pollinator planting



Delivered by contractors



Stafford Street in Fabric District



# Trees in Hard Landscapes

## Stafford Street Feedback

**STAFFORD  
STREET** L3

### GREENING THE FABRIC DISTRICT



**82%** of businesses say that greening the area has benefited their business to some or a great extent

**▲ 94%**

Local residents rate the appearance of their area nearly twice as highly post-greening

**92%**

say that planting street trees makes the area look better and attracts people and businesses

**68%**

68% feel that having trees planted locally encourages them to spend more time outdoors.

**52%**

of businesses say that the most important benefit of greening is increased footfall (up 83% on the pre-planting response)

**33%**

of new cyclists said a key reason they started cycling was because their route to work/college is now more attractive.

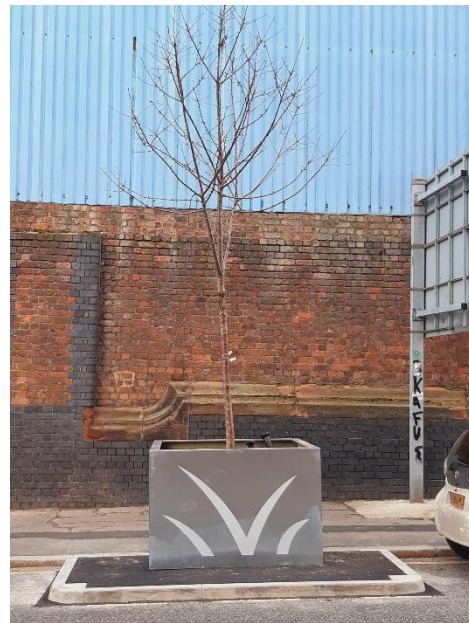




# Tree Planting in Hard Landscapes Difficult Spaces

Delivered in-house

- Use of containers with irrigation systems
- Avoids underground cables and utilities
- Replaced concrete bollards
- Providing a shady street/parking space
- Trialling an urban tree nursery





# Tree Planting for Engagement Mobile Forest

Launched June 2019  
by Sir William Worsley  
DEFRA Tree Champion





# Urban Carbon Sinks

## Floating Ecosystems





# Urban Carbon Sinks

## Pollinator Planting







## Urban carbon sinks- Living Green Walls





# Thank you

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