

# challenging the urban fabric to be water sensitive

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Sustainable rainwater management is  
brilliant



Reduces flooding.

Reduces combined sewer overflows (CSOs).

Cleans & cools runoff to protect streams, rivers and seas.

Replenishes aquifers, interflow and base flow diluting the effects of urban pollution and keeping rivers healthy.

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Improves water and food security.

Reduces the urban heat island effect.

Improves air quality.

Supports sustainable building energy use.

Generates a sense of place, amenity value, health & wellbeing.

Promotes increased biodiversity.

# It's a no brainer!

It's so effective, cost-effective and brings so many additional benefits that we should consider nature-based approaches to rainwater management whenever we plan to amend the urban fabric

We should also seek opportunities to retrofit throughout our urban landscapes

"how can the urban fabric work harder for rainwater?"





Urban Natural Flood Management





Oxleas Ancient Woodland





wet woodland habitat =  
maximum evapotranspiration  
& bioremediation

Clothworker's Wood, Greenwich





Glenbrook Wetland Treatment System





New wetland areas will bring more biodiversity



Scrub clearance creates more attractive and biodiverse spaces



Wetland plants will be chosen for attractiveness as well as function.



Wetland areas are attractive and bring wildlife



A cleaner, clearer natural environment for all to enjoy



Yellow Flag Iris is a beautiful native wetland plant

#### Polluted Stream :

The stream is polluted with mis-connections and road run-off. This is evident in its smell, colour, the presence of Sewage Fungus and has been confirmed by our laboratory testing.

#### Natural Treatment :

Weirs will be used to divert the day to day low flow through new wetland areas which will 'treat' the water to remove pollutants using natural biological and filtration processes.

The wetland areas will be planted with aquatic and marginal planting and species will be selected in order to bring the most wildlife and colourful flowers.

#### Woodland Management :

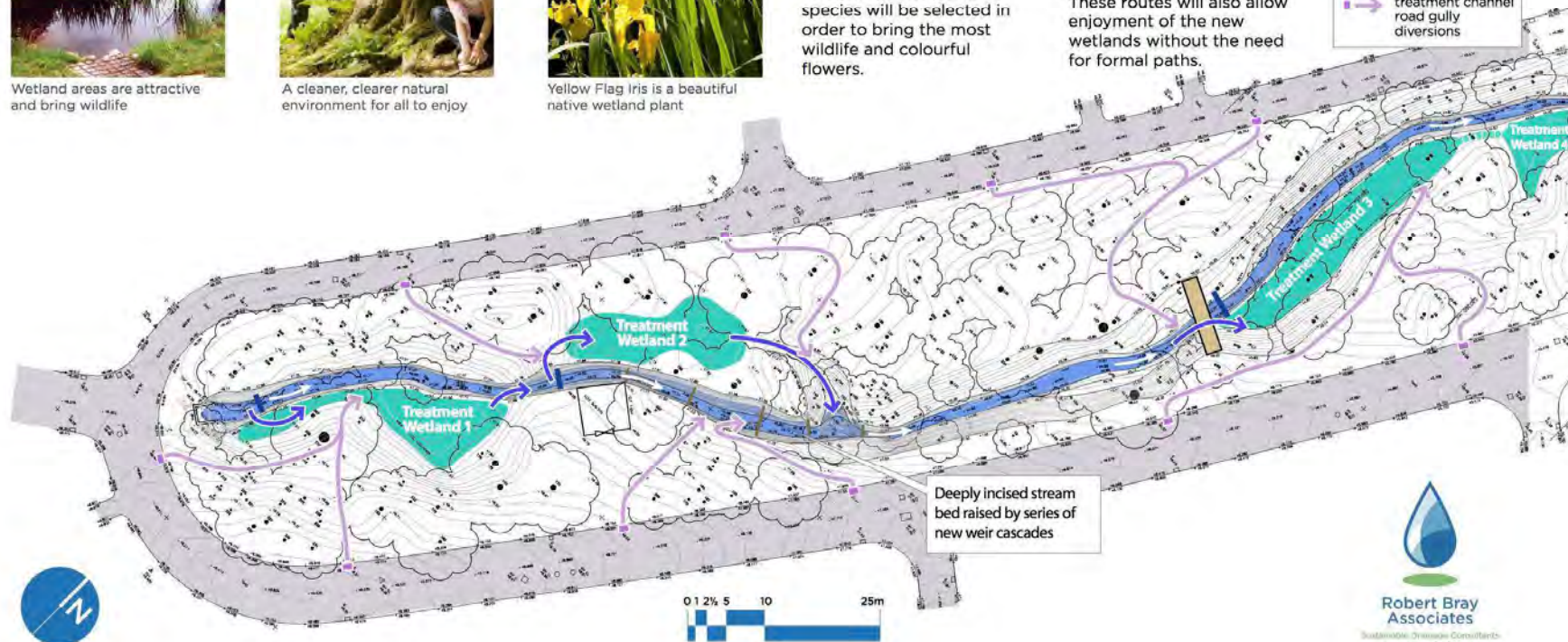
Some tree clearance and crown thinning will be required in order to allow enough daylight to reach the wetland plants, but nothing that wouldn't normally be expected as routine biodiverse woodland management. The additional sunlight will allow more plants and wildlife to flourish.

#### Maintenance Access :

Routes will be cleared through the woodland to allow routine maintenance such as de-silting, checking weirs, water quality testing and wetland inspection. These routes will also allow enjoyment of the new wetlands without the need for formal paths.

## Thames21 SuDS projects

### Boxer's Lake : SuDS Park Concept Proposals 1of2



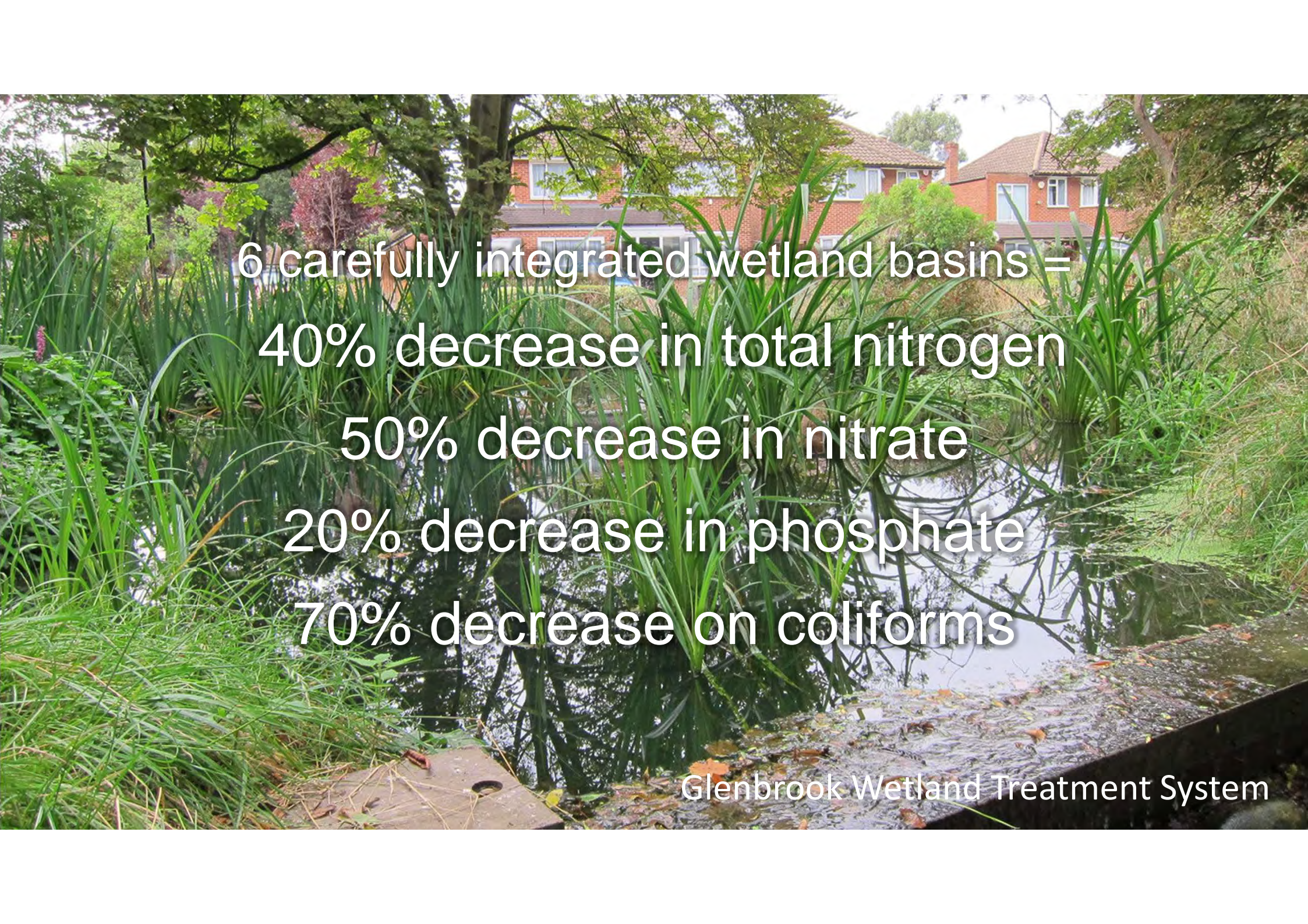
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Glenbrook Wetland Treatment System

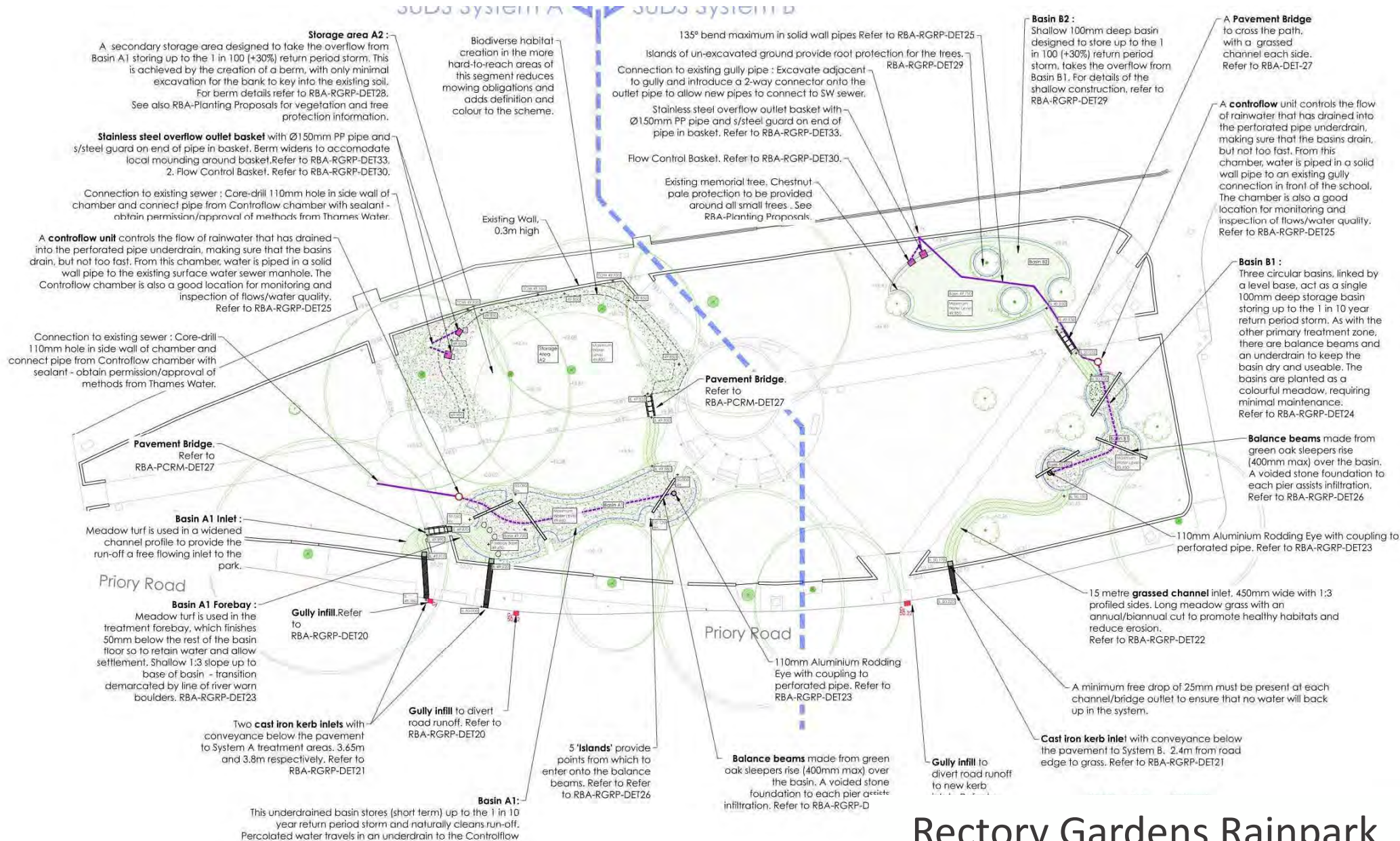




6 carefully integrated wetland basins =  
40% decrease in total nitrogen  
50% decrease in nitrate  
20% decrease in phosphate  
70% decrease on coliforms

Glenbrook Wetland Treatment System





# Rectory Gardens Rainpark





Rectory Gardens Rainpark





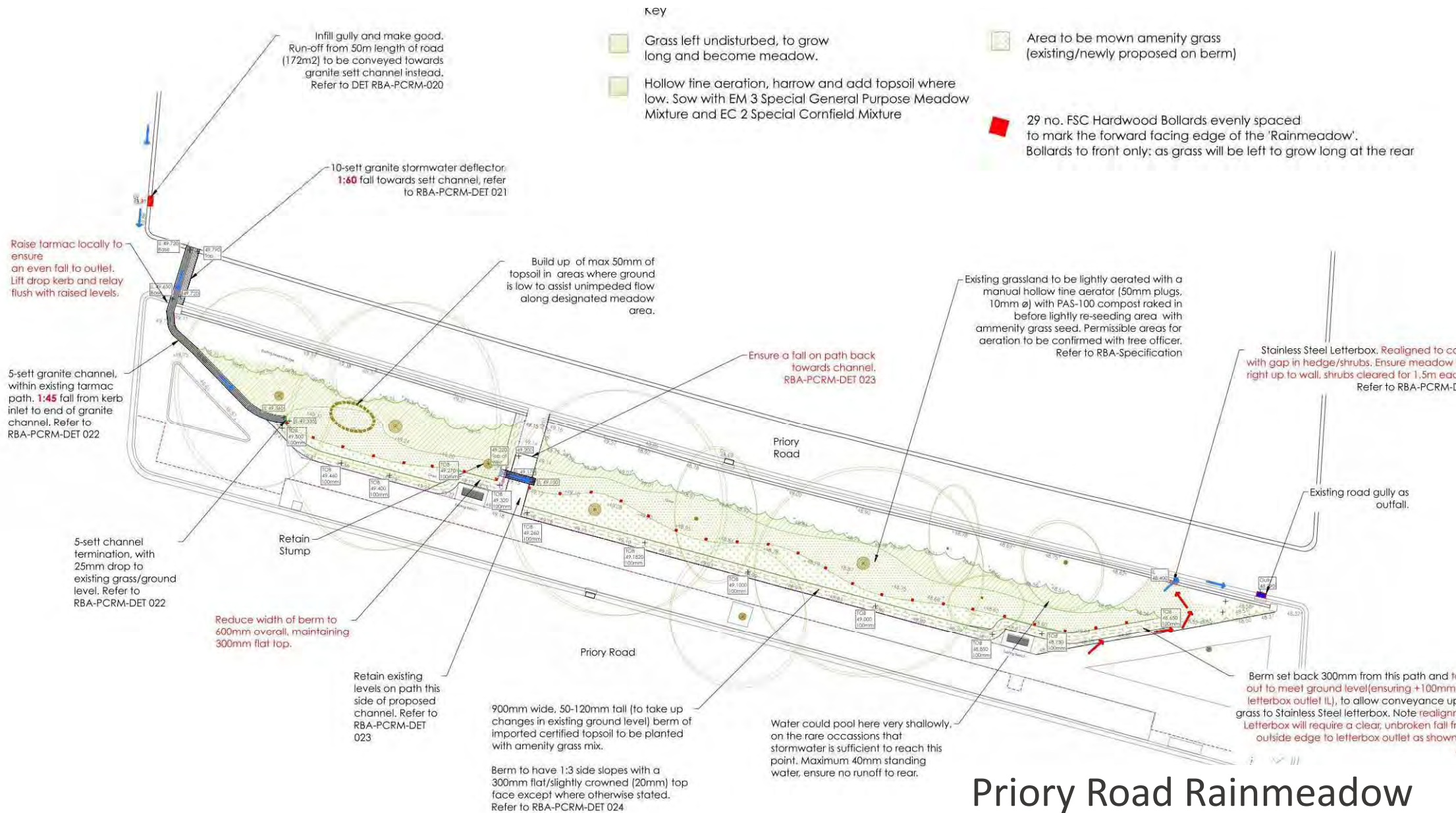
Rectory Gardens Rainpark





Rectory Gardens Rainpark









Priory Road Rainmeadow





Priory Road Rainmeadow





Priory Road Rainmeadow





Renfrew Close - before





Renfrew Close Community Raingardens





Renfrew Close Community Raingardens





Holland Park retrofit SuDS





Holland Park retrofit SuDS





Holland Park retrofit SuDS





Bromsgrove Civic Centre





Bewdley School Science Block









Measham Leisure Centre - before





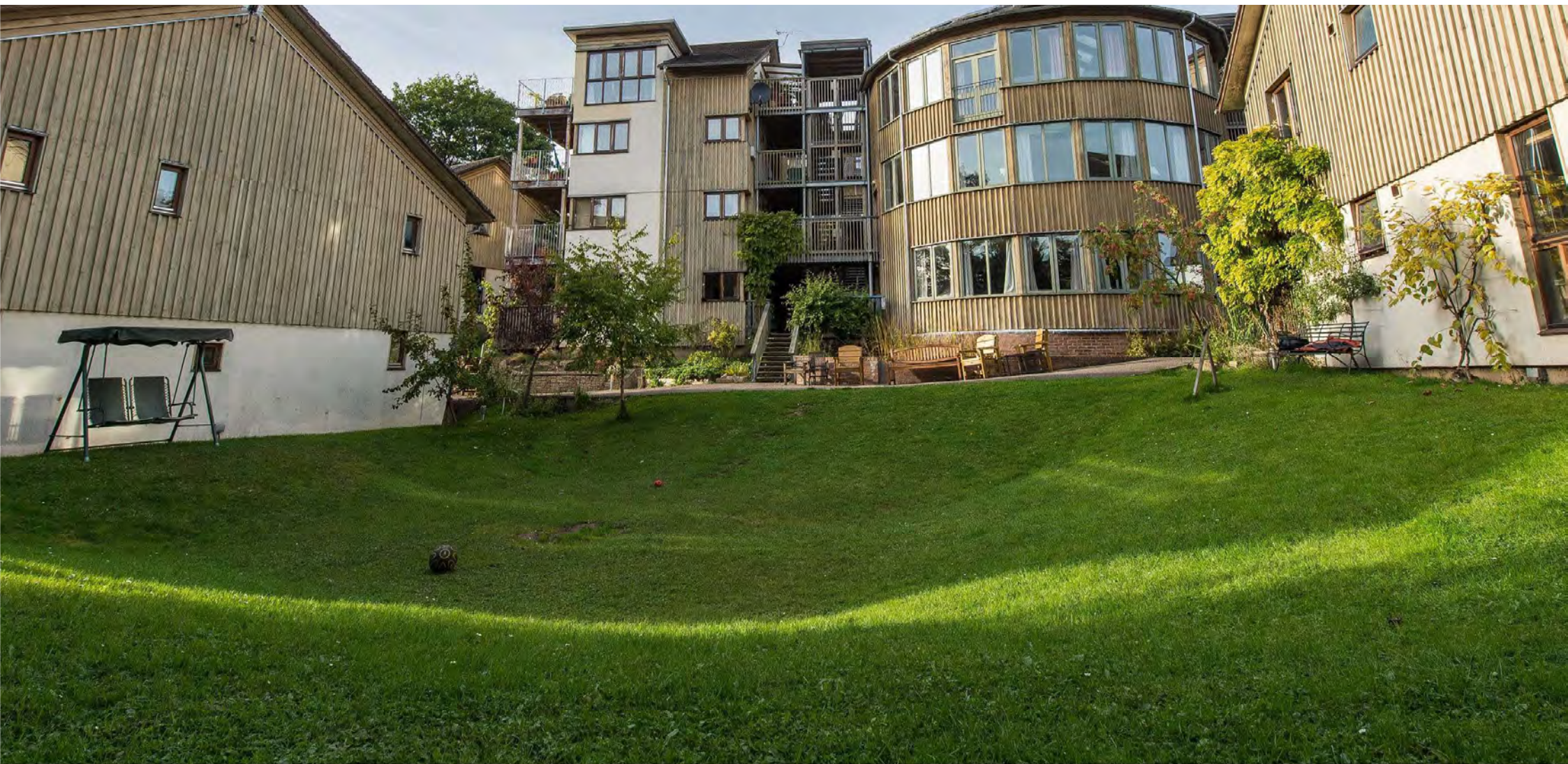
Measham Leisure Centre Raingardens



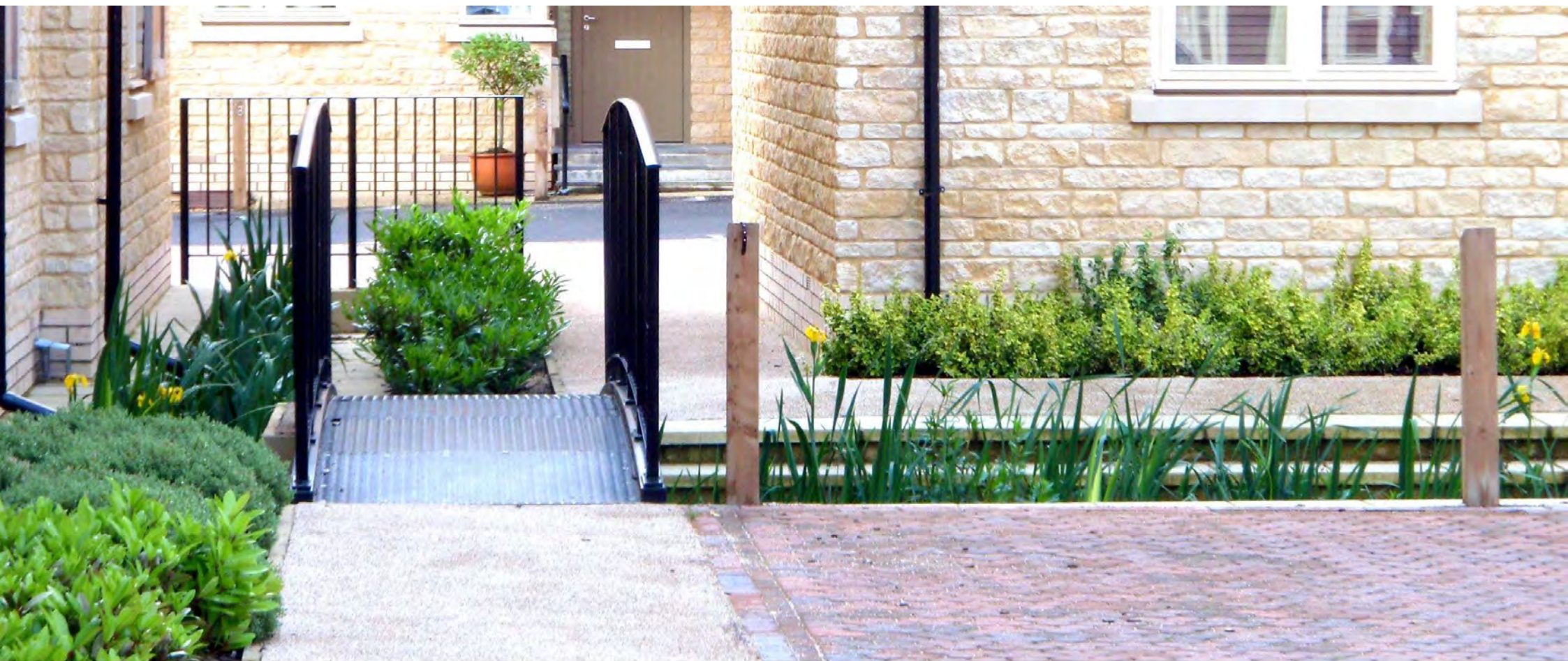


Springhill Cohousing









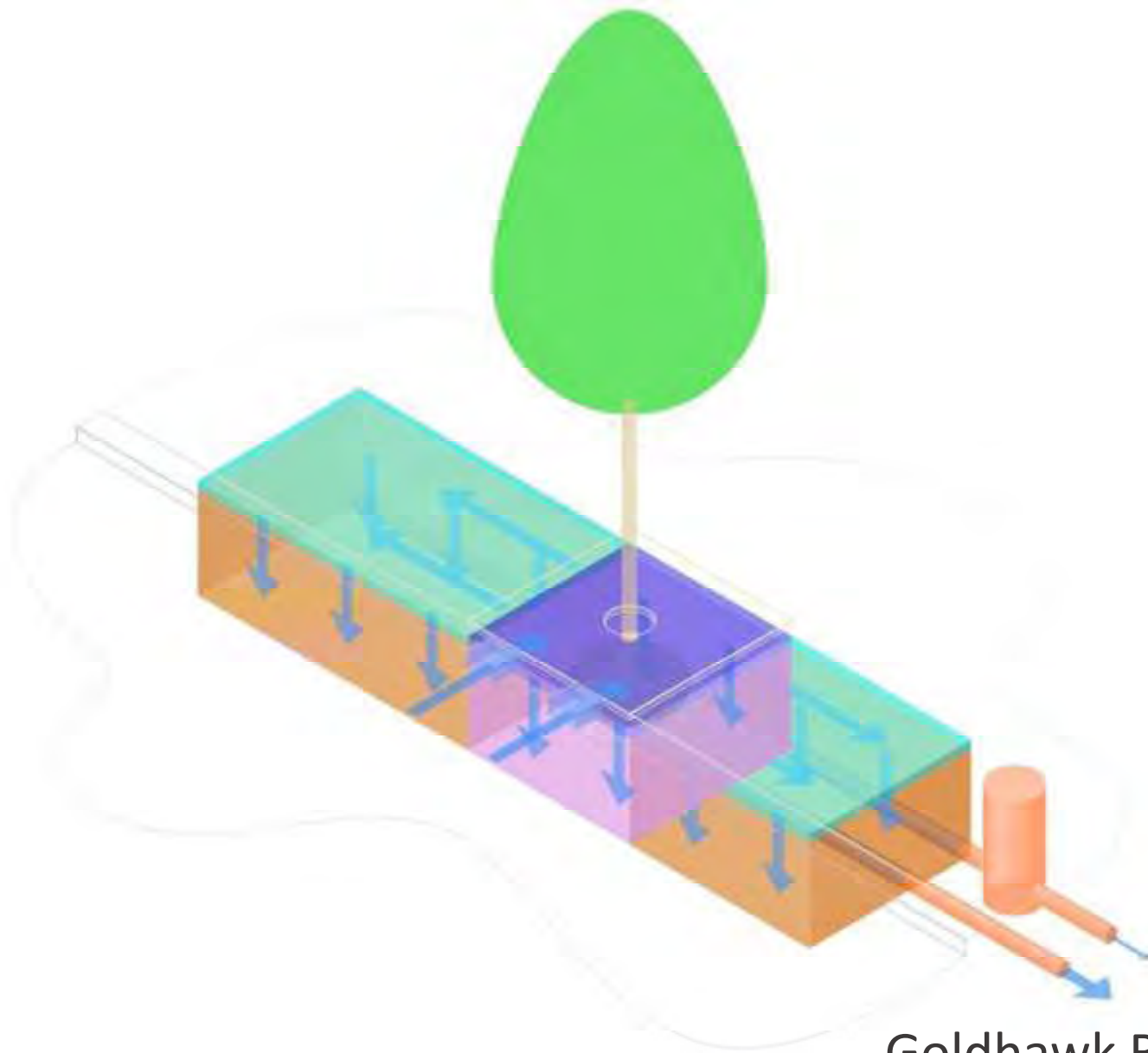
Stamford Housing (106 units/ha)





Sheffield Grey to Green





Goldhawk Rd SuDS Tree Trenches





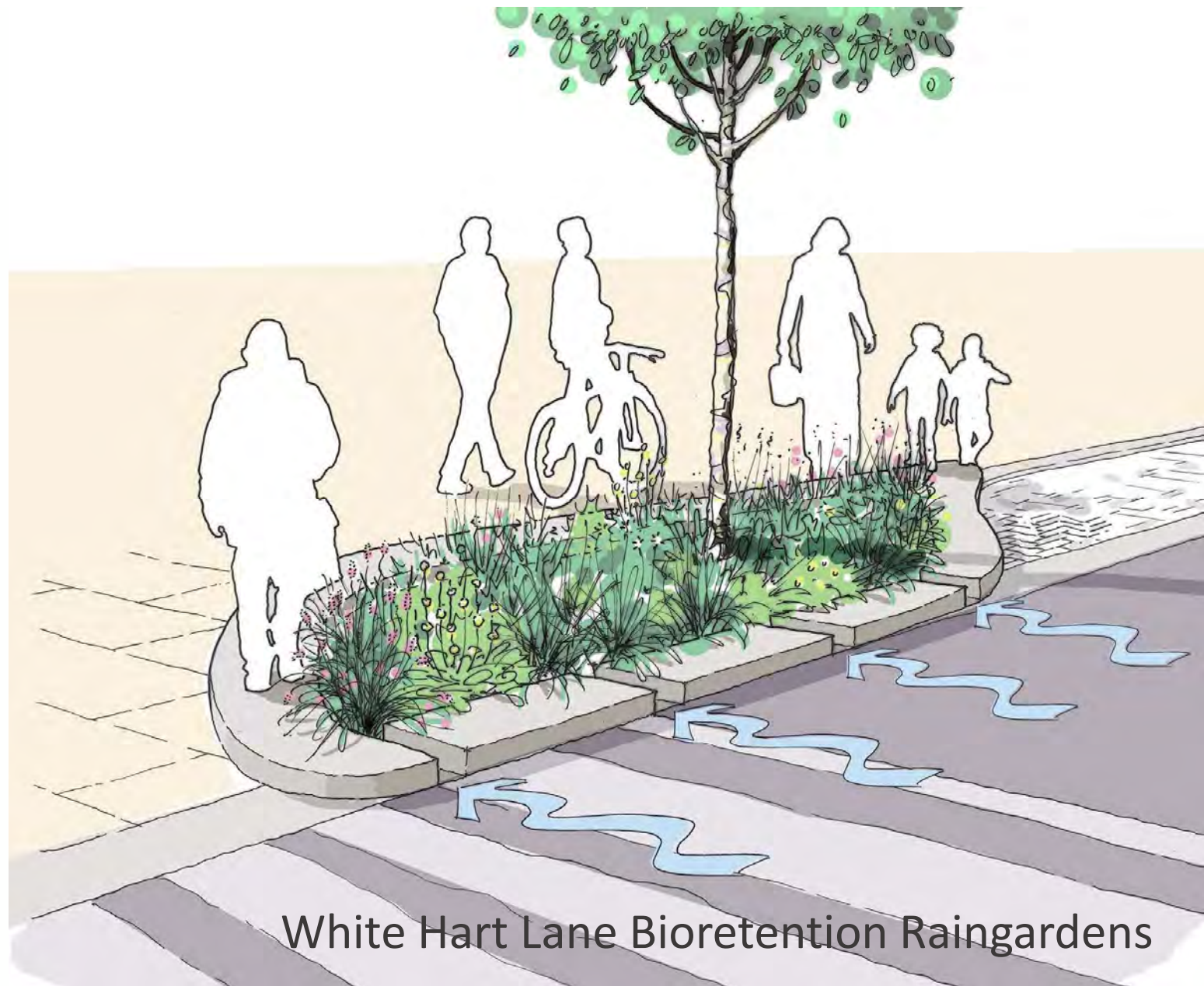
Goldhawk Rd SuDS Tree Trenches





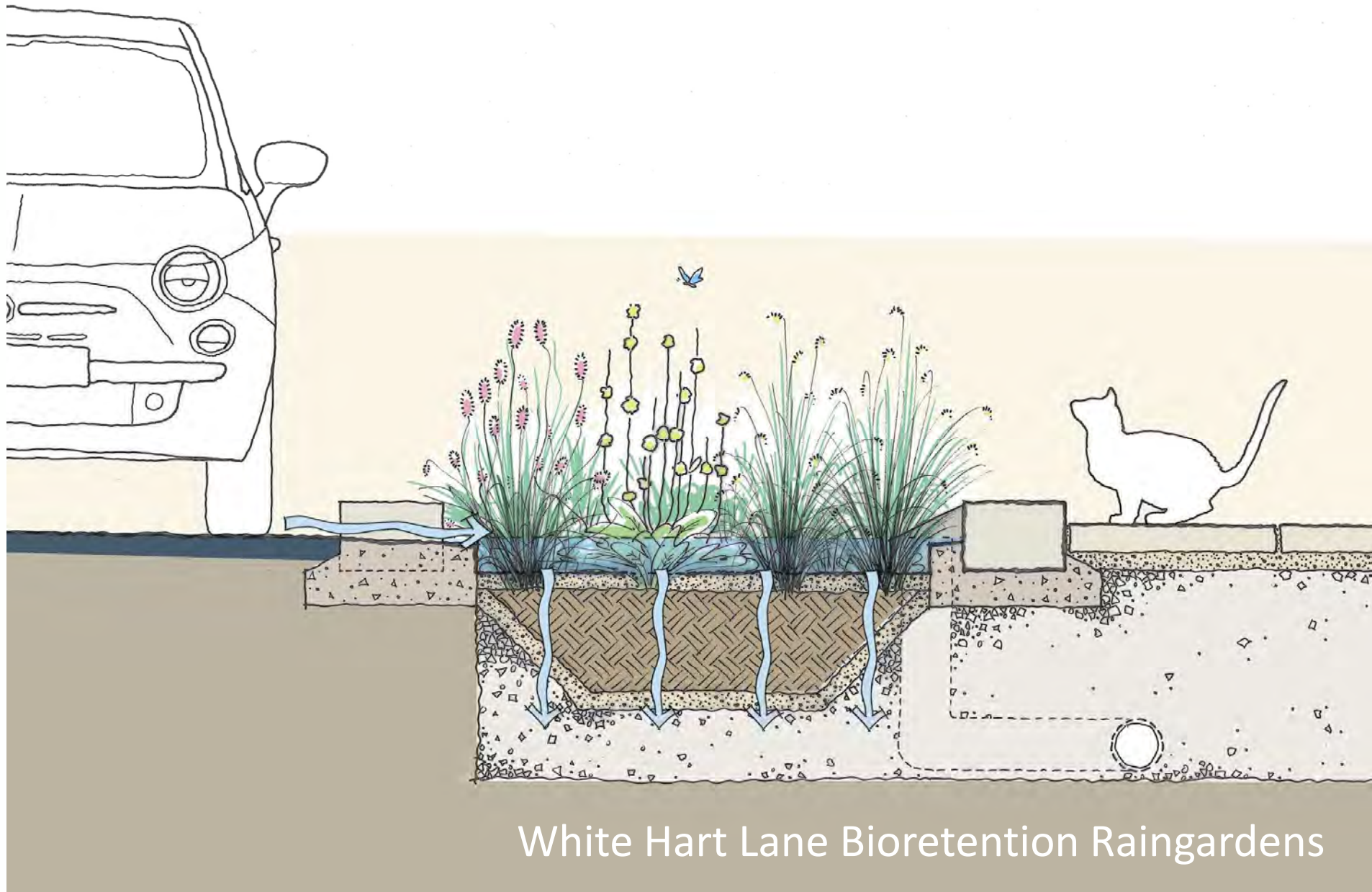
White Hart Lane





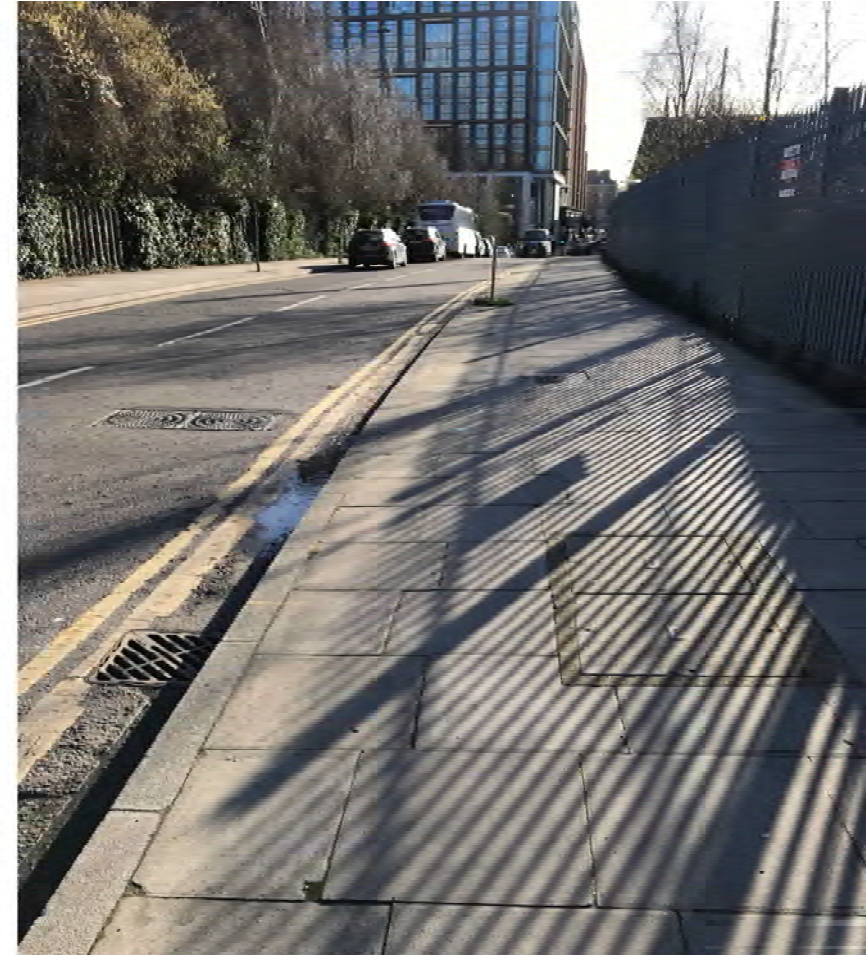
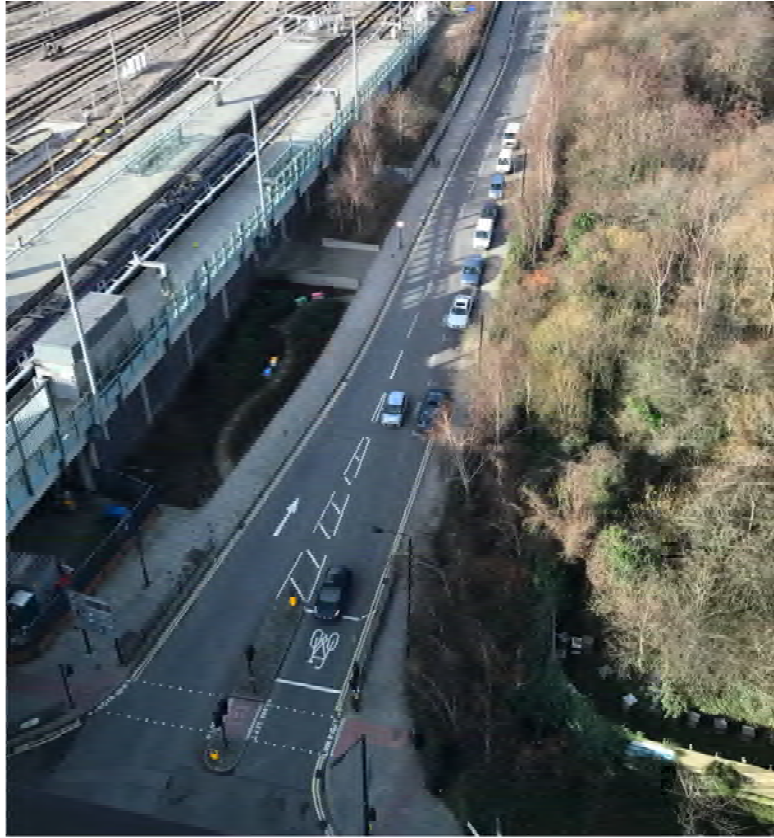
White Hart Lane Bioretention Raingardens



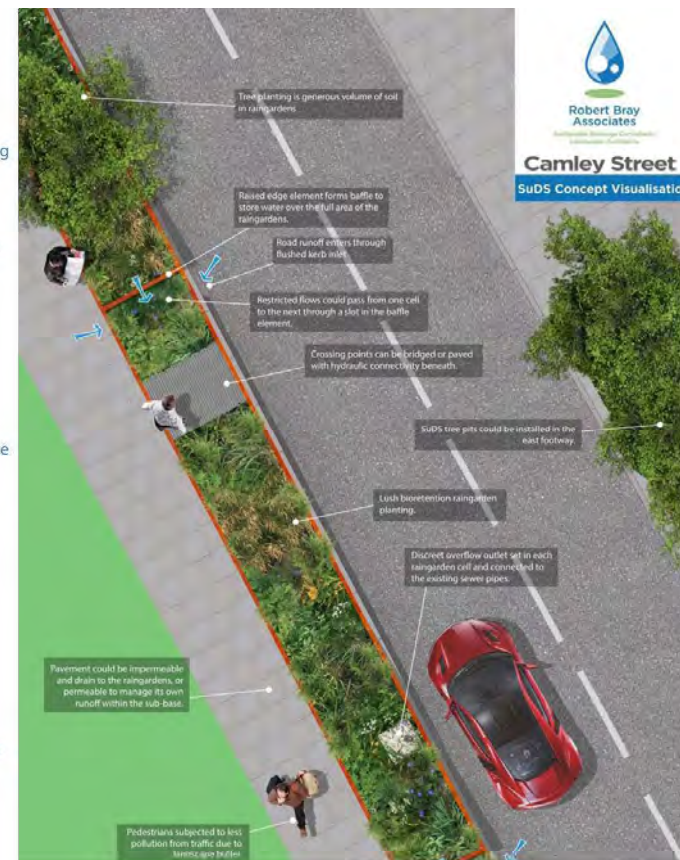
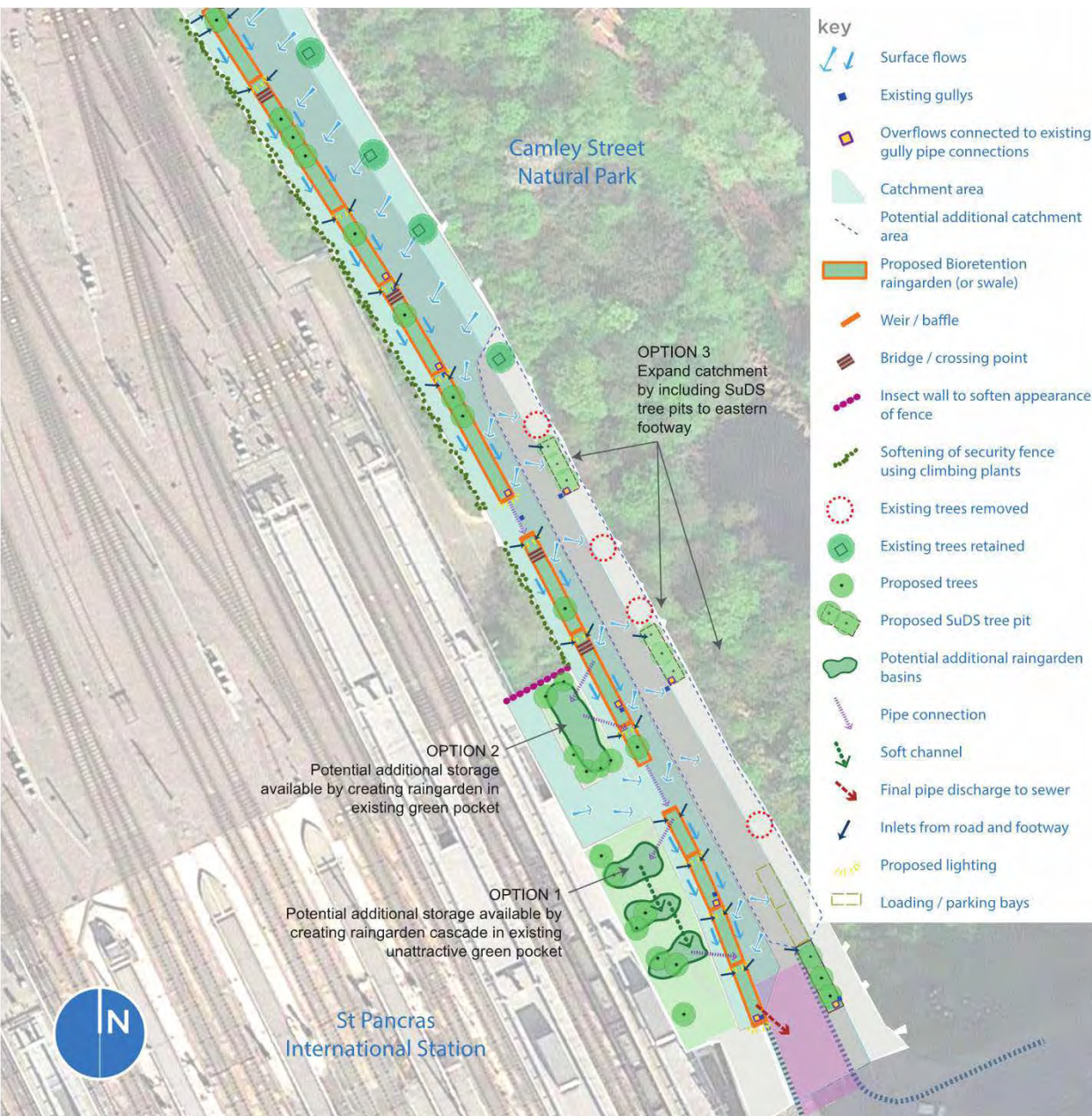


White Hart Lane Bioretention Raingardens



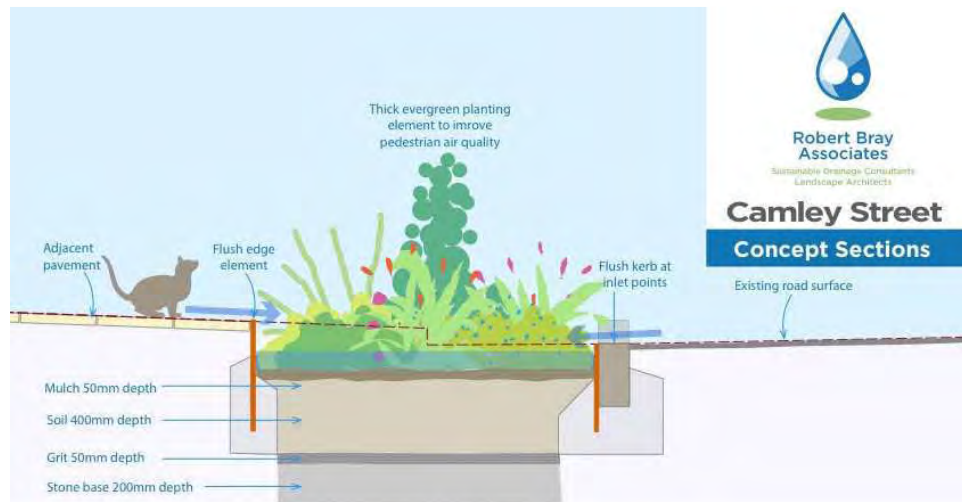




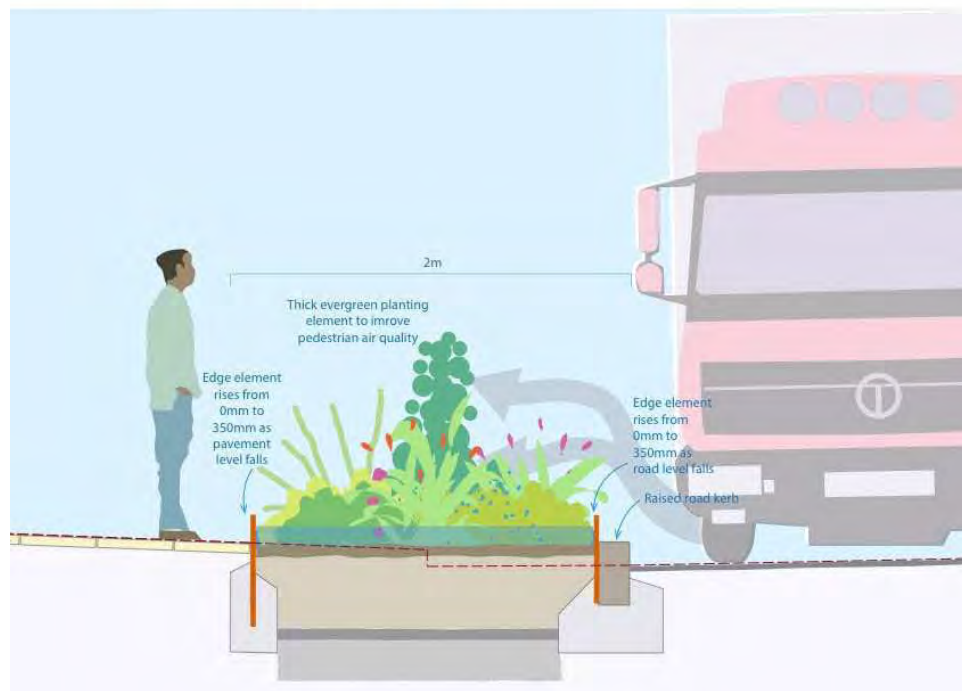


Camley Street, Camden





Illustrative cross section through bioretention feature at kerb inlet location



## Camley Street Concept Sections



Illustrative long section of bioretention feature



Illustrative long elevation of bioretention feature from footway

Camley Street, Camden





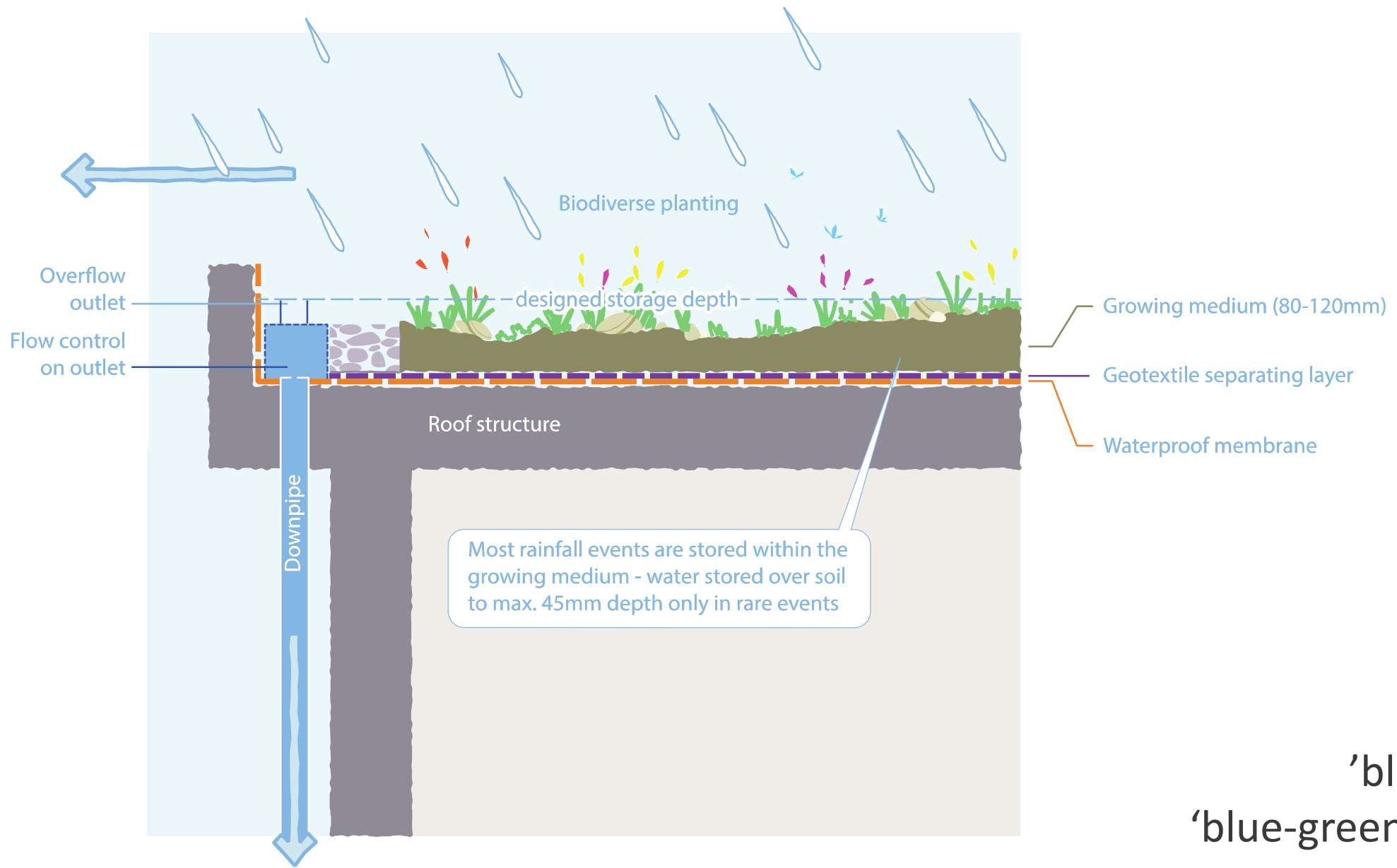
Green walls





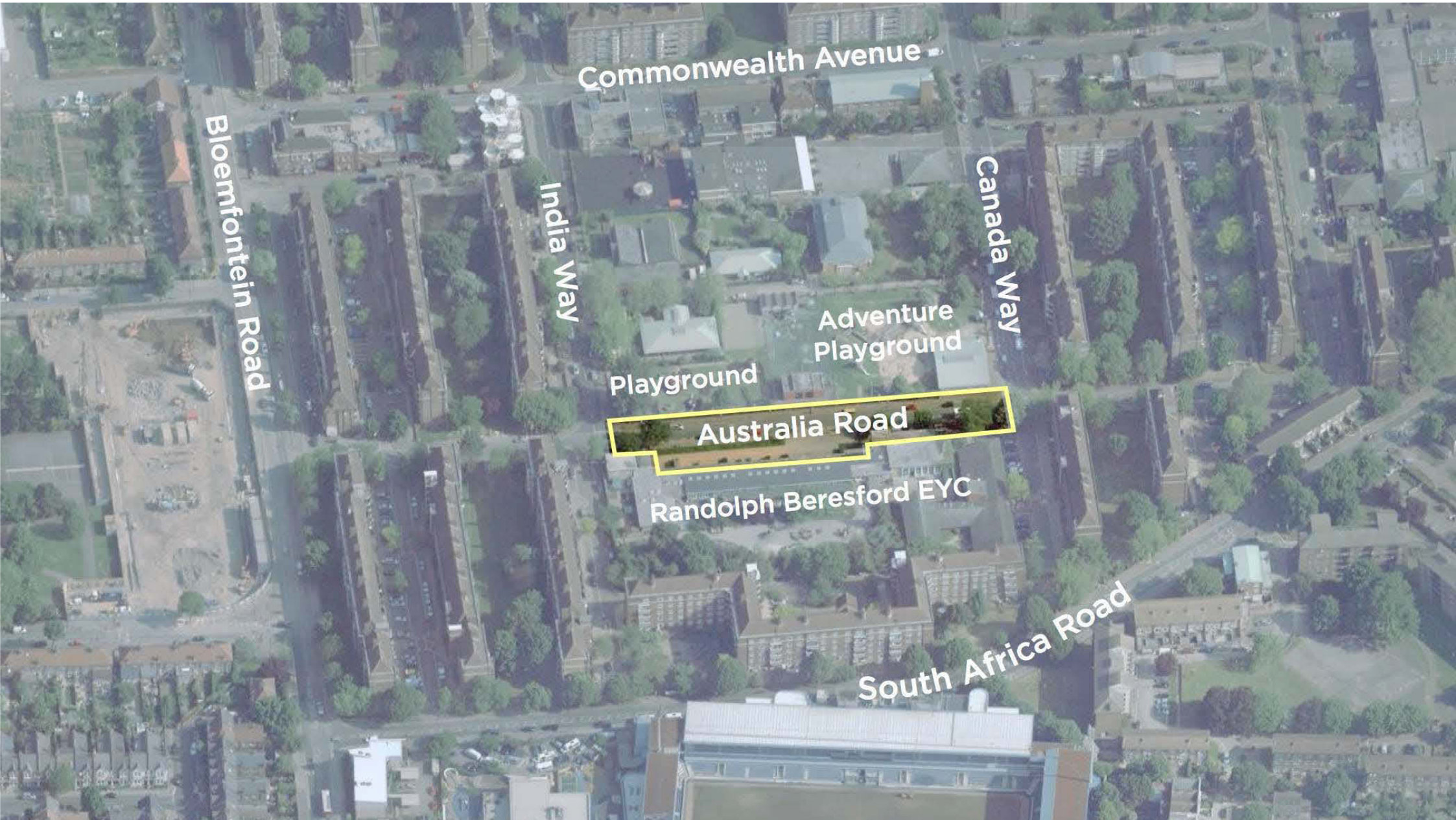
Barbican green roof [Nigel Dunnett]





'blue' or  
'blue-green' roof





Commonwealth Avenue

Bloemfontein Road

India Way

Canada Way

Adventure  
Playground

Playground

Australia Road

Randolph Beresford EYC

South Africa Road





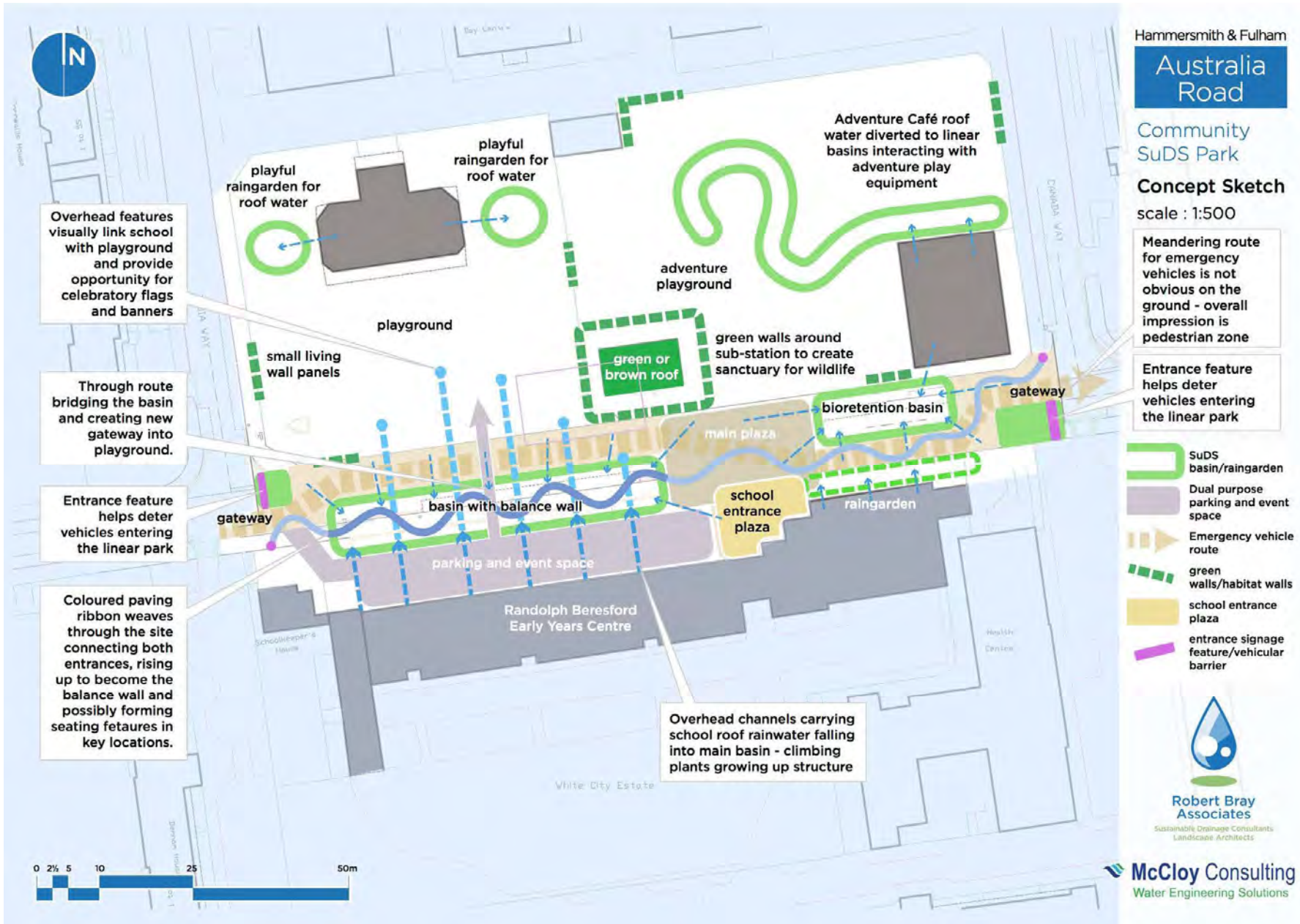




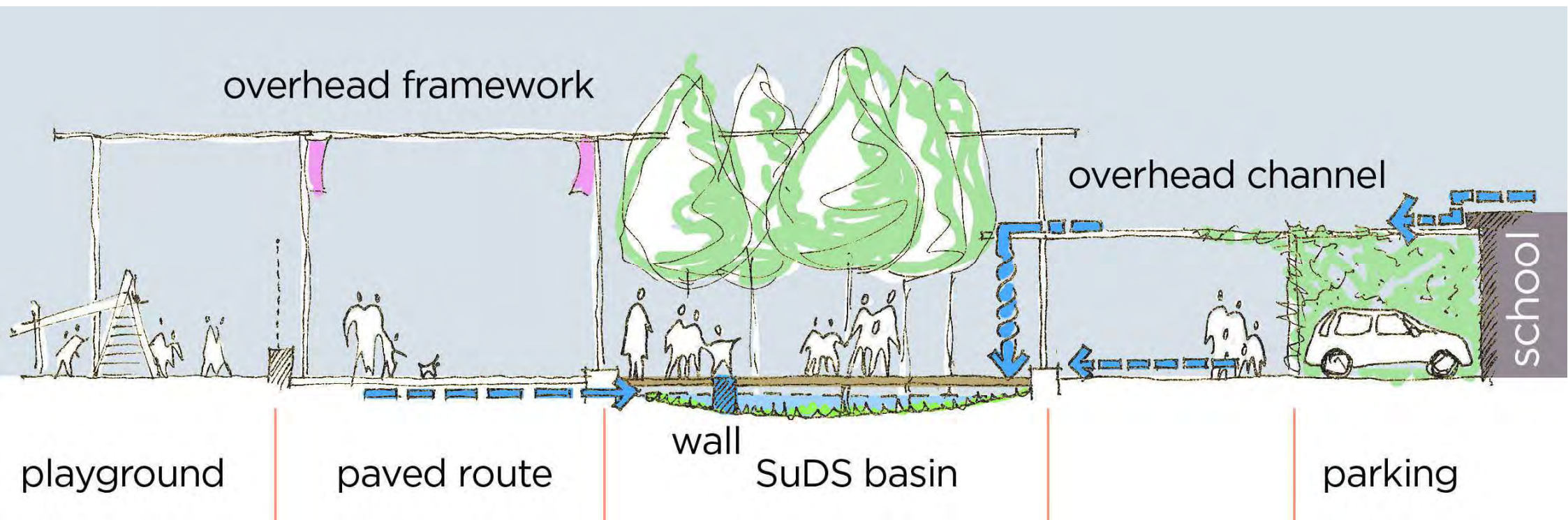




















Hammersmith & Fulham

## Australia Road

### Community SuDS Park

#### Image board

We collected these images to inspire our design.

They demonstrate some of the ideas we would like to create in this park such as :

how walls, seating and planting can create useful and interesting places;

how wildlife can be brought into cities in fun ways;

how pathways can move through planting and areas that sometimes store water;

how streets can be made unique and reflect their community;

how upright features can contribute to an attractive landscape.

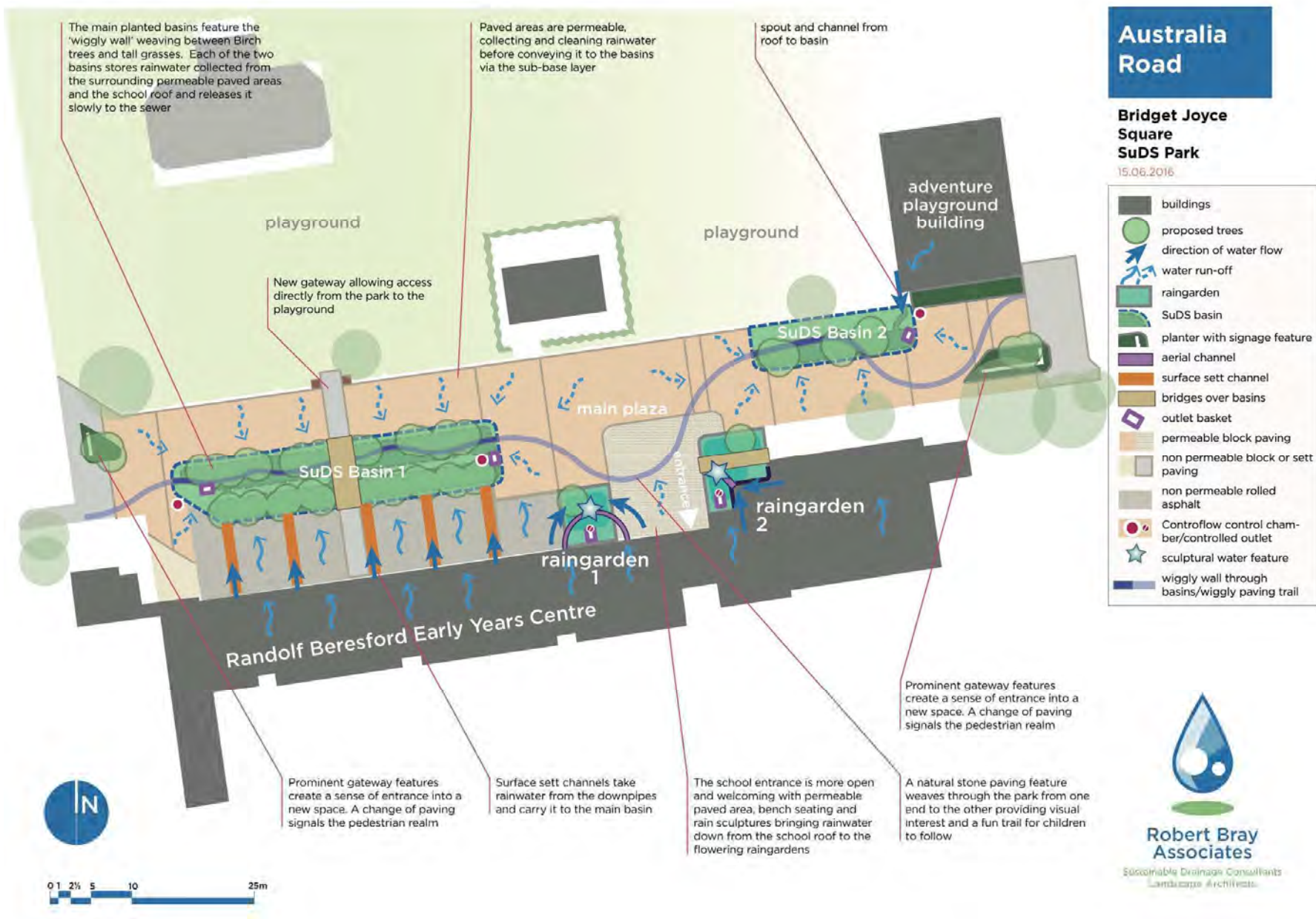


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Water Engineering Solutions

















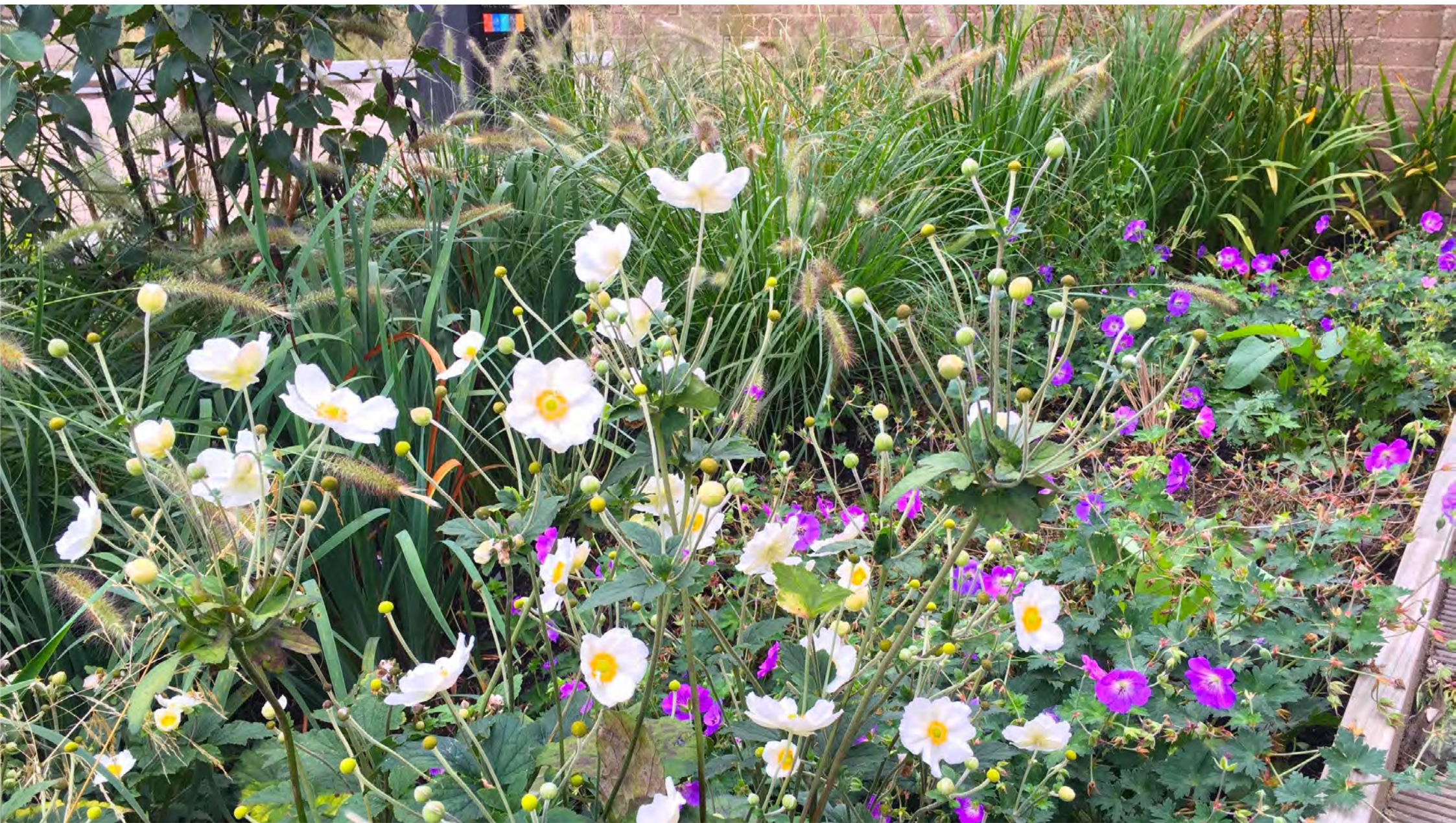




































**Big Local Community Christmas** 

**Friday 16th December**  
3pm to 6pm | Bridget Joyce Square  
Australia Road, W12 7PH

Santa's grotto | children's activities | choirs | local food producers | arts and crafts stalls | sports activities



**Wormholt & White City Big Local exists to help you create fun and opportunity in the area...**

**and to shout about all the things you can get involved with**

activities | training | promotion | volunteering | leadership opportunities  
and to shout about all the things you can get involved with  
opportunities | training | promotion | volunteering | leadership opportunities

**Web:** [ourbiglocal.org.uk](http://ourbiglocal.org.uk) **@OurBigLocal**  
Email: [info@ourbiglocal.org.uk](mailto:info@ourbiglocal.org.uk)  
White City Community Centre, India Way, W12  
020 722 8000

**LOTTERY FUNDED** 









Thank you

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