



Greater Cambridge Partnership

HISTON ROAD

Landscape Strategy





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WSP
62-64 Hills Road
Cambridge
CB2 1LA
Phone: +44 1223 558 050
Fax: +44 1223 558 051
WSP.com



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Signature	
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1 INTRODUCTION

This landscape strategy has been developed collaboratively with officers from the Cambridge City Council Streets and Open Spaces team and draws upon:

- Site familiarisation visits and photography undertaken in September and October 2018;
- Relevant precedent streetscape studies in Cambridge and the Southeast of England; and
- Feedback received at the Histon Road Local Liaison Forum (HRLLF) workshop (8th October 2018).

The preliminary design put forward for public consultation sought to compensate for tree removal through replacement planting elsewhere on Histon Road to achieve neutrality the same net quantity of trees. In subsequent design development, working alongside council officers, the potential for a varying of this strategy by using large trees to achieve biodiversity net gain has been explored in accordance with the council's Tree Strategy 2016 to 2026. The principle of net gain goes further than neutrality and aims to provide a greater total quantum of biodiversity when comparing the existing situation with the proposed scenario.

The following simple net gain calculation based on mature tree canopy size was set out at the HRLLF workshop and was well received in principle:

- Existing small species trees have an average mature canopy size of 3 metre radius which equates to a volume of 113 m³ (assuming a spherical canopy).
- Proposed medium species trees with a mature 6 metre crown radius = 905 m³ = 8 small trees.
- Proposed large species trees with a mature 10 metre crown radius = 3142 m³ = three medium or 27 small trees.

It is therefore proposed to follow this approach where appropriate. Table 1 below sets out the biodiversity net gains envisaged for Histon Road given the proposed strategy rather than the previously proposed tree neutrality.

Table 1: Biodiversity Net Gain Calculation

	Year 1	Year 10	Year 20	Year 50
Tree neutral strategy	-593 m ³	-804 m ³	-715 m ³	0 m ³
Proposed strategy	-450 m ³	6 m ³	4010 m ³	40073 m ³
Difference between proposed strategy and tree neutral	143 m³	810 m³	4725 m³	40073 m³

The landscape strategy appendix is supported by 7 no. A3 illustrations as follows:

- Figure 1: Akeman Street - Concept Plan and Visualisation
- Figure 2: Akeman Street - Rain Garden Details
- Figure 3: Gilbert Road Warwick Road - Concept Plan and Cross Sections
- Figure 4: Gilbert Road Warwick Road - Visualisation
- Figure 5: Brownlow Road and Blackhall Road - Concept Plan

- Figure 6: Land opposite Hazelwood Close – Before and After Cross Sections
- Figure 7: Material and Planting Palette

2 INTERVENTION AREAS

The following streetscape strategies have been identified for each of the Intervention Areas along Histon Road. The first four of which were considered at the HRLLF.

Crossroads at Gilbert Road and Warwick Road - A Gateway

The principal design objective is to enhance streetscape character by providing a new tree planting design which includes large species with an open canopy. Selected existing small tree species will be replaced to achieve long term environmental, social and economic benefits including biodiversity, improved air quality and reduced surface water runoff.

Tree planting, maintenance and management will be in accordance with industry best practice to ensure tree health and allow the most successful specimens to become a characterising influence and locally distinctive. The trees will cast light shade in summer months and benches will be provided to encourage passive recreation beneath. Benches will be robust enough to withstand vandalism, have wooden seats and backrests and be orientated towards Histon Road.

The mature canopy will be a prominent feature and will form a gateway to celebrate the transition between suburban and urban Cambridge. Existing views towards the Langham House landmark building on the north-east corner of the junction will be retained, enhanced and framed by crown-lifting the proposed trees as they mature. The ground beneath the trees will be grassed where possible to maintain the existing green character, providing amenity value and facilitating surface water infiltration and irrigation for the trees.



Plate 1: Photograph showing the existing situation at Langham House. The existing mature Sorbus (whitebeam) is proposed to be removed and replaced with two much larger species trees.

The Junction of Akeman Street - A Green Oasis (With Sound Track)

The primary objective is to build on the opportunity afforded by high footfall to local shops and the bus-stop by taking up the asphalt and replacing with soft landscape elements, benches and play equipment to provide recreational and amenity value.

The design proposes several new medium sized trees to replace the two existing very poor-quality specimens. The replacement trees will cast light shade in summer months and benches will be located so that there are options to sit in either sun or shade. Benches will be robust enough to withstand vandalism, have wooden seats, central arm and backrest and be orientated to deter overlooking of Akeman House, 194 and 196 Histon Road.

The soft landscape areas will be redesigned as slightly sunken rain gardens with a bioretention function. Low level, low maintenance planting will be provided to improve air quality and provide amenity value for all seasons. Herbaceous plants, grasses, evergreen structural shrubs, groundcover and wildflower seeding will be included. The planting / seeding mix will be adapted every five years in response to the changing light conditions beneath the tree canopies and the competition for water and nutrients as tree roots grow.

Adaptive management will be used to ensure any planting or seeding which consistently fails to thrive is replaced with a suitable soft landscape treatment. Bare ground susceptible to footfall and subsequent compaction / erosion will be avoided.

Interpretation such as signage could also be provided in this area subject to further consultation with local residents. This could focus on the Roman heritage of Akeman St. or the principles of water sensitive design employed in the design of the wider area.

The proposed colour palette for hard landscape materials is warm tones such as ochre and light brown. Sandstone and/or clay paviours will be provided in discreet areas of hard landscape related to desire lines, seating, and play equipment. A 'Dance Chime' small piece of play equipment is proposed to provide a pleasant and unique ad-hoc activity that will encourage informal social use of the space and make it memorable.



Plate 2: Photograph showing the existing situation at Akeman House. The existing declining tree (next to the bins) in hard landscape is proposed to be replaced with three much larger species trees, seating and a rain garden.

The Junctions of Brownlow Road and Blackhall Road - Birch Trees

The design team and the HRLLF agreed that the existing mature birch trees in grassed areas are in reasonable condition and provide suitable character and sufficient benefit to the local area. Removal of

three mature birch trees at Blackhall Road is proposed to accommodate the bus, cycle and walking improvements. In this location at least one replacement birch tree will be planted.

The Linear Strip of Land Opposite Hazelwood Close - A Green Corridor

The proposed solution in this area is to replace the overgrown hedgerow with a new fence within highway land. The fence will sit adjacent to the existing residential property boundary fencing and will be steel mesh. Planting of non-vigorous species are to be grown up the fence. Species selection will include a proportion of evergreens, climbers and flowering plants.

The proposed fence would be up to 1.8 m in height and the planting will be maintained / cut to around 2 m in height to ensure sufficient privacy for properties backing onto the road whilst minimising overshadowing. As well as softening the fence, the planting will be designed to minimise cost and frequency of maintenance, and will also provide year-round visual interest. This type of planting will have negligible impact on adjacent garden planting, and will also benefit air quality and biodiversity.

There is potential to involve an artist in the detailed design of this area to provide a repeating or rhythmic element throughout the length of the planting.

Gilbert Close Junction

The strategy for Gilbert Close was not discussed at the HRLLF. At least one additional medium or large sized tree will be provided here. The surfacing will remain as grass.

3 CONCLUSION

The proposed interventions set out above have been developed in conjunction with relevant parties. The primary objective to provide sustainable environmental enhancement via streetscape design has been met. The long-term vision is for the proposed large trees to thrive and provide a lasting legacy. This will be achieved through implementation of the latest advances in arboricultural knowledge and techniques when considering ground preparation, planting, maintenance and management of trees.

The streetscape designs will have the following beneficial effects:

- A richer, more visually appealing and distinctive public realm;
- Greater opportunities for passive and active recreation to promote human health and wellbeing;
- Increased biodiversity; and
- Wide-ranging environmental and socio-economic impacts associated with increased tree canopy cover including reduced storm water runoff; improved local air, soil and water quality; reduced atmospheric carbon dioxide; and increased property values.

The next step is for the landscape proposals to be developed in conjunction with officers and other relevant technical specialists including civil engineers, lighting, drainage and arboriculture. The landscape designs will involve underground clash detection between existing and proposed concrete foundations, drainage, services and tree roots. The final tree planting details will be bespoke solutions at individual locations to ensure the proposals are as sustainable and coordinated as possible.



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Cambridge
CB2 1LA

wsp.com