Z Hinchliffe & Sons Ltd

Ecological Design Strategy

Dobroyd Mills

Brooks Ecological

Grounded advice

R-3301-01

March 2018

Introduction

Brooks Ecological has been commissioned by Z Hinchliffe & Sons Ltd to produce an Ecological Design Strategy (EDS) in support of a hybrid planning application for the redevelopment of the Dobroyd Mills site. The EDS has been produced in response to consultation comments by Kirklees Council's ecologist Tom Stephenson dated 02/03/18, the conclusion of which are reproduced below.

Recommendation

Further information is needed to demonstrate that the proposals are acceptable. However, I am confident that an acceptable scheme can be provided.

A suitably qualified ecologist will need to advise on how the favourable conservation status of bats will be maintained, and to undertake the appropriate licencing actions.

A mitigation and enhancement scheme (Ecological Design Strategy) will need to be developed. This will need to be in detail in respect of the parts of the site for which full permission is sought and in outline in respect of the reminder of the site. Issues to be addressed in this scheme are provision for foraging/roosting bats and the function of the adjacent Kirklees Wildlife Habitat Network.

The Hybrid Application Boundary

The hybrid application refers to an outline application for the red line boundary illustrated below and a detailed application for the first phase as shown on subsequent pages.

To deliver positive effects on the Wildlife Habitat Network , land within the developer's ownership but out forming part of the application boundary (blue line) is included.

The Habitat Corridor

The area shaded green on this plan represents the habitat corridor to which the measures set out in the document apply. This incorporates the Kirklees Wildlife Habitat Network and additional land to the east which will extend it.

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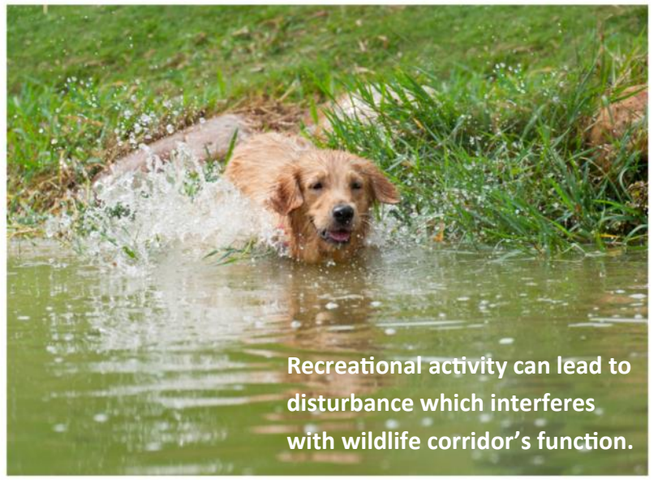
Wildlife Corridors

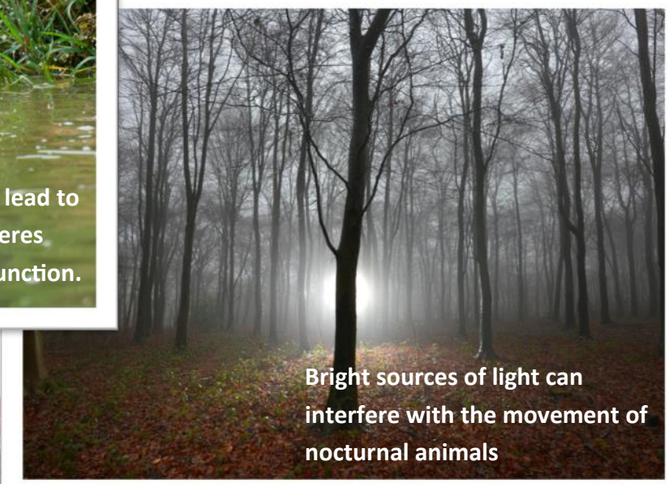
Wildlife (habitat) corridors are lines of continuous habitat in which wildlife can move freely. To function as an effective corridor fauna need to feel secure in these habitats and flora needs the opportunity to move and spread by seed. As such, wildlife corridors need to avoid 'pinch points' where the corridor becomes too narrow or light and disturbance can penetrate and present a barrier to movement.

The existing mill dam and surrounding woodland creates a good wildlife corridor with low levels of disturbance .

Threats



Recreational activity can lead to disturbance which interferes with wildlife corridor's function.



Bright sources of light can interfere with the movement of nocturnal animals

Culverts present major pinch points and barriers to movement of fauna

Litter can accumulate in habitat corridors

Invasive weeds can run rapidly through habitat corridors

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Outline Design Solutions : Light spill

Strong sources of illumination including street lights, vehicle headlights and security lighting should be positioned to prevent light spill into the habitat corridor. The orange line in the figure shows the location where the lighting strategy needs to be carefully considered.

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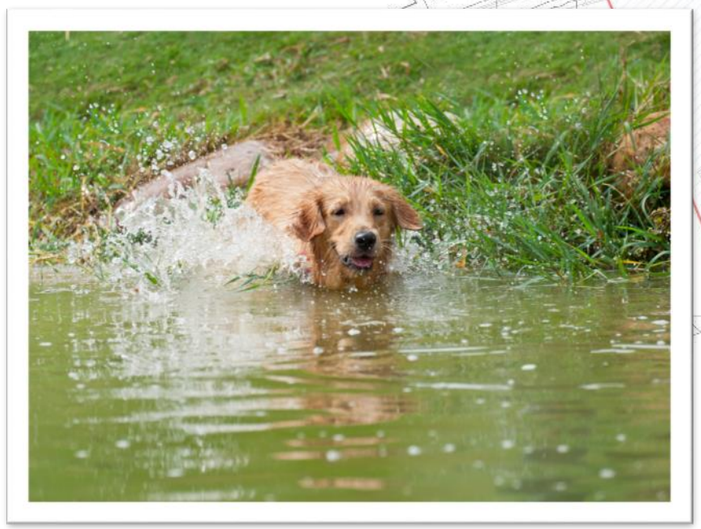
Outline Design Solutions : Disturbance

Key sources of disturbance to fauna include pets, people and irregular noise. Managing access is a key consideration when seeking to reduce these effects. Currently a footpath runs on the northern boundary. This footpath will see increased use with residents of the proposed new development using it to access dog walking. A limited fencing strategy can be incorporated that prevents people and pets accessing a quiet wooded bank which runs down to the mill dam. The mill dam will act as a further barrier and enclose a parcel of undisturbed habitat (indicated in yellow).

The detail of the fencing can be specified at a later date but is likely to comprise post and rail fencing with a chain link mesh or standard stock proofing post and net fencing.



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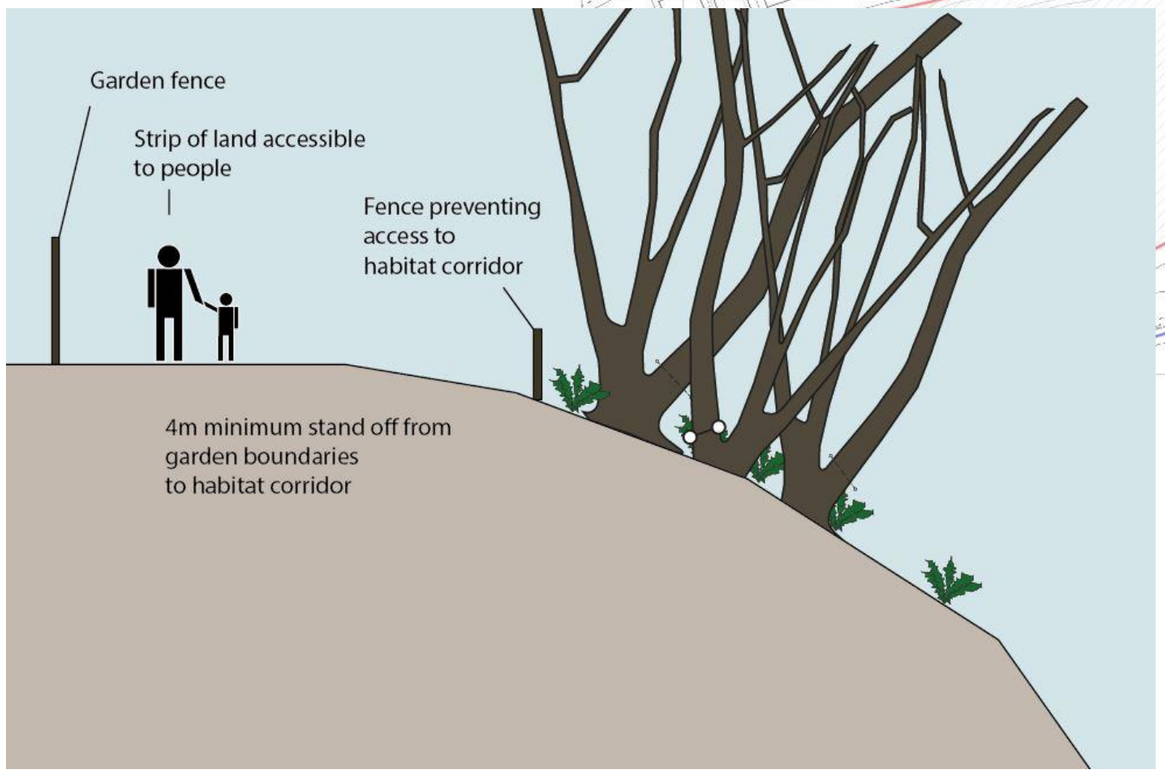
Outline Design Solutions : Litter

Litter frequently accumulates in wildlife corridors by virtue of their proximity to people. This can be wind blown, casually dropped or deliberately dumped.

Gardens that back onto open ground can present problems when garden waste is tipped over the fence. This can lead not only to swamping of native flora but presents a risk of spreading non native plant material into the wild.

It is also not uncommon to see large items of furniture or defunct electrical items tipped over garden fences with all of the problems this can cause for wild animals and sources of pollution .

Dog waste can cause serious damage to habitats and accumulates close to areas where footpath open into rough ground. Providing dog waste bins and signage is an effective way of controlling this but this needs to be carefully located where people regularly pass and where the Local Authority can collect.



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Detailed Application

The detailed application covers the first phase of development creating the access and the building of commercial buildings with associated car parking and landscaping.

Construction presents ecological risks and opportunities as highlighted.

The Proposed Detailed Layout

Protect

Silt fencing is likely to be needed to prevent contamination of water course.

Protect

The steep wooded bank and the river will be protected from unnecessary construction impacts by BS5837 Fencing .

Create

The embankment will create an area of new made ground which will ultimately become habitat and contribute to the habitat network .

Restore

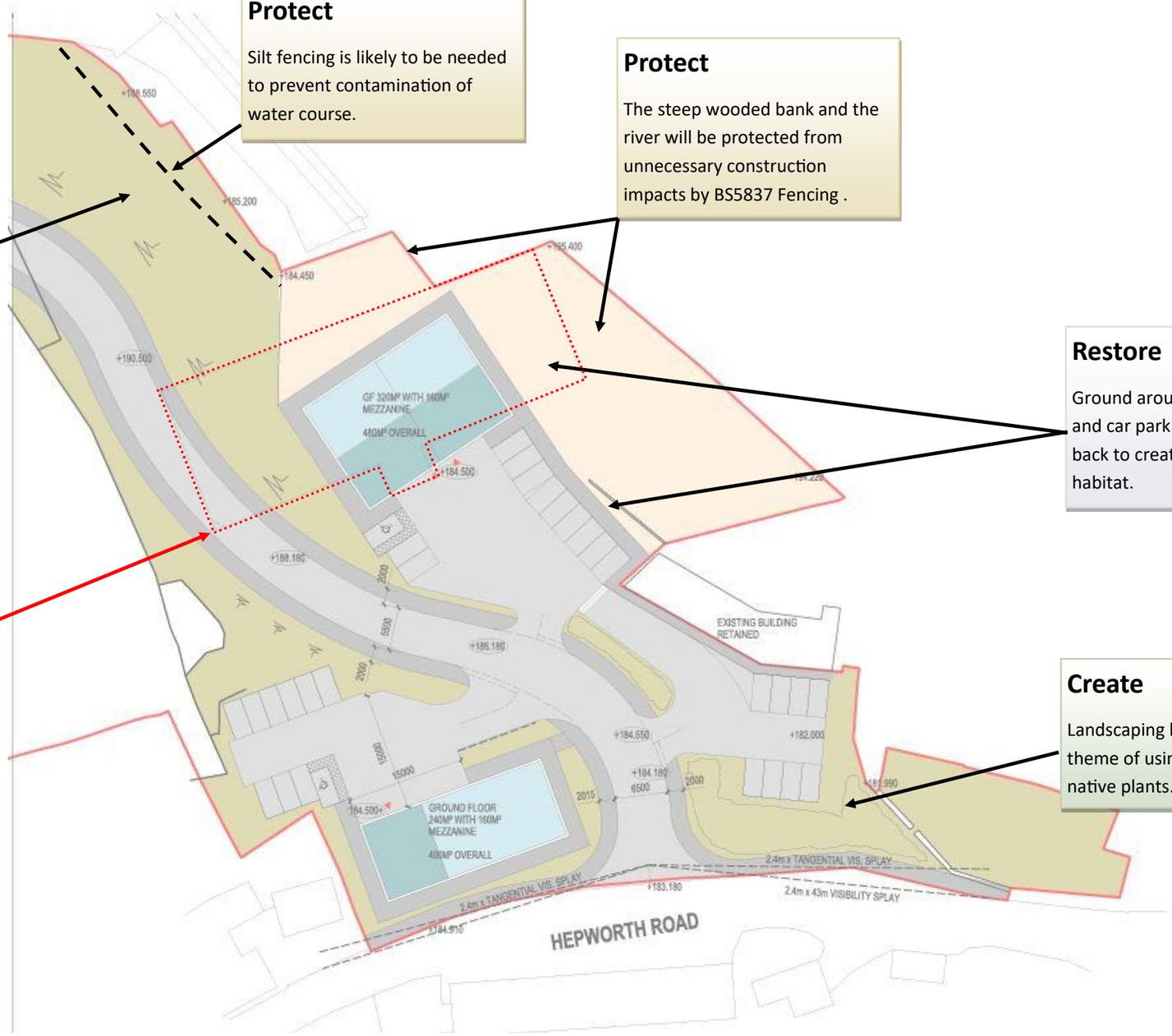
Ground around the new building and car parking can be restored back to create usable woodland habitat.

Manage legal Risk

This mill building previously found to support a bat roost: an update survey will be carried out and a license applied for if still present.
Survey in May-June 2018.
Building not demolished prior to this.

Create

Landscaping beds can follow a theme of using locally prevalent native plants.



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Detailed Design Solutions : Habitats created and restored

This page shows the habitats that can be accommodated on site to contribute to the wildlife habitat network. The full details of specification, installation and management should be included in a BS42020 Landscape Ecological Management Plan which can be produced as a condition of planning.

EM10 – TUSSOCK MIXTURE

< PREVIOUS | NEXT >

Composition

The varied forms of the grasses in EM10 provide the main focus of interest of this mixture. The tussock forming grasses are combined with wild flowers like knapweeds and vetches which can cope with competition from taller vegetation. This mixture has been devised to create areas of tussocky grassland that, once established, require little or no maintenance. This grassland type can form a good habitat for insects, small mammals, birds, amphibians and reptiles, providing nesting sites during spring, food during summer and autumn, and shelter during winter.

Wild Flowers

%	Latin name	Common name
0.5	Achillea millefolium	Yarrow
1.5	Agrimonia eupatoria	Agrimony
1	Arctium minus	Lesser Burdock
2.5	Centaurea nigra	Common Knapweed
2	Centaurea scabiosa	Greater Knapweed
2	Daucus carota	Wild Carrot
1	Dipsacus fullonum	Wild Teasel
1	Galium album - (Galium mollugo)	Hedge Bedstraw
0.2	Geranium pratense	Meadow Cranesbill
0.5	Leucanthemum vulgare	Oxeye Daisy
1	Pastinaca sativa	Wild Parsnip
0.7	Plantago lanceolata	Ribwort Plantain
0.1	Pulicaria dysenterica	Common Fleabane
2	Silene dioica	Red Campion
2	Torilis japonica	Upright Hedge-parsley
2	Vicia sativa ssp. segetalis	Common Vetch
20		

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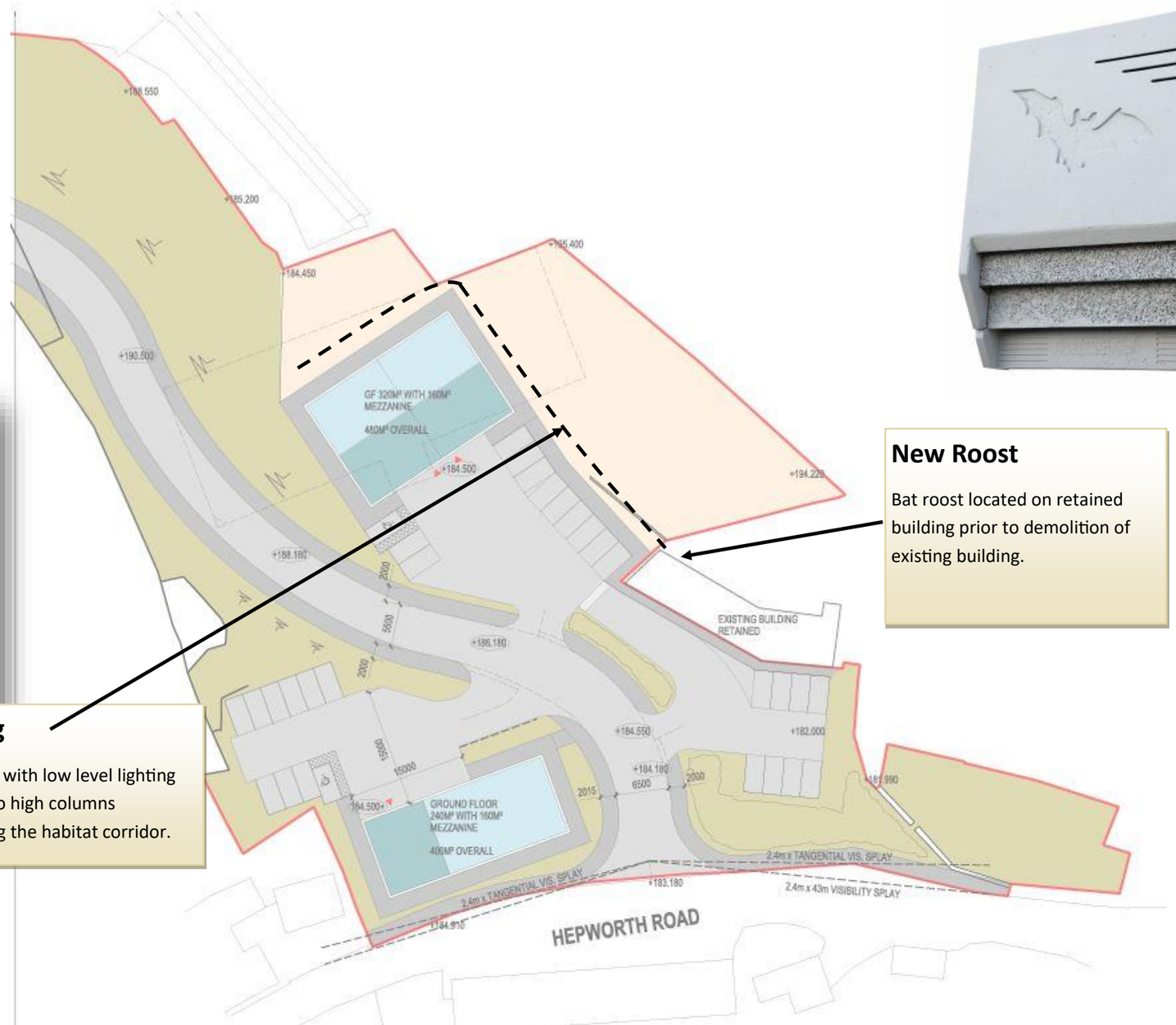
Detailed Design Solutions: Bats

Prior to demolition of the mill which formally supported the bat roost, an alternative roost will be erected under the instruction of an ecologist. This will be placed on a suitable elevation (un-lit) of the retained mill building as shown. This will be carried out even if updating surveys fail to show continued roosting on site.

Lighting around the new building will be controlled to prevent spill into the habitat corridor. The dashed line on the figure to the right shows the location where the lighting strategy will be controlled.

Lighting

Car park lit with low level lighting bollards, no high columns illuminating the habitat corridor.



New Roost

Bat roost located on retained building prior to demolition of existing building.

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