

BOW17.1593 Wilson Road, Huyton: Condition Discharge 8 Bat Box Plan

Background Information

Planning permission has been granted for the demolition of existing buildings and redevelopment of a site at 35 Wilson Road within Huyton Business Park (Application number: 25/00205/FUL). The development aims to add to the storage capacity of the site comprising new warehouses/storage units, associated parking, landscaping and new vehicular access.

The site is located within Knowsley, Central Merseyside, and comprises mostly hard standing and buildings, with patches of spare ephemeral vegetation, scrub and trees at the site boundaries, with Logwood Mill Brook to the north-eastern edge. The surrounding land is predominantly a business park, with warehouses, scattered trees and small areas of woodland alongside Logwood Mill Brook. Through Logwood Mill Brook, the site is connected to a wider semi-natural area, with the closest greenspace 250 m to the north.

A previous bat report supporting the planning application (BOW17.1593 Wilson Road, Liverpool Updated Bat Report_Aug 2024') recommended the following:

- Provision of at least two Schwegler 2F bat boxes on trees located along the site boundary;
- Design lighting scheme to encourage bat activity;
- Provision of native flowers to attract pollinators and planting of night flowering species.

As part of the planning application the following conditions in relation to bats were included:

Condition 8:

"No part of the development hereby permitted shall be occupied until details of the number and location of bat boxes to be incorporated into the scheme have been submitted to and approved in writing by the Local Planning Authority. The bat boxes shall be installed in accordance with the approved details prior to the first occupation of the building and shall be retained at all times thereafter."

Reason: In the interests of biodiversity conservation and to comply with Policy CS8 of the Knowsley Local Plan Core Strategy, adopted January 2016."

Policy CS8 – Green Infrastructure (Knowsley Local Plan Core Strategy)

Policy CS8 sets out that development within Knowsley is expected to protect, manage and enhance the existing Green Infrastructure network and its beneficial functions. To achieve this, the Local Plan confirms that planning powers and other interventions will be used to:

- **(a)** *Protect and enhance strategically important areas of greenspace; and*
- **(d)** *Protect, enhance and/or introduce biodiversity within existing Green Infrastructure, including through integration into the design of new development and public realm projects.*

Within this policy framework, Prescott (Logwood) Brook (which runs adjacent to the site boundary) is identified in paragraph 5.94 as a locally important water body and a strategically significant Green Infrastructure asset.

Development in proximity to this feature is therefore expected to demonstrate a clear avoidance of ecological harm where possible, and contribute positively to habitat quality, connectivity, and ecosystem function.

This advice note provides details of the number and location of bat boxes (Appendix 1) in relation to the development in order to discharge these conditions, it also provides details on a lighting strategy, to ensure bat boxes are placed effectively and to maximise potential use, along with enhancing the ecological quality of the adjacent brook and woodland habitat, in line with section (d) of policy CS8.

Bat Boxes

The survey completed by Bowland Ecology found that the site offered limited potential for roosting, foraging and commuting bats. Bat activity was low during bat surveys, which was suggested to be due to the current floodlighting on site and in the wider industrial area. Bat boxes can be installed on trees in darker areas of the site to provide roosting opportunities and enhance the value of the site for bats. The lighting strategy also offers an opportunity for significant enhancement for bats and other wildlife.

The boxes to be installed on the buildings will comprise 2F Schwegler Universal Bat Box (Table 1 - available at <https://www.wildcare.co.uk/> or www.nhbs.com; other suppliers are available). These bat boxes are installed onto trees.

Table 1: Details of bat boxes to be installed on trees.

Bat box type	Specifications	Image
2F Universal Schwegler Bat Box https://www.wildcare.co.uk/bat-box-45.html	<u>Description and position:</u> Enclosed, discrete bat boxes which should be installed in a tree at a minimum height of 4m. Ensure a clear horizontal approach is provided for bats.	

Installation Requirements

The bat boxes will be installed following best-practice guidance as detailed below:

- **Height:** Installed at least 4 m from the ground;
- **Orientation:** Face south-west to south-east;
- **Lighting:** To be installed in a dark, unlit area, with no direct or indirect illumination on the box entrance or commuting corridor to the east, complying with ILP Guidance for bat-sensitive lighting zones (further details on lighting is provided in the relevant section below);
- **Flight approach:** to be installed in an area with a clear horizontal flight approach free from vegetation or obstructions that could hinder access. This may require some pruning/branch trimming; and
- **Tree type:** Ideally to be installed on well-established/mature trees.

The integration of bat roosting habitat will not cause disturbance to users of the development, nor create aesthetic problems. Bats will not nibble or gnaw at wood, wires or insulation. Bat droppings do not smell strongly and there are no known health risks associated with them. The droppings are dry and do not putrefy, but crumble away to dust, or are washed away by rain.

Suggested locations for the bat boxes are shown in Appendix 1. All installers should be made aware of the requirements above and assess the suitability of the proposed location. Should the suggested locations not be suitable for any reason, then alternative mature trees within the woodland to the east of the site should be selected. Any alternative locations must still meet all of the same installation conditions and must retain the required dark, undisturbed environment.

The bat boxes should not be installed until the lighting plan is in place to prevent illumination on the bat boxes in the future. This ensures that no lighting columns, security lighting, or operational fixtures will illuminate the bat boxes either directly or indirectly. This is essential for maintaining compliance with ILP bat-sensitive lighting guidance and protecting roost suitability. Additional lighting strategy suggestions are detailed in the relevant section below.

Legal Protection and Licensing

All bat species and their roosts are protected under UK law. If bats begin to use a bat box, the box becomes a legally protected roost feature. Therefore:

- Bat boxes must not be opened, inspected internally, moved, or otherwise disturbed unless carried out by a licensed bat worker; and
- This requirement applies year-round, regardless of whether bats are present at the time of proposed works, because the roost feature itself is protected even outside the active period.

These precautions ensure full compliance with the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations.

Lighting

The site is currently of low value to foraging and commuting bats due to the significant flood lighting, which offers a good opportunity for enhancement of the site for bats within the new design. Boundary habitats including woodland and a watercourse linked to wider semi-natural areas, likely provide quality habitat in an otherwise industrial area.

Unnecessary lighting will be avoided in foraging areas and commuting corridors, including the eastern boundary of the site. Any new lighting schemes will be designed in accordance with the with ILP Guidance Note 08/23: *Bats and Artificial Lighting at Night*, BS 42020¹, to minimise the impacts on, and enhance the site for, roosting, foraging, and commuting bats. The following measures listed below, are some suggestions which would significantly enhance the site and adjacent habitats for bats, should they be factored into the lighting strategy:

¹ <https://theilp.org.uk/resource/gn08-bats-and-artificial-lighting-pdf.html>

Mitigation and Enhancement Objectives

- Prevent illumination of bat boxes, treeline boundaries, and adjacent off-site habitats such as Logwood Mill Brook;
- Ideally, aim to maintain light levels at <1 lux at identified sensitive receptors (i.e. bat boxes and boundary habitats, such as woodland surrounding Logwood Mill Brook to the east), adhering to ILP recommended thresholds; and
- Where possible, ensure that the operational lighting scheme does not increase skyglow, glare, or lateral light spill beyond the industrial footprint.

Lighting Design Principles

Use of Warm-Temperature, Low-Intensity Lighting

- All external lighting will use warm-spectrum LEDs with colour temperatures ≤ 2700 K, as recommended by ILP guidance to reduce blue-light content that is most disruptive to bats;
- If a red light component² could be utilised, this will enhance the site significantly for bats and other nocturnal wildlife; and
- Luminaires could be specified at the lowest feasible lumen output required for safe industrial operation.

Directional and Targeted Lighting

- Luminaires will be fitted with directional optics, cowls, or hoods to ensure light is directed downward onto active working areas only;
- Upward light output ratio (ULOR) = 0%, where possible; and
- All lighting columns will be angled and positioned to ensure illumination is kept away from vegetation boundaries.

Shielding and Baffles

- Where any lighting is located within 20 m of sensitive habitat, consider full-height baffles or rear louvres to prevent lateral light spill and confine illumination to hardstanding areas.

Spatial Lighting Strategy

Dark Corridors and No-Light Zones

- Dark corridors maintained along:
 - The site perimeter vegetation (i.e. woodland, tree lines);

² <https://www.conservationevidence.com/actions/2021>

- Log Mill Brook; and
- Existing or proposed locations of bat boxes.
- Predicted lux levels within these corridors should be ≤ 0.5 –1 lux, in line with ILP sensitivity zones, where possible.

Lighting Setbacks

- A minimum 10–20 m offset between lighting columns and boundary vegetation will be implemented wherever feasible; and
- Where this distance cannot be achieved, additional shielding and lower mounting heights may be used to compensate.

Mounting Heights and Pole Design

- All lighting ideally installed at the lowest practicable mounting height, reducing the radius of illumination and skyglow; and
- Typical height range will ideally be 4–6 m, unless operational safety requires otherwise.

Operational Controls

Timers and Curfews

- Lighting to be controlled via automatic timers and photocell sensors to ensure illumination is restricted to essential operational periods only, where feasible; and
- Outside security lighting to operate on PIR / motion sensors, avoiding continuous illumination overnight where possible.

Adaptive Lighting

- During low-activity periods, lighting may operate at reduced output levels (e.g., dimmed to 30–50%).

Bat Box Integration

Placement of Bat Boxes in Dark Zones

- All bat boxes will be installed within dark corridors, on mature trees or buildings where illumination levels remain below 1 lux; and
- No lighting unit will be directed toward any bat box location.

Planting for Bats

Native planting to increase nocturnal invertebrate populations on-site will enhance the site foraging bats (Detailed in BOW17.1593_Wilson Street, Huyton, Ecological Enhancement Plan), by increasing prey availability.

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Where feasible, any greenspaces within the site could be enhanced for nocturnal invertebrates and thus foraging bats, through the following measures:

- Including night-flowering native plant species in landscaping to attract bat prey, such as Hemp agrimony (*Eupatorium cannabinum*), soapwort (*Saponaria officinalis*), and evening primrose (*Oenothera biennis*). Further information is available at <https://www.bats.org.uk/advice/gardening-for-bats/bed-and-breakfast>.
- Incorporating a range of plant species with different flowering seasons to make sure there is food from early spring (when bats come out of hibernation) to late Autumn (when bats are building up their fat reserves in preparation for going into hibernation);
- Ensure a variety of flower shapes and sizes, that are pale in colour, to increase the abundance and diversity of nocturnal invertebrates within the site.

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References

Institution of Lighting Professionals (2023) *Guidance Note GN 08/23: Bats and Artificial Lighting at Night*. Available at: <https://theilp.org.uk/resource/gn08-bats-and-artificial-lighting-pdf.html> (Accessed: 26 November 2025).

Appendix 1 – Bat Box Location Plan

