# Sensitive Lighting Strategy

Premier inn Manchester (West Didsbury) Christie Fields Business Park, Derwent Avenue,

Manchester M21 7QS

Whitbread Group PLC

| Status | Issue | Name | Date |
|---|---|---|---|
| Draft | 0.1 | Amber Williams BSc (Hons), MSc, MPhil Consultant Ecologist | 03/09/2026 |
| Final | 1 | Amber Williams BSc (Hons), MSc, MPhil Consultant Ecologist | 03/09/2026 |

**Arbtech Consultant's Contact Details:**
Amber Williams
BSc (Hons), MSc, MPhil
Consultant Ecologist
amberwilliams@arbtech.co.uk
https://arbtech.co.uk

## Limitations and Copyright

Arbtech Consulting Limited has prepared this report for the sole use of the above-named client or their agents in accordance with our General Terms and Conditions, under which our services are performed. It is expressly stated that no other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us. This report may not be relied upon by any other party without the prior and express written agreement of Arbtech Consulting Limited. The conclusions and recommendations contained in this report are based upon information provided by third parties. Information obtained from third parties has not been independently verified by Arbtech Consulting Limited.

© This report is the copyright of Arbtech Consulting Limited. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.

## Industry Guidelines and Standards

This report has been written with due consideration to:

- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- British Standard 42020 (2013). Biodiversity – Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.

## Proportionality

> The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.
>
> The desk studies and field surveys undertaken to provide a Preliminary Ecological Appraisal (PEA) might in some cases be all that is necessary.
>
> (BS 42020, 2013)

## 1.0 Introduction

Arbtech Consulting Limited was instructed by Whitbread Group PLC to produce a Sensitive Lighting Strategy for Premier inn Manchester (West Didsbury) Christie Fields Business Park, Derwent Avenue, Manchester M21 7QS (hereafter referred to as “the site”).

This report is prepared to inform a planning application with the Manchester City Council proposal is described as: Erection of a two storey annexe building, following demolition of existing restaurant building, to form an additional 30 hotel bedrooms and breakfast room, together with alterations to the car park and proposed landscaping works.

A plan showing the proposed development is provided in Appendix 1.

This plan has been informed by Preliminary Ecological Appraisal and Roost Assessment (Arbtech Consulting Ltd., 2024) and Ecological Mitigation and Enhancement Management Plan (Arbtech Consulting Ltd., 2024).

## 2.0 Site Context and Survey Information

### *2.1 Site Location and Landscape Context*

The rectangular survey site is centred on National Grid Reference SJ 82963 92139 and has an area of approximately 0.7ha. The site comprises two buildings including a hotel and a public house, with significant areas of hardstanding, along with sections of ornamental planting and modified grassland, that border the site. The site is surrounded by residential development to the east, south and west, and a cemetery to the north. Major commuter roads are also adjacent to the site on the northern and eastern boundaries.

### *2.2 Ecological Information*

This plan has been informed by Preliminary Ecological Appraisal and Roost Assessment (Arbtech Consulting Ltd., 2024 which found the buildings on site to have negligible habitat value for roosting bats. The surveys also confirmed the habitats within the site are unlikely to provide an important resource for foraging and commuting bats. The report noted that the site is extremely well lit 24/7 and as such, is likely to deter significant levels of foraging and commuting bats from utilising the site. However, the proposed habitat plan includes the creation of wildflower meadow, mixed scrub and tree planting. These habitats are likely to provide foraging and commuting resources

for local bat populations. Furthermore, the Ecological Mitigation and Enhancement Management Plan details the provision of two bird and two bat boxes situated to the northeastern aspect of the site within retained trees.

## 3.0 Sensitive Lighting Strategy

*Key Features and Areas that are Sensitive for Bats*

- The buildings currently present has not been found to host roosting bats and therefore the proposed works onsite is not likely to disturb roosting bats.
- The proposed bat boxes on site will be a sensitive area for bats.
- The retained shrub and trees and proposed thicket and tree planting, wildflower meadow and mixed scrub creation provide areas that promote invertebrates to the site. This, in turn, offers provisions for foraging bats as well as providing somewhat linear navigation corridors.
- In summary, the majority of the eastern aspect of the site provides low value for bats in the form of commuting and foraging opportunities, and therefore lighting must be controlled across this aspect of the site during and post development.

*External Lighting*

All external lighting will be installed in accordance with current guidance issued by the Bat Conservation Trust and Institute of Lighting Professionals: *Guidance Note 08/23: Bats and Artificial lighting at Night* (BCT & ILP 2023). External lighting will be installed in a way as to limit artificial light spill over habitats of value to protected and/ or notable species potentially using the site. External lighting installation will avoid excessive light spill over:

- Retained habitats of elevated value including retained trees.
- The northeastern elevation of buildings.
- The proposed vegetated areas particularly the mixed scrub, wildflower meadow and created trees.
- Any newly installed species-specific habitat prescriptions.

The following lighting design prescriptions are considered suitable for the type and scale of the proposed development to minimise the impacts of artificial lighting on site on bats and other protected/ notable species. External lighting will be installed in accordance with the below design prescriptions:

- **Reducing the operating time of lighting and levels of illuminance provided via:**
  Preventing the use of motion sensors where possible to allow lights to be turned off permanently whilst not in use.
  Where the use of motion sensors is desirable, light sensors should be set to lighting periods of no longer that 30 seconds to prevent unnecessary light spill.
- **Avoiding light spill via:**
  The use of directional lighting by using luminaires with rear shields and an upwards lighting ratio of zero.
- **Light type:**
  Use of lamps that minimise UV emissions or use UV filters to reduce the attractiveness of the lamp to invertebrates as not to attract invertebrates away from bat foraging habitat.
  Use high-pressure sodium or LED lamps, ideally warm white as this has a low relative attractiveness of invertebrates.
  Installing lighting systems that deliver no greater than a 3lux average illuminance, with a maximum horizontal illuminance of 0.6 uniformity (subject to appropriate maintenance factors).

*Internal Lighting*

Impacts of artificial light spill through windows will be mitigated by fitting internal lighting fixtures in line with recommendations within Guidance Note 08/23 (BCT & ILP 2023). Specifically, in order to limit light spill through windows, internal lighting will be recessed into the ceiling and set back a minimum of 1m from all windows as to limit horizontal light spill. A schematic representation of the effect of these lighting prescriptions is provided on **Figure 1** below.

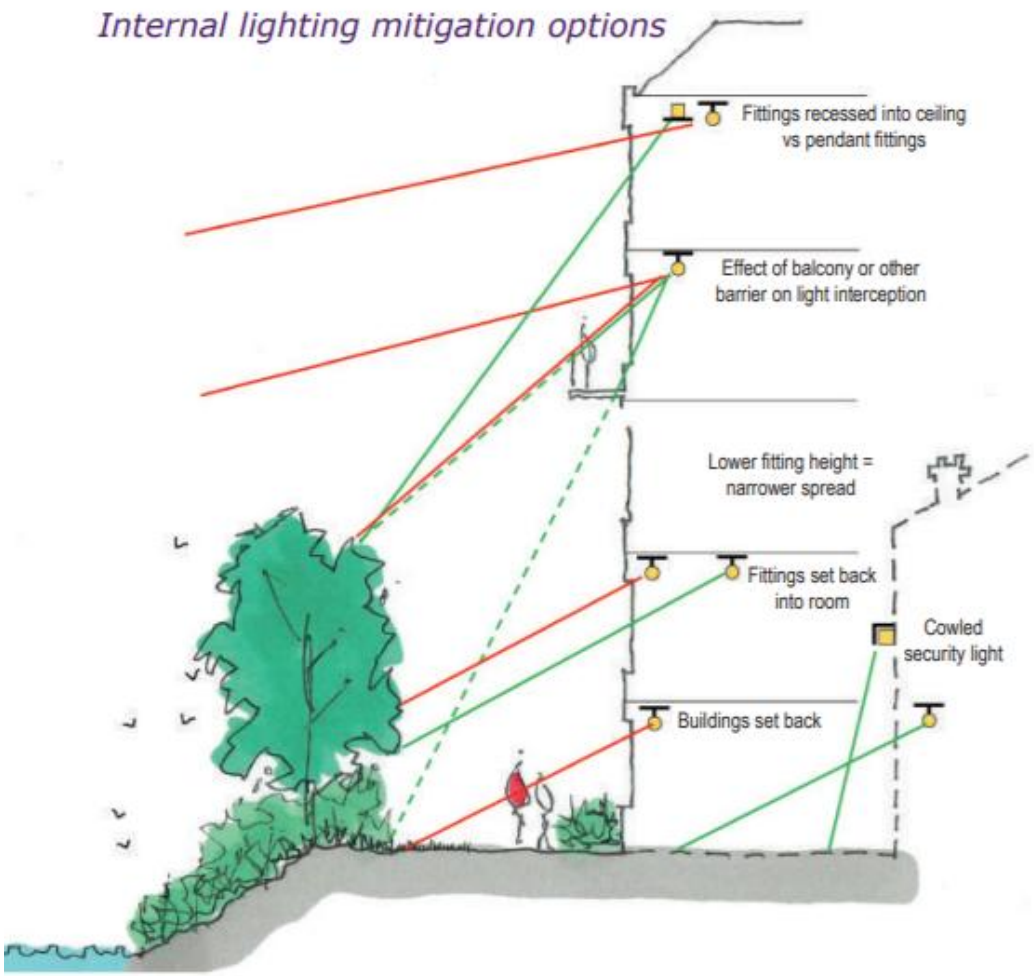
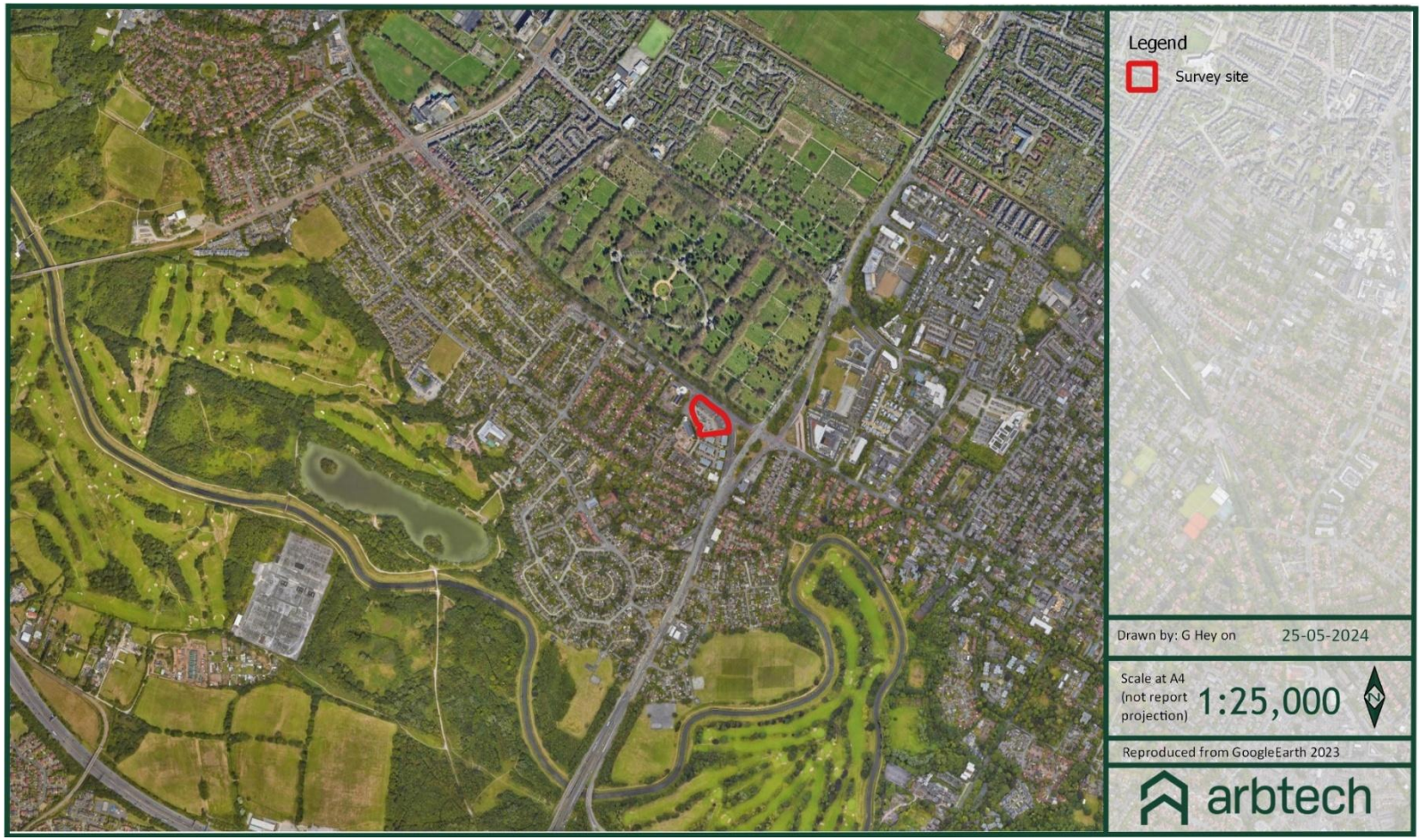



**Figure 1:** Internal Lighting mitigation options. Image taken from Guidance Note 08/23 (BCT & ILP 2023).

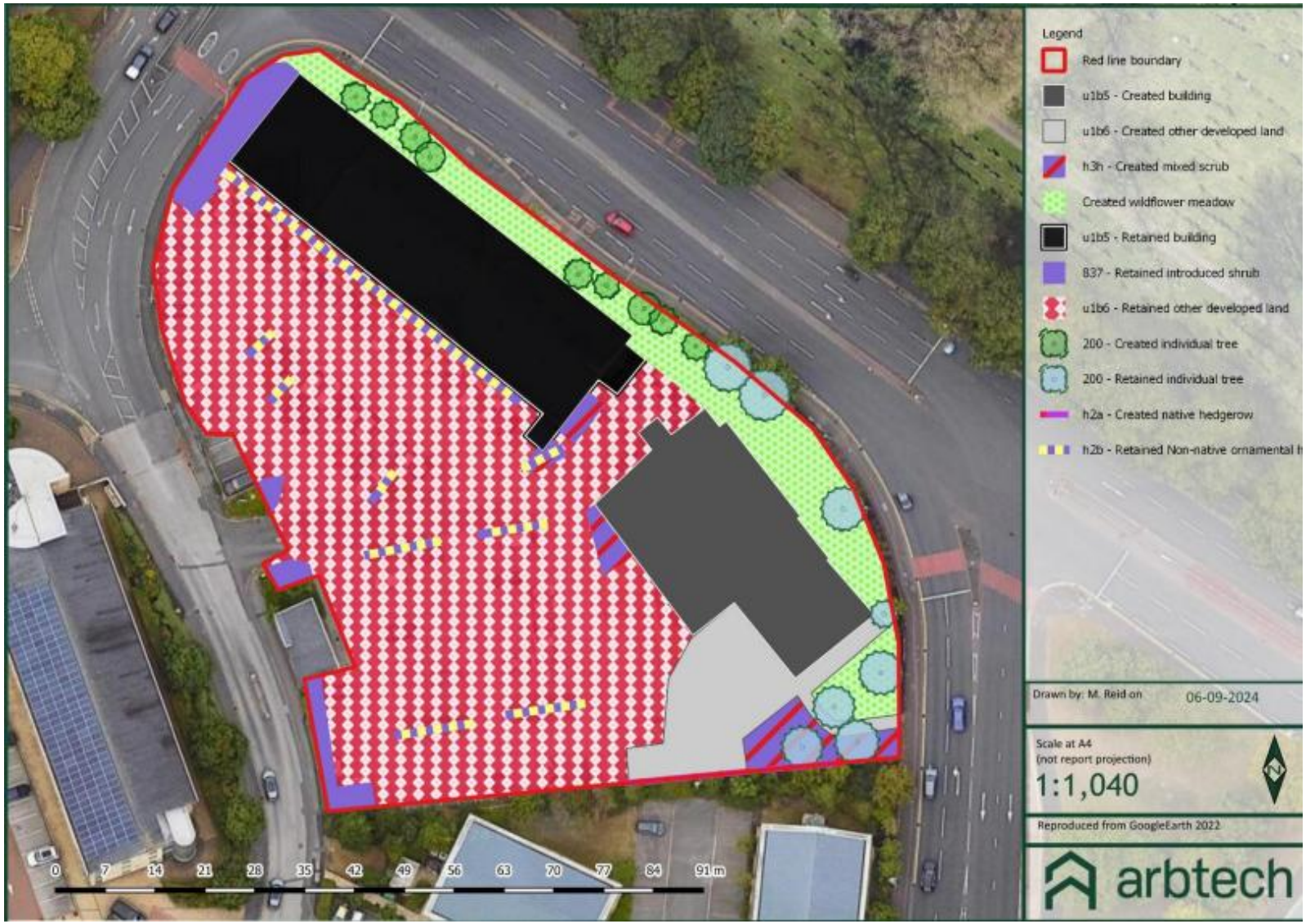
# Appendix 1: Proposed Development Plan



## Appendix 2: Site Location Plan



# Appendix 3: Proposed habitat plan



## Appendix 4: Map from Ecological Mitigation, Enhancement Management Plan (EMEMP) – Arbtech (2024)



# Appendix 5: Wildlife Sensitive Areas and Dark Corridors

