

# Derogation Licence Application – Supporting Information

Proposed Medical Centre

Airlie House, Adamstown Blvd., Lucan, Co. Dublin

Hasan Kadhim

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**Project:**

Proposed Medical Centre  
Airlie House, Adamstown Blvd., Lucan, Co. Dublin

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## 1 Introduction

### 1.1 Overview

Wingspan Ecology were commissioned by Hasan Kadhim, the applicant, to carry out bat survey works in regards to the proposed medical centre development at Airlie House, Adamstown Blvd., Lucan, Co. Dublin.

The proposed development site is situated within Adamstown and comprises Airlie House and associated extensions and immediate lands. The site is bound on all sides by recent development, comprising to the housing developments to the north, east and south (St. Helen's and Airlie View) and the Adamstown Boulevard to the west.

The proposed development broadly comprises the renovation of Airlie House into a medical centre including the demolition of the existing extensions and garage, and construction of a new extension to the south.



**Plate 1-1.** Airlie House within the proposed development site.

This report describes the baseline condition in relation to bats and details the methodologies and results of survey work undertaken. The results are then evaluated, and specific measures are proposed where relevant, in order to mitigate any potential impact to bats from the proposed development.

### 1.2 Bats in Ireland

#### 1.2.1 Legislative Context

All bat species in Ireland, and their roost sites, are protected under the following national and international legislation:

- Wildlife Act (1976) & Wildlife (Amendment) Act 2000;
- European Commission Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Directive 92/43/EEC), i.e. the 'Habitats Directive';
- The Convention on the Conservation of European Wildlife and Natural Habitats, i.e. the 'Berne Convention'; and
- The Convention on the Conservation of Migratory Species of Wild Animals, i.e. the 'Bonn Convention'.

Under Section 23 of the above listed Wildlife Acts (1976-2000) it is offence to wilfully interfere with or destroy the breeding or resting place of any bat species. Furthermore, in view of their sensitive status

across Europe, all species of bat have been listed on Annex IV of the Habitats Directive with some, such as the lesser horseshoe bat, given further protection and listed on Annex II of this Directive. This Directive was transposed into Irish law as the European Communities (Natural Habitats) Regulations, 1997 ('Habitat Regulations'), and combined with the Wildlife Acts (1976-2016), ensures that individual bats and their breeding sites and resting places are fully protected.

Under the Habitats Regulations (2011), all bat species are listed on the First Schedule and Regulation 51 makes it an offence to:

- Deliberately capture or kill a bat;
- Deliberately disturb a bat particularly during the period of breeding, hibernating or migrating;
- Damage or destroy a breeding site or resting place of a bat;
- Keep, sell, transport, exchange, offer for sale or offer for exchange any bat taken in the wild.

There is provision in Regulation 54 of the Habitats Regulations for the Minister to grant, in strictly specified circumstances, a derogation licence permitting the above listed activities “*where there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species ... at a favourable conservation status*”.

### 1.2.2 Current Status and Trends

A list of bat species known to occur in Ireland is given in Table 1-1 along with estimated population numbers and reported trends. This includes nine resident species and two vagrant species, which have only been recorded on a single or handful of occasions in Ireland.

**Table 1-1.** Status and distribution of bat species in Ireland.

Species	Conservation Status and Trend <sup>a</sup>	Estimated Population <sup>ba</sup>	Population Trend <sup>ab</sup>	Distribution <sup>b</sup>
<b>Common Pipistrelle</b>	Favourable / Improving	1,872,500 – 4,229,800	2003-2023: +139.83% 2011-2023: +117.9%	Widespread
<b>Soprano Pipistrelle</b>	Favourable / Improving	1,204,800 – 2,709,600	2003-2023: +278.50% 2011-2023: +221.60%	Widespread
<b>Nathusius' Pipistrelle</b>	Unknown	4,100 – 6,900	2006-2023: +23.50% 2011-2023: +0.41%	Recorded across most counties although at low concentrations
<b>Leisler's Bat</b>	Favourable / Improving	112,800 – 202,300	2003-2023: +210.01% 2011-2023: +117.50%	Widespread
<b>Brown Long-eared Bat</b>	Favourable / Improving	65,200 – 102,000	2006-2023: +26.86% 2011-2023: -9.92%	Widespread
<b>Daubenton's Bat</b>	Favourable / Improving	55,200 – 76,500	2006-2023: -3.84% 2011-2023: -8.34%	Widespread
<b>Whiskered Bat</b>	Favourable / Stable	Data deficient	-	Widespread although concentrated more in east and south.
<b>Natterer's Bat</b>	Favourable / Stable	Data deficient	-	Widespread
<b>Lesser Horseshoe Bat</b>	Inadequate / Deteriorating	12,791	2007-2018: Decreasing	West of Ireland (Counties Mayo, Galway, Clare, Limerick, Cork & Kerry)
<b>Greater Horseshoe Bat</b>	n/a	n/a	n/a	Vagrant
<b>Brandt's bat</b>	Data deficient	n/a	n/a	Vagrant

### 1.3 Relevant Guidance

The following guidance documents were consulted and followed in the completion of this report:

- Bat Surveys for Professional Ecologists: Good Practice Guidelines (4<sup>th</sup> edition). Bat Conservation Trust (Collins, 2023).

<sup>a</sup> Source: NPWS (2019).

<sup>b</sup> Source: Roche & Langton (2024).

- Bat mitigation guidelines for Ireland v2. Irish Wildlife Manuals, No. 134. National Parks and Wildlife Service (Marnell *et al.*, 2022)
- The status of EU protected habitats and species in Ireland. National Parks and Wildlife Service (NPWS, 2019).
- Bats and artificial lighting at night. Guidance Note GN08/23. (ILP, 2023).
- Best Practice Guidelines for the Conservation of Bats in the Planning of National Road Schemes (NRA, 2005a).
- Guidelines for the Treatment of Bats During the Construction of National Road Schemes (NRA, 2005b).

1.4

### **Statement of Competency**

This report has been prepared by Donnacha Woods (M.Sc., B.Sc.). Donnacha has over 10 years' experience working as an ecologist in both private consultancy and conservation. Donnacha holds a B.Sc. in Zoology from University College Dublin and a M.Sc. in Biodiversity and Conservation from Trinity College. He has worked as an ecologist across a wide range of projects both in Ireland and abroad and has significant experience carrying out bat surveys, impact assessments and prescribing mitigation in relation to bats. Donnacha has received specialist training in bat trapping, handling and identification from Bat Conservation Ireland, and is involved in bat monitoring with local bat groups.

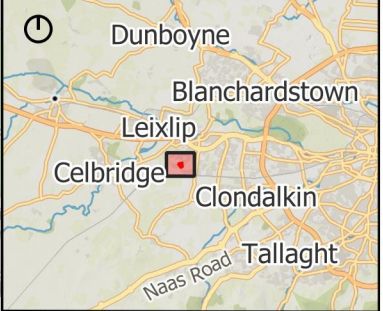


**Legend**  
 Site Boundary

Title  
**Figure 2-1. Location of proposed development site.**

Project  
**Proposed Medical Centre, Airlie House, Adamstown Blvd., Lucan, Co. Dublin**

Client  
**Hasan Kadhim**



Drawn by: D. Woods	Date: 04/11/2025
Project no.: 2530	Projection: IRENET95
Scale: 1:8,000 @ A4	Imagery: OpenStreetMaps

Notes:  
 Site boundaries shown are for demonstrative purposes only and do not represent exact planning or legal boundaries.

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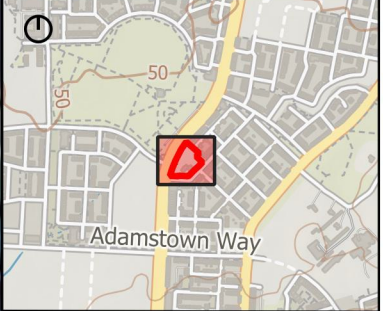
**Legend**

- Site Boundary
- Structures

Title  
**Figure 2-2. Existing layout of the proposed development site.**

Project  
**Proposed Medical Centre, Airlie House, Adamstown Blvd., Lucan, Co. Dublin**

Client  
**Hasan Kadhim**



Drawn by: D. Woods	Date: 04/11/2025
Project no.: 2530	Projection: IRENET95
Scale: 1:650 @ A4	Imagery: Bing Aerial

**Notes:**  
 Site boundaries shown are for demonstrative purposes only and do not represent exact planning or legal boundaries.

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## Characteristics of the Proposed Works

The proposed development comprises the renovation and extension of AIRLIE HOUSE (two-storey protected structure) to provide a medical clinic facility that includes:

Demolition of existing 2-storey extensions in the southeast corner and western elevations of Airlie House.

Permission for change of use of the remaining structure from use of existing dwelling to Medical Use (Class 8) with internal modifications and renovations to include consultation rooms, treatment rooms, storage, and nursing station.

Proposed two-storey side extension to the existing Airlie house that consists of the main reception, administration rooms, staff room, store rooms, consultation rooms, and other ancillary rooms.

Site development works and landscaping works include the provision of public open space, boundary treatment, 26 car parking spaces with a set-down area in front of the new extension, Secured Vehicular access to the development is via the road network proposed under Planning Reg. Ref. SDZ24A/0022W.

Along with all other site works proposed on c. 0.2 hectares of the Airlie House lands.



### 3 Ecological Survey and Site Assessment

#### 3.1 Methodology

##### 3.1.1 Desk Study

A desk study was carried out in order to collate any available information on the presence of bats in the locality of the proposed development. This included reference to the following resources and publications:

- National Biodiversity Data Centre (NBDC) online mapping and species records;
- Bat Conservation Ireland publications and datasets, e.g. Bat Record Maps, Bat Landscapes, Brown Long-eared Bat Roost Monitoring etc.;
- National Parks and Wildlife Service (NPWS) datasets;
- Environmental Protection Agency (EPA) mapping and datasets for location of waterbodies; and
- Satellite imagery from various sources (Google, Digital Globe, Bing) for landscape features.

A full list of all the publications and information sources used in the completion of this report are present in Section 6 References.

The proposed development lies between the national 2km grid square O03G. Records of bats from the last 20 years from available datasets for this grid square were searched in the completion of this report.

##### 3.1.2 Field Surveys

###### 3.1.2.1 Roost Inspection Survey

A roost inspection survey was carried out of the existing building on-site on 7<sup>th</sup> October 2025. The survey was carried out in-line with the best practice methods outlined in the Bat Conservation Trusts “*Bat Surveys for Professional Ecologists*”, 4th edition (Collins, 2023).

A thorough search of the building was conducted during daylight hours and included both the exterior and interior of the building. The survey involved a search for evidence of bat presence within the building, including, but not limited to:

- Droppings;
- Fur-oil stains and scratch marks,
- Dead specimens;
- Urine splashes;
- Prey items (moth/butterfly wings etc.); and
- Audible squeaking.

The features within the proposed development site were assessed for their suitability for bats based on Collins (2023), given in Table 3-1 below.

**Table 3-1.** Suitability levels of habitat features for bats (Collins, 2023).

Potential suitability	Roosting habitats in structures	Potential flight-paths and foraging habitats
<b>None</b>	No habitat features on site likely to be used by any roosting bats at any time of year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels.	No habitat features on site likely to be used by any commuting or foraging bats at any time of year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).
<b>Negligible</b>	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.

Potential suitability	Roosting habitats in structures	Potential flight-paths and foraging habitats
<b>Low</b>	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions, and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats).	Habitats that could be used by small numbers of bats such as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a park-land situation) or a patch of scrub.
<b>Moderate</b>	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions, and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens.
<b>High</b>	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses, and grazed park-land. Site is close to and connected to known roosts.

### 3.1.2.2 Emergence Survey

Dusk emergence surveys were carried out on the subject building on 7<sup>th</sup> October 2025 using direct observation and handheld bat detectors (both heterodyne and full-spectrum). The purpose of the emergence survey was to determine the presence of roosting bats in the structure via the direct detection of emerging bats post-sunset. The surveys focussed on potential entry/exit points identified during the roost assessment survey.

The survey followed the best practice methods outlined in the Bat Conservation Trusts “*Bat Surveys for Professional Ecologists*” (Collins, 2023). The survey commenced c.15 minutes prior to sunset and concluded c.2 hours post-sunset. Temperatures were mild, ranging from c.16-14°C, with light wind and no precipitation. Any bats detected emerging from the structure were recorded on field sheets and maps, as was any general bat activity in the immediate area.

A high-sensitivity thermal imaging camera was also utilised as a survey aid, as per Fawcett Williams (2021). Thermal imaging significantly improves the detectability of bats emerging/re-entering roost sites, as the camera is not restricted by the available visible light. Footage was then reviewed following the survey to ensure no potential emergence was missed during the survey.



**Plate 3-1.** Example of thermal imaging camera footage captured during emergence survey.

### 3.1.3 Limitations

Owing to appointment timings, surveys were not possible during the recommended bat survey season (i.e. April to September, as per Collins (2023)). By September / early October most bats will have vacated their maternity roosts and non-breeding summer roosts and have begun utilising transitional roosts, prior to going into hibernacula. The emergence survey results contained in this report can therefore be considered to represent an assessment of Airlie House for the presence of transitional roosts.

It should be noted that bats will often not emit echolocation calls when emerging from roost and will therefore not be picked up on bat detectors during the initial emergence flight. In addition, some species (namely brown long-eared bat) can emerge after last-light in full darkness. As such, there is potential for some bat emergence to go unrecorded during surveys. However, specific measures have been taken to reduce this potential for emergence flights to be missed:

- Surveyors were equipped with high-powered torches and focused on specific locations of the subject building, remaining strictly attentive throughout the survey duration.
- Thermal imaging cameras, which can successfully detect bats emerging from roost at night, were also used during surveys. This footage was reviewed following the surveys in order to maximise detection of any potential bat emergence.

However, while all measures have been taken to achieve full detection, the number of bats observed as outlined in the results of this report should be taken as a minimum number.

## 3.2 Results

### 3.2.1 Desk Study

#### 3.2.1.1 *National Biodiversity Data Centre (NBDC) Records*

The NBDC records were searched for observations of bat species within the 2km grid square of the proposed development site. Historical records exist for a total of 4no. species:

- Common pipistrelle;
- Soprano pipistrelle;
- Leisler's bat;
- Daubenton's bat; and
- Brown long-eared bat.

#### 3.2.1.2 *Previous Assessments to Inform Planning Applications*

A desktop search was completed for any recent previous assessments undertaken at the proposed development site or adjacent sites available in the public domain. Pertinent results from such assessments are outlined below.

#### **St. Helen's Phase 2 Residential Development**

Bat surveys were undertaken by Scott Cawley in 2017 and 2018 in relation to the St. Helen's Phase 2 residential development (now constructed). The surveys encompassed former agricultural land, in addition to emergence surveys carried out of Airlie House within the proposed development site. No bats were recorded emerging from Airlie House during the emergence surveys. A total of five bat species were recorded across the entire survey area, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, Leisler's bat and brown long-eared bat.

### 3.2.2 Field Surveys

#### 3.2.2.1 *Roost Inspection Survey*

The roost inspection survey comprised a thorough assessment of the exterior and interior of the subject building for evidence of the presence of roosting bats and/or any potential to support roosting bats.

Airlie House comprises a 19<sup>th</sup> century detached three-bay two-storey building. The building is in a poor state of repair with evidence of anti-social behaviour and fire damage. The building has a number of extensions of varying ages. To the south-west of the main house there is a 20<sup>th</sup>-century two-storey extension. To the north-east there is an older two-storey extension and attached flat-roofed garage. The majority of the windows of the building have been boarded up, either via wood sheeting on the inside, or via steel sheets bolted to the exterior. Windows on the main house are predominantly timber frame, with uPVC windows on the extensions.

The roof is of the north-east extension and sections of the main house are currently in an unfinished state following what appears to be recent re-roofing works. This roof is largely without slates, and comprises battens on roofing membrane. As such, there has been water ingress into the building and many of the upper floors and internal ceilings are collapsing.

The subject building was thoroughly searched for any evidence of roosting bats. This included, but was not limited to, the following areas:

- External bricks, plaster, soffits, fascia boards etc. for grease stains and scratch marks;
- External paving, window sills and internal floors, walls, stairs, furniture and attic/loft spaces (where accessible) for bat droppings;
- Where possible in suitable crevices for live bats;

- Internal floors and surfaces for discarded moth and butterfly wings.
- Walls and corner areas for perching stains and scratch marks;
- In toilets, sinks and other areas of standing water for dead bats.

No bat droppings or other evidence of presence was recorded during the roost inspection survey. Note: the first floor was inaccessible in places due to collapsing floors and stairs.



**Plate 3-2.** South-west extension to main house.



**Plate 3-3.** North-east extension to main house and attached flat-roofed garage (B).



Plate 3-4. Interior of main house.



Plate 3-5. Interior roof space showing roofing membrane and water ingress.

### 3.2.2.2 **Emergence Surveys**

Survey details are outlined below. Reference numbers are provided for notable observations, which are presented in Figure 4-1 further below.

7<sup>th</sup> October 2025

Sunset: 18:47

Temp.: 16-14°C

Precipitation: None

Wind: Light breeze

The first observation comprised a distant Leisler's bat record at 19-minutes post-sunset. At 25-minutes post-sunset a single common pipistrelle was recorded coming from the direction of the north-east extension. Adopting a precautionary approach, this bat is assumed to have emerged from this area of the building (ref: CP01). At 26-minutes post-sunset a single soprano pipistrelle was observed similarly coming from roof level of north-east extension, and is similarly assumed to have emerged from this area of the building (ref: SP01). This bat was then observed foraging in the immediate vicinity of the building, including above the garage extension, before leaving the site to the north-west,

At 28-minutes post-sunset two common pipistrelle were recorded coming up over the north-east extension, before foraging in wide circles in general vicinity of the building (CP02). Again, it cannot be ruled out that one or both of these bats emerged from the subject building. A single common pipistrelle remained foraging in within the site from approximately 29-minutes post-sunset to 43-minutes post-sunset. The remaining observations comprised a single soprano pipistrelle briefly recorded foraging at 52-minutes post-sunset, and a common pipistrelle foraging within the site at 59-minutes post-sunset.

**Total bats recorded emerging:** likely 2-3no common pipistrelle and likely 1no. soprano pipistrelle.

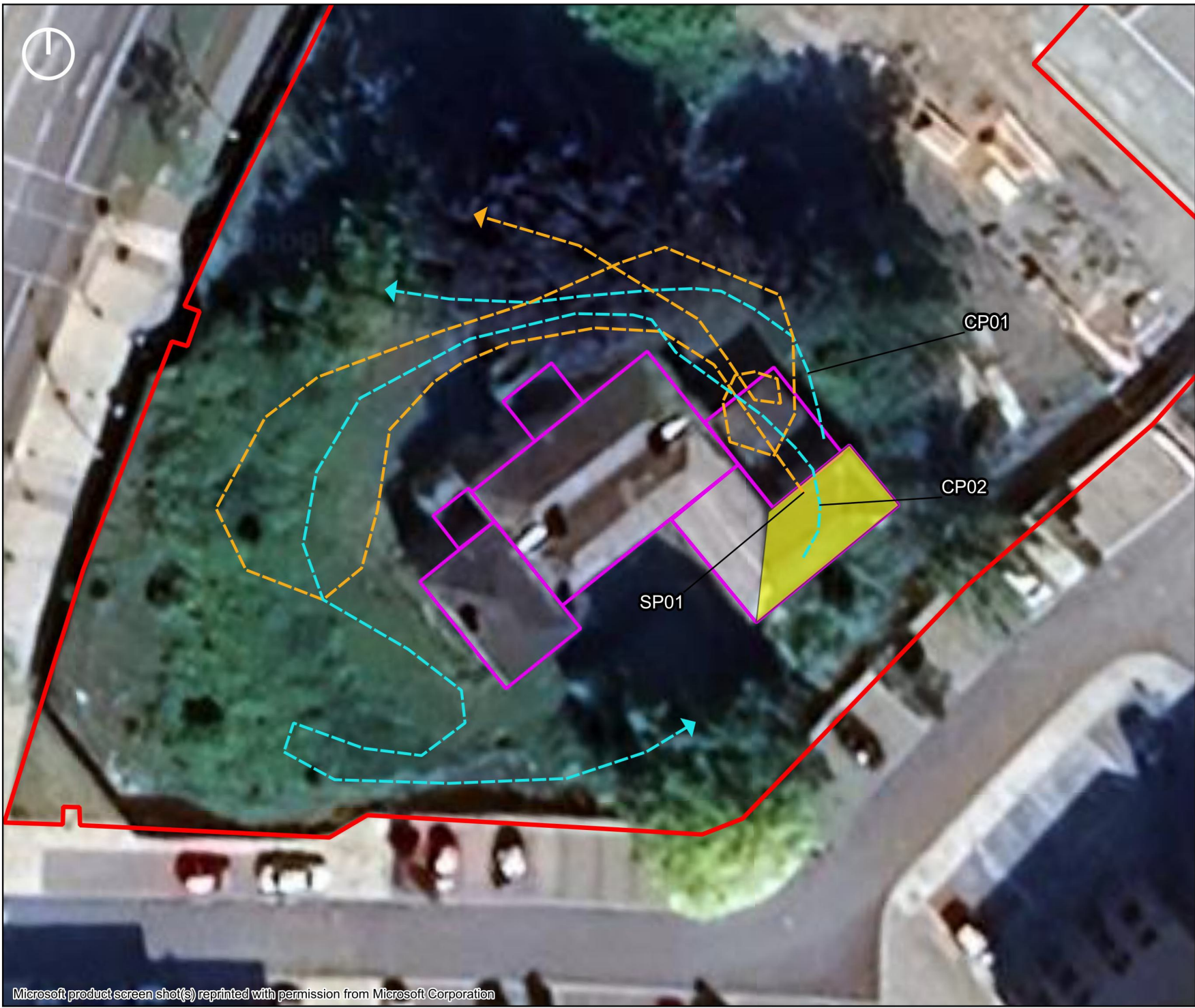


Plate 3-6. Estimated emergence area from subject building.

### 3.3 Evaluation

The emergence survey, carried out in early October 2025, recorded likely 2-3no common pipistrelle and likely 1no. soprano pipistrelle emerging from the north-east extension of Airlie House. Owing to the seasonality and small number of bats observed, these are considered to be **transitional roosts** for common pipistrelle and soprano pipistrelle.

However, as outlined in Section 3.3 further above, owing to appointment timings surveys were not possible during the May to August window. As such the potential for bats to utilise the building for other roosting purposes during the core summer months (i.e. as a maternity roost) cannot be excluded.



**Legend**

- Site Boundary
- Structures
- Estimated Roost Location

Bat Flights

- - - - - → Common Pipistrelle
- - - - - → Soprano Pipistrelle

Title  
**Figure 3-1. Notable observations recorded during emergence surveys.**

Project  
**Proposed Medical Centre, Airlie House, Adamstown Blvd., Lucan, Co. Dublin**

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Drawn by: D. Woods	Date: 04/11/2025
Project no.: 2530	Projection: IRENET95
Scale: 1:350 @ A4	Imagery: Bing Aerial

Notes:  
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Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

## 4 Mitigation Measures

### 4.1 Overview

A total of two bat species were recorded as likely roosting in the subject building during surveys; common pipistrelle and soprano pipistrelle. A derogation licence is therefore required from the National Parks and Wildlife Service (NPWS) for works to this building as per Regulation 54 of the Habitats Regulations.

Measures have been designed to mitigate potential impacts as a result of the proposed development, with focus on facilitating the continued use of the building by roosting bats post-construction.

### 4.2 Mitigation Measures

#### 4.2.1 Disturbance to bats during demolition and renovation works

The following measures have been designed to mitigate potential impacts to bats during renovation works and have been designed adopting a precautionary approach in light of survey timings and associated limitations.

- Works to this building, including the demolition of the two extensions and garage, should begin outside of the period for potential roost usage (i.e. works to be carried out during period of 31<sup>st</sup> October to 31<sup>st</sup> March<sup>c</sup>), as any bats potentially present would be at risk of injury / mortality should substantive works be undertaken during this period.
- The re-roofing works of the main house should ideally be carried out during autumn or spring. During these times bats will typically be capable of feeding on most evenings and may be torpid during the day, but will not have begun giving birth. Any potential remedial timber treatment required should be carried out during period 31<sup>st</sup> October to 31<sup>st</sup> March, as the chemicals involved in these treatments can be harmful to bats. Replacement roofing felt should be 1F Bitumen felt or similar 'bat friendly' membrane, as this material does not contain polypropylene filaments that can trap bats.
- Should the works be required to commence during the active bat season (i.e. March/April – September/October) the commencement should be immediately preceded by bat emergence surveys to determine whether any bats are utilising the structure. These will comprise a minimum of two visits during May to August period with a minimum of two surveyors on each visit. Should small numbers of bats be recorded emerging they will require exclusion from the building (i.e. blocking of entry/exit points once bats have emerged). Physical removal by hand by a suitably qualified bat specialist, licenced to handle bats, may be required should exclusion not be possible. In this instance bats will be placed in one of the erected bat boxes on-site. Should surveys reveal the presence of a maternity roost or other significant roost, then works must not proceed during the April to September window.
- Should works commence during November to March period, the building will be inspected by a suitably qualified ecologist for the potential presence of any hibernating bats prior to commencement. Where hibernating bats are identified, they may require physical removal by hand by a suitably qualified bat specialist.
- A qualified ecologist and/or the local NPWS conservation officer will be present to oversee the proposed commencement works.

#### 4.2.2 Provision of roosting features

The attic space of the main house has the potential to support roosting bats post-development with appropriate design considerations. As such, in order to facilitate future entry and exit pathways for bats from this attic space post-works, it is proposed to install 6no. bat access tiles / vents<sup>d</sup>, comprising 3no. on each of the two interior facing aspects of the hipped roof. As outlined above, roofing felt in this attic space should be

<sup>c</sup> As per Marnell (2022), amended to include period for transitional roosts and adopting a precautionary approach the period for potential maternity roosts.

<sup>d</sup> E.g. 'Habibat', 'Just Lead', 'Beddoes', 'Leadworx' bat access tiles or product of similar design and function.

1F Bitumen felt or similar ‘bat friendly’ membrane, as this material does not contain polypropylene filaments that can trap bats.

In addition to the above, a total of 4no. bat boxes will be erected on suitable mature trees within the proposed development site in the vicinity of the subject building. Studies of existing bat box schemes in Ireland observed preference by pipistrelle bats for 1FF designs (McAney & Hanniffy, 2015). As such, the bat boxes should comprise 4no. Schwegler 1FF (or similar comparable designs).

The boxes should be erected at a minimum height of 4m, and in varying orientations (i.e. some south-facing, some east/west facing and some north-facing). This allows for potential bat movement between boxes under changing environmental conditions (e.g. south-facing boxes can overheat during summer heat waves). The bat boxes will be installed prior to the commencement of works and under guidance from a suitably qualified ecologist.



**Plate 4-1.** Example bat access tiles / vents (*‘Just Lead’*, *‘Beddoes’*).

#### 4.2.3 Lighting

The Institute of Lighting Professionals (ILP) and the Bat Conservation Trust UK (BCT) have compiled guidelines on artificial lighting and bats (BCT, 2018). These guidelines will be taken into consideration in the final lighting plan in order to best facilitate continued bat usage within the proposed development site. Measures outlined in this guidance document include advice on appropriate luminaire specifications, which will be accommodated where possible, as outlined below:

- All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used.
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
- A warm white spectrum (ideally <2700Kelvin) should be adopted to reduce blue light component.
- Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012).
- Internal luminaires can be recessed where installed in proximity to windows to reduce glare and light spill.
- The use of specialist bollard or low-level downward directional luminaires to retain darkness above can be considered. However, this often comes at a cost of unacceptable glare, poor illumination efficiency, a high upward light component and poor facial recognition, and their use should only be as directed by the lighting professional.
- Column heights should be carefully considered to minimise light spill.
- Only luminaires with an upward light ratio of 0% and with good optical control should be used –See ILP Guidance for the Reduction of Obtrusive Light.

- Luminaires should always be mounted on the horizontal, i.e. no upward tilt.
- Any external security lighting should be set on motion-sensors and short (1min) timers.
- As a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed.

#### 4.2.4 **Monitoring**

A monitoring visit to the installed bat boxes will be undertaken by a suitably qualified ecologist during the first summer post-construction and in fifth year post-construction (during May-August window). Boxes will be investigated via ladder or from ground level (only possible with Schwegler 1FF designs) and records taken on the usage of any boxes by bats. Note: Any handling of bats must only be undertaken by a bat ecologist licenced to handle bats and under appropriate licence from the NPWS. The ecologist will assess the suitability of the bat boxes post-construction and may make recommendations on the relocation or replacement of bat boxes. Any boxes recorded to be utilised by bats will be strictly protected. Any bat boxes noted to be damaged or removed will be replaced by the same or similar comparative available model.

## Derogation Licence Application

Surveys undertaken at the proposed development site recorded an estimated 2-3 common pipistrelle bats and 1 soprano pipistrelle bat emerging from Airlie House. Wingspan Ecology, on behalf of Hasan Khadim, are therefore applying for a bat derogation licence in relation to works to this structure.

The NPWS document, Guidance on the Strict Protection of Certain Animal and Plant Species under the Habitats Directive in Ireland - National Parks and Wildlife Service Guidance Series 1 (2021), was reviewed before undertaking this derogation application. Article 16 of the Habitats Directive sets out three pre-conditions, all of which must be met before a derogation from the requirements of Article 12 or Article 13 of the Directive can be granted. These preconditions are also set out in Regulation 54 of the Regulations.

The preconditions are:

1. A reason(s) listed in Regulation 54 (a)-(e) applies
2. No satisfactory alternatives exist
3. Derogation would not be detrimental to the maintenance of a population(s) at a favourable conservation status.

It is believed that the pre-conditions for granting a derogation licence have been met, as follows:

### Test 1 – Reasons for Seeking Derogation

Regulation 54(2) (a)–(e) states that a derogation licence may be granted for five reasons listed (a) to (e). We are of the opinion that the following reasons apply:

*(c) In the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment.*

This application for derogation qualifies under Regulation 54(2)(c) of the European Communities (Birds and Natural Habitats) Regulations as the proposed development is required to remove an existing risk to public safety.

The proposed development site encompasses a derelict house and extensions. The buildings are in a poor state of repair and there is evidence of ongoing anti-social behaviour. The building has evidence of fire damage and previous vandalism. The stairs and upper floor have collapsed in places and are structurally unsound. There is ongoing deterioration and collapse in the ceilings (see Plates 3-3 and 3-4 further above). The proposed development site, formerly surrounded by agricultural land, is now entirely encompassed by recent housing developments and a large population centre, and there is a very high likelihood of further anti-social activity within the building. This comprises a significant health and safety risk to the public. Members of the public entering the site and building would be at risk of serious injury due to the deteriorated state of the structure.

### Test 2 – There is no Satisfactory Alternative

There are no satisfactory alternatives to the demolition works to allow for new development.

Do nothing scenario: As detailed above, the building in its current state comprise a risk to public health and safety. As such, the do-nothing scenario is unsatisfactory.

Demolition of buildings on-site and no new development: The potential for the demolition of the existing buildings on-site with no further development was considered. Under this scenario, the bat roosts would similarly be lost and derogation required. This scenario would not allow for new development and is therefore unsatisfactory.

Renovation of existing building including retention of extensions: The potential for the renovation of Airlie House encompassing the retention of the existing extensions was considered. Under this scenario, significant works would be required to the existing extensions, including complete removal/replacement of existing roofs and interior components. These works would result in the disturbance / loss of the existing bat roosts and would themselves require derogation licence. As such, this scenario is unsatisfactory.

Chosen option: Renovation of Airlie House with design to include suitable roosting habitat for bats. This will ensure the provision of suitable, stable roosting habitat at the site into the long-term to the benefit of local bat populations.

### Test 3 – Favourable Conservation Status

As stated in the above NPWS document, '*Annex IV species must be maintained at Favourable Conservation Status or restored to favourable status if this is not the case at present. The net result of granting a derogation licence must be neutral or positive for the species in question*'.

A small common and soprano pipistrelle roost was recorded in the proposed development site. Evidence of survey results show the structure does not contain a significant roost (i.e. a maternity roost).

The overall trend for the national population of common and soprano pipistrelle in Article 17 reporting (NPWS, 2019) is as follows:

- Range = Favourable
- Population = Favourable
- Habitat for species = Favourable
- Overall Assessment of Conservation Status = Favourable
- Overall trend in Conservation Status = Improving

Mitigation measures have been designed in respect to the demolition and renovation works to ensure that there will be no negative impacts to potential roosting bats as a result of the proposed development (as detailed in Section 5 above). Roosting habitat will be provided in the attic space of the existing Airlie House. No significant impacts are anticipated on the local population of common pipistrelle and/or soprano pipistrelle bats.

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