Bat and Bird Survey Report. September 2026.
School House (Former), Balglass Road, Howth, Co. Dublin



September 2026

Aidan Murphy BSc (Hons) MSc
Ecologist

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1. Introduction

Ecologist Aidan Murphy MSc was commissioned by Meadowleck Ltd, on behalf of the current site owner, Beatha Ghlas Properties Ltd, to undertake bat and bird surveys at the site during August and September 2026. The surveys were undertaken to address Condition 12 of Fingal County Council's Notification of Decision to Grant Permission issued to Balglass Asset Holdings Limited for the proposed development (Register Reference F25A/0217E; Decision Order No. PF/2845/25, dated 29 September 2025).

The aims of the bat surveys were to gather information pertaining to use of the site by bats by carrying out the following:

• Bat activity surveys to identify the baseline use by bats in the habitats determined to be suitable for foraging/commuting bats, including recording species present and activity levels;

• Presence/absence of potential bat roosts and status of roosts, if present;

• Identification of any active bird nests and, where present, their status.

Aidan holds a BSc (Hons) in Wildlife Biology and an MSc in Ecological Assessment (UCC). Aidan has worked for ten years as a freelance ecologist with survey experience including bats, birds, freshwater & terrestrial invertebrates, and botanical surveys.

Aidan holds a National Parks & Wildlife Service (NPWS) Bat Survey Licence, (NPWS Survey Licence No.: DER-BAT- 2026-192. Expiry date: 31st December 2026).

2. Legislation Relating to Bats and Birds

All bat species are protected under Irish and European law. Nationally, the Wildlife Act 1976, as amended, makes it an offence to wilfully interfere with or destroy a place used by bats for breeding or resting. All Irish bat species are listed in Schedule 5 of the Act, making it an offence to:

- intentionally kill, injure or take a bat;
- possess or control a live or dead bat, or anything derived from one;
- wilfully interfere with a structure or place used by a bat for breeding or resting; or
- wilfully interfere with a bat while it occupies such a structure or place.

The EU Habitats Directive (92/43/EEC), transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011), protects bats and their roosts at European level. Ireland is also a signatory to the Bonn Convention on Migratory Species, the Bern Convention on European Wildlife and Natural Habitats and the EUROBATS Agreement. All Irish bat species are listed in Annex IV of the Habitats Directive, while the lesser horseshoe bat is additionally listed in Annex II and is afforded special protection.

Regulation 51(2) of the 2011 Regulations provides:

"Notwithstanding any consent, statutory or otherwise, given to a person by a public authority or held by a person, except in accordance with a licence granted by the Minister under Regulation 54, a person who, in respect of a species referred to in Part 1 of the First Schedule—

(a) deliberately captures or kills any specimen of these species in the wild;

(b) deliberately disturbs these species, particularly during the period of breeding, rearing, hibernation and migration;

(c) deliberately takes or destroys eggs of those species from the wild;

(d) damages or destroys a breeding site or resting place of such an animal; or

(e) keeps, transports, sells, exchanges, offers for sale or offers for exchange any specimen of these species taken in the wild, other than those taken legally as referred to in Article 12(2) of the Habitats Directive,

shall be guilty of an offence."

All wild birds, their nests and eggs are protected under the Wildlife Act 1976, as amended; active nests must not be disturbed or destroyed while in use.

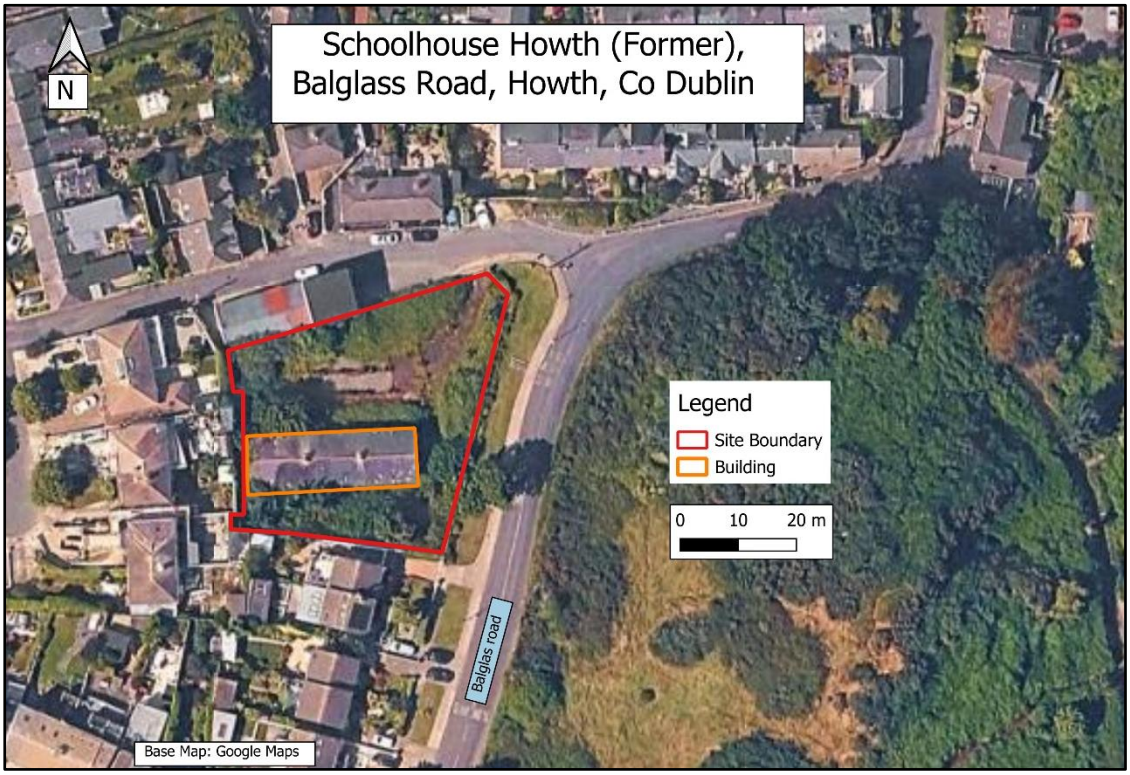
3. Site Location and Description

The former Howth National Schools building is a single-storey structure with a pitched slate roof and overhanging eaves; ITM: 728605 738638. The external walls are of random rubble stone, with areas of brick repair, and retain a weathered lime-render finish that has been lost in places. The south elevation contains two entrance doors and six large timber-framed window openings, while the north elevation contains ten similar window openings. The building is internally divided into two former schoolroom areas, each with an associated office and separate entrance. Potential bat-roost features may be associated with the slate roof, overhanging eaves and gaps or defects within the weathered masonry and render.

The nearest European protected area is Howth Head SAC (Site Code 000202), located approximately 0.46 km south-west of the site and does not list any bat species as a Qualifying Interest. North-West Irish Sea SPA (Site code: 004236) is located 0.54 km north-east.
The site's principal connectivity with the wider landscape is provided by the scrub and gorse habitat to the east, while residential properties and gardens surround the site to the north, south and west.

The proposed development comprises the conversion and extension of the former schoolhouse to provide four dwellings, together with the construction of two detached dwellings. Associated works include drainage, landscaping, boundary treatments, private gardens, bicycle storage, public open space and four car-parking spaces, accessed via the existing entrance from Balglass Road.
The present report has been prepared to address Condition 12 of the planning permission granted by Fingal County Council (Planning Ref. F25A/0217E), which requires a bat and bird survey to be undertaken prior to the commencement of development.

Figure 1. *Proposed development site showing the site boundary and old school building*.



4. Methodology

4.1. Desktop Study

Records from the National Biodiversity Data Centre (NBDC) for the site and surroundings were extracted and reviewed for bat records. Such information can identify bat species that may occur within a proposed development site or in the surrounding areas. It should be noted that an absence of records is likely to reflect an absence of survey data and cannot be taken as confirmation that a particular species is not present in the site or the surrounding area.

4.2. Field Study

4.2.1. Preliminary Roost Assessments – Buildings

The external assessment of the building was undertaken during daylight hours from ground level. Binoculars were used to inspect roofs and wall sections greater than approximately 3 m in height. Internal inspections were undertaken where access was available. Surveys sought evidence of current or previous bat use, including live or dead bats, droppings, feeding remains, urine staining, fur staining and grease marks associated with potential roost entrances. General bird activity and evidence of nesting birds were also recorded.
In accordance with the BCT Guidelines (Collins, 2023), buildings were assessed for Potential Roost Features (PRFs) and assigned a suitability category of None, Negligible, Low, Moderate or High according to their potential to support roosting bats. The criteria used are presented in Table 1.

Table 1. *Criteria for Assessing the Potential Suitability of the Site for Bats, Collins (2023)*

Potential Suitability	Description (roosting habitats in structures)
None	No habitat features on site likely to be used by any roosting bats at any time of the year
Negligible	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.
Low	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).
Moderate	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 is unlikely to support a roost of high conservation status (with respect to roost type 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.
High	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).

4.2.2. Ground Level Tree Assessment (GLTA)

All trees within the survey area were inspected from ground level for features with the potential to support roosting bats, including cavities, woodpecker holes, hazard beams, rot holes, splits, lifted bark, tear-outs, dense ivy cover and other potentially suitable features. Particular attention was given to trees proposed for removal. Binoculars were used, where necessary, to inspect features above ground level. Trees were assessed in accordance with the Ground Level Tree Assessment (GLTA) methodology described by Collins (2023). Potential Roost Features (PRFs) were identified and classified according to their capacity to support roosting bats. Recommendations for further survey, aerial inspection where appropriate, or other mitigation measures were based on the type and significance of the PRFs identified.

***Table 2**. Classification of Potential Roost Features (PRFs) in trees, based on Collins (2023)*

PRF Classification	Description
No PRF	No features with potential to provide suitable shelter or access for roosting bats were identified during the ground-level assessment.
PRF-I	A feature considered suitable for use by an individual bat or a very small number of bats, either occasionally or as a day roost, but unlikely to support a maternity colony.
PRF-M	A feature considered suitable for use by multiple bats and which, due to its dimensions, internal conditions and potential longevity, may support a maternity colony or another roost of higher conservation significance.

In accordance with Collins (2023), individual PRFs are classified rather than assigning an overall bat roost potential to the tree.

4.2.3. Dusk Emergence Surveys

Dusk emergence surveys of the buildings were undertaken by Aidan Murphy on 26th August and 9th September 2026 to observe and listen for bats emerging from potential roost features, in order to determine the presence or likely absence of roosting bats at the time of survey. The dusk emergence surveys commenced approximately 20 minutes before sunset and concluded approximately 90 minutes after sunset. Weather conditions were suitable for bat activity during all surveys, comprising calm, dry and mild conditions with air temperatures within the optimal range for bat surveying. Survey details are summarised in Table 3 below.

Survey positions and night-vision aids were arranged to provide the best practicable coverage of the accessible and visible elevations. Dense vegetation nevertheless restricted coverage of approximately the western third of the building, as described under Survey Limitations. Surveys were supplemented by 3 no. night vision cameras (NVAs) in accordance with best practice guidelines (Collins, 2023). Particular attention was given to all potential access and egress points identified during the preceding daytime Preliminary Roost Assessment.

Two thermal imaging cameras (Pixfra A613) and one infrared camera (Canon XA50) were positioned to optimise views of the buildings and trees. Echolocation calls were recorded using handheld Echo Meter Touch Pro 2 and Anabat Scout full-spectrum bat detectors from the principal survey position. All recordings were stored for subsequent analysis. Bat sonograms were manually analysed and identified to species level using Wildlife Acoustics Kaleidoscope Viewer Pro.

Table 3. Details relating to bat surveys conducted on site in August and September 2026

Date	Survey Type	Survey Times	Weather	Temperature (°C)
26 August 2026 (Sunset 20:28)	Dusk Emergence	20:10 – 22:15	40% cloud, no rain, no wind	17°C-15°C
9 September 2026 (Sunset 19:54)	Dusk Emergence	19:30 – 21:30	90% cloud, no rain, no wind	14°C-13°C

4.2.4. Passive Detector Monitoring

A full-spectrum passive bat detector (Wildlife Acoustics Song Meter Mini Bat) was deployed within the eastern classroom to provide longer-term monitoring for any bat activity within the building, particularly bats potentially entering through a gap identified beneath the roof slates, which was considered a potential roost feature (PRF).

The detector was programmed to record automatically from before sunset until after sunrise from 26 August to 9 September 2026.

All recorded files were subsequently reviewed and bat calls were manually analysed using Wildlife Acoustics Kaleidoscope Viewer Pro. Calls were identified to species level where possible. Where reliable identification to species level was not possible, calls were assigned to genus level (*Myotis* sp.). Bat activity was quantified as the number of bat registrations recorded; registration totals represent acoustic records and should not be interpreted as the number of individual bats present. For each species, the time of first detection relative to sunset was also recorded to assist in interpreting the timing and pattern of bat activity across the site.

4.2.5. Bird Survey

The building and surrounding vegetation were surveyed for birds during the daytime site inspection and preceding dusk bat emergence surveys All bird species seen or heard within or immediately adjoining the site were recorded. Particular attention was given to evidence of breeding activity, including territorial behaviour, birds carrying nesting material or food, adults entering potential nest sites, recently fledged young, occupied nests and other behaviour indicative of breeding.

The external elevations, roof structure, openings and accessible internal areas of the former schoolhouse were inspected for evidence of nesting birds, including active or old nests, nesting material, droppings and suitable nesting locations. Trees, shrubs and dense vegetation immediately surrounding the building were also examined for their potential to support nesting birds.

4.2.6. Survey Limitations

No safe access was available to the attic/roof void, preventing inspection of concealed roof features. Dense vegetation also obscured approximately the western third of the building restricting close inspection and visibility during the dusk surveys. Although thermal and infra-red equipment was used, these constraints reduced confidence in detecting emergence. A small or intermittently used roost within the inaccessible or obscured areas cannot therefore be excluded.

These constraints mean that the presence of a small or intermittently used bat roost within the inaccessible roof structure or obscured part of the building cannot be ruled out.

5. Results

5.1. Desktop study results

Records from the National Biodiversity Data Centre (NBDC) (https://maps.biodiversityireland.ie/) from within a 2 km radius of the site centre were extracted and reviewed (accessed 05/09/2026). The search returned records for four bat species; soprano pipistrelle *Pipistrellus pygmaeus*, common pipistrelle *Pipistrellus pipistrellus*, Leisler's bat *Nyctalus leisleri*, and brown long-eared bat *Plecotus auritus*. NBDC bat records are presented in Table 4 below.

Table 4. Nearest NBDC bat records from within tetrad O23Z

Grid reference/ distance from site	Species	Recorder	Date of last record	Database
O2839	Common pipistrelle Leisler's bat Soprano Pipistrelle Brown long-eared bat	Tina Aughney	26/08/2021	National Bat Database of Ireland
O2838	Common pipistrelle Soprano Pipistrelle	Tina Aughney	23/05/2014	National Bat Database of Ireland
O2938	Common pipistrelle Soprano Pipistrelle Brown long-eared bat	Tina Aughney	24/08/2021	National Bat Database of Ireland

Bat Conservation Ireland's habitat suitability index

In addition, Bat Conservation Ireland's habitat suitability index[1], available to view on the NBDC online mapping portal, classifies the landscape within which the site is located, as having a medium to high suitability for bats, with a score of 29.44, see Table 5 below.

Table 5. *Bat Conservation Ireland Habitat Suitability Index*

Common name	Scientific name	Habitat Suitability Index	Predicted habitat suitability
All bats		29.44	**Medium to high**
Soprano pipistrelle	Pipistrellus pygmaeus	55	High
Leisler's bat	Nyctalus leisleri	47	High
Common pipistrelle	Pipistrellus pipistrellus	45	High
Brown long-eared bat	Plecotus auritus	39	High
Natterer's bat	Myotis nattereri	25	Moderate
Whiskered bat	Myotis mystacinus	21	Moderate
Daubenton's bat	Myotis daubentonii	21	Moderate
Nathusius' pipistrelle	Pipistrellus nathusii	12	Low
Lesser horseshoe bat	Rhinolophus hipposideros	0	Low

The Bat Conservation Ireland Habitat Suitability Index (Table 5) indicates that the landscape surrounding the site provides a range of habitats suitable for bats. Habitat suitability is predicted to be highest for common pipistrelle, Leisler's bat, brown long-eared bat and soprano pipistrelle, while lower suitability is indicated for Natterer's bat, whiskered bat, Nathusius' pipistrelle and lesser horseshoe bat.

[1] Lundy, M.G., Aughney, T., Montgomery, W.I. & Roche, N. (2011). Landscape conservation for Irish bats and species-specific roosting characteristics. Bat Conservation Ireland. Accessed 9 September 2026.

5.2. Field study results

5.2.1. Preliminary Bat Roost Assessments – School House

No bats, bat droppings, urine staining or other definitive evidence of bat use were recorded during the daytime inspections. However, several peacock butterfly wings were found together beneath a section of the collapsed suspended ceiling, which could potentially provide a feeding perch. The wings appeared dusty and old rather than fresh or indicative of recent use, and no associated bat droppings were present.

Photographs of the external and internal building inspections, together with accompanying notes, are provided in the Appendix.

5.2.2. Nesting Bird Survey

No active bird nests or other evidence of nesting birds were observed during the surveys. The following bird species were recorded, primarily from calls heard within adjacent vegetation: wren (*Troglodytes troglodytes*), robin (*Erithacus rubecula*), blackbird (*Turdus merula*) and great tit (*Parus major*). Few birds were directly observed.

5.2.3. Ground Level Tree Assessment (GLTA)

The trees within the site were inspected from ground level, with particular attention given to those proposed for removal. The trees comprised relatively young sycamores growing among bramble and elder scrub. None supported cavities, splits, loose bark or other potential roost features (PRFs), and no evidence of bat occupation was identified. The trees are therefore assessed as having negligible suitability for roosting bats.

5.2.4. Dusk Emergence Surveys

Across two emergence surveys undertaken over two nights, no bats were observed or recorded emerging from the former schoolhouse. However, a bat was observed on the thermal camera within the foliage of a tree adjacent to the northern elevation. It was not observed flying into the tree but remained stationary within the foliage for approximately six minutes before flying off to the west. Its low, fluttering flight was consistent with that of a brown long-eared bat. No calls were recorded by the bat detector during this observation.

Results are summarised in Table 6 and Table 7 below. All bat species recorded during surveys are Annex IV species under the EU Habitats Directive and all have a 'Favourable' Status in Ireland.

Table 6. *Total counts of bat registrations from dusk emergence surveys: August and September 2026. Registration totals represent bat passes (acoustic) recorded during emergence surveys and do not represent the number of individual bats present.*

Date	Building	Common pipistrelle	Soprano pipistrelle	Leisler's bat	Total Registrations
26 Aug. 2026	Former Schoolhouse	11	5	2	18
09 Sept. 2026	Former Schoolhouse	8	0	0	8

Table 7. *Dusk Emergence Survey Data for Buildings*

Building name	Survey date	Species detected in order of first recording at site, after sunset	Description of activity	Roost recorded
Former Schoolhouse	26/08/2026 1st Survey **(Sunset 20:28)**	First bat: **Leisler's bat** (+9 min) **Common pipistrelle** (+20 min) **Soprano pipistrelle** (+66 min)	No bats were observed emerging from the subject building. A single common pipistrelle briefly foraged in front of the northern elevation before moving away through the surrounding landscape. Leisler's bat and soprano pipistrelle were also recorded acoustically but were not observed. Their calls were very faint and were considered to originate beyond the site rather than from bats using the building or its immediate surroundings.	**NO**
	09 /09/2026 2nd survey **(Sunset 19:54)**	First bat: Common pipistrelle (+15 min)	No emergence recorded in subject building. Common pipistrelle was observed foraging briefly around the north of the building 16 minutes after sunset with 6 registrations over a 3 minute period and left the area. Two more calls were recorded but unseen 37 minutes after sunset. No other bat calls recorded.	

5.2.5. Passive Detector Results

One passive detector was deployed from 26 August to 9 September 2026 in the eastern classroom, which contained a substantial hole in the roof and a broken window. Calls attributable to brown long-eared bat were recorded by the detector positioned within the eastern classroom on four nights. Given the detector location, the character of the room and the accompanying feeding remains, these records provide evidence consistent with brown long-eared bat entering and occasionally using the building, although the precise nature and location of that use were not confirmed.

Table 8. *Passive Bat Detector Records from eastern classroom, 26/08/2026– 09 /09/2026*

Date (2026)	Species	First Detection (time after sunset)	Count	Comments
26 August	Brown long-eared bat	2 hours 27 minutes	1	Likely from within building
28 August	Brown long-eared bat	1 hour 6 minutes	1	Likely from within building
29 August	Brown long-eared bat	6 hours 0 minutes 7 hours 3 minutes	2	Likely from within building
07 September	Brown long-eared bat	2 hours 59 minutes	1	Likely from within building

5.2.6. Analysis of Survey Results

Former School House

The building was assessed as having *Moderate* suitability for roosting bats. No bats, droppings, urine staining or other definitive evidence of a bat roost were identified during the daytime inspections. However, the attic was not accessible for inspection, while the western end of the building could not be fully examined due to dense vegetation.

No bats were observed emerging from the building during the two dusk emergence surveys undertaken in August and September 2026, which were supported by infra-red and thermal imaging. However, brown long-eared bat activity was recorded by the passive detector within the eastern classroom on four nights, and possible feeding remains consistent with use by this species were found in the same room. These findings indicate use of the building by brown long-eared bat and raise a reasonable suspicion of an internal feeding perch or roost, although no emergence was observed.

Other bat activity recorded during the surveys was low. A single common pipistrelle was observed briefly foraging within the grounds. Soprano pipistrelle and Leisler's bat calls were faint and distant, and neither species was considered to be closely associated with the site.

It is notable that the site is already subject to substantial light spill from street lighting along its northern and eastern boundaries. Plate 28 illustrates the extent to which this lighting illuminates the approaches to the Former Schoolhouse, reducing the availability of dark commuting routes between the building and the surrounding landscape, particularly for light-sensitive species such as brown long-eared bat.

Trees

The GLTA found that the trees within the site contained no identifiable potential roost features suitable for bats. Their bat-roosting potential was therefore assessed as *Negligible*, and no further tree-roost surveys are considered necessary.

First detection times and likelihood of nearby roosting

On 26 August 2026, Leisler's bat was first recorded nine minutes after sunset and common pipistrelle 20 minutes after sunset. On 9 September 2026, common pipistrelle was first recorded 15 minutes after sunset. Common pipistrelles typically emerge approximately 20–30 minutes after sunset (Roche & Torsney, 2021); consequently, these relatively early records indicate that one or more common pipistrelle roosts are likely to occur within the surrounding area.

Leisler's bats typically emerge relatively early, averaging approximately 18 minutes after sunset (Jones & Rydell, 1994). The detection nine minutes after sunset is also consistent with a roost occurring locally. However, Leisler's bats are strong, fast-flying species capable of travelling some distance shortly after emergence, and the recorded calls were faint and appeared to originate beyond the site. The timing therefore suggests roosting within the wider locality but does not demonstrate that a roost was present within or immediately beside the site.

Soprano pipistrelle was not recorded until 66 minutes after sunset. This comparatively late detection, together with the faint and distant nature of the calls, does not indicate roosting in the immediate vicinity. No bats were observed emerging from the Former School House during either survey; therefore, the early common pipistrelle and Leisler's bat records are considered indicative of

roosts elsewhere in the surrounding landscape rather than evidence of a roost within the subject building.

Overall interpretation

Taken together, the surveys demonstrate that the Former Schoolhouse site provides foraging habitat for common pipistrelle and brown long-eared bat, with soprano pipistrelle and Leisler's bat recorded in the wider vicinity. Brown long-eared bat activity recorded by the detector positioned within the eastern classroom on four nights, together with possible feeding remains found in the same room, is consistent with possible occasional use of the room as a feeding perch and raises a reasonable suspicion of a roost within the building.

The species assemblage recorded during the 2026 surveys was broadly consistent with that predicted by the Bat Conservation Ireland Habitat Suitability Index. All species identified as having a high likelihood of occurrence were recorded. In contrast, none of the three *Myotis* species for which the area was assessed as having moderate habitat suitability was detected. This may reflect the comparatively low detectability of *Myotis* species rather than their absence from the wider Howth area.

Ecological importance

Common pipistrelle and brown long-eared bat were recorded using the site, while soprano pipistrelle and Leisler's bat were also recorded in the surrounding area. Although the site lies within an urban residential landscape, the adjoining gorse/scrub, mature gardens, trees and other vegetated areas provide a network of potential commuting and foraging habitat. Mature trees and buildings in the locality may also provide alternative roosting opportunities, although these were not surveyed as part of the present assessment. The subject site therefore forms part of a wider area of habitat available to bats, rather than representing the only suitable foraging or potential roosting resource locally.

The present surveys carried out in August and September 2026 are a 'snapshot' in time and the absence of a species, or evidence of their presence, does not preclude their presence at a later date.

6. Potential Impacts & Mitigation

6.1. Building and Potential Bat Roost

No bats were observed emerging from the building during the two dusk emergence surveys. However, brown long-eared bat calls were recorded by the passive detector positioned within the eastern classroom, and butterfly-wing feeding remains were found beneath a potential feeding perch. A brown long-eared bat was also recorded by thermal camera in vegetation immediately north of the building. Taken together, these findings give rise to a reasonable suspicion that the building may be used by an individual brown long-eared bat as a roost and/or internal feeding perch. The proposed works include the removal of the existing roof covering and roof structure, which would result in the loss of potential roosting features. If a bat were present during these works, there would also be a risk of disturbance, injury or death. The works could therefore result in offences under the Wildlife Acts 1976–2022 and should not commence until an appropriate derogation licence has been obtained from the NPWS.

The derogation licence should cover all works capable of affecting the suspected roost, including the stripping of slates, removal of roofing materials and timbers, and disturbance or removal of other potential roost features within the building.

6.2. Vegetation Clearance and Further Investigation

Dense vegetation adjoining the northern and southern elevations restricted visibility during the emergence surveys, with approximately the western third of the building substantially obscured. Selective vegetation clearance will therefore be required to provide access and clear sightlines for further inspection and survey of this part of the building.

Given the reasonable suspicion that the building is used by brown long-eared bat as a roost and/or internal feeding perch, vegetation clearance immediately adjoining the building should be undertaken only after the derogation licence is in place and under the direction of the appointed bat ecologist. Clearance should be limited to that necessary to provide safe access and adequate visibility for further inspection and survey of the building. Vegetation clearance will be undertaken outside the bird-nesting season.

Following vegetation clearance, the previously inaccessible western third of the building, including the obscured sections of the northern and southern elevations, the western gable wall and the associated roofline, should be inspected at close range. Further investigation should include, where practicable

- A detailed internal and external inspection should be undertaken of accessible roof and wall features.
- Suitable crevices should be inspected using an endoscope, where safe and appropriate.
- Classroom and other internal areas should be examined for droppings, feeding remains or other evidence of bat use.
- Additional emergence or re-entry surveys should be undertaken where seasonal and weather conditions permit.

A derogation licence should be applied for on the basis of the evidence already obtained. Further surveys may provide additional information on how brown long-eared bats use the building, but an absence of bats during these surveys would not remove the need for a licence.

6.3. Loss of Trees

The trees within the site were assessed as having negligible suitability for roosting bats, and no potential roost features were identified. Their removal is therefore unlikely to result in the direct loss of a bat roost. However, the removal of existing trees and scrub will temporarily reduce the amount of sheltered foraging habitat available within the site. This is of particular relevance to brown long-eared bats, which commonly forage close to vegetation and glean insects from foliage and other surfaces.

One existing ash (*Fraxinus excelsior*) near the north-western site boundary will be retained. The landscape plan also provides for substantial new planting throughout the development, including semi-mature trees, hedging, shrubs and perennial planting. As this vegetation establishes, it will provide replacement foraging habitat and vegetation cover within the site, although there will be an unavoidable period during which the newly planted vegetation offers less shelter and foraging value

than the existing mature vegetation and scrub. Retained and proposed planting should, as far as practicable, remain unilluminated to maintain its value for bats.

6.4. Ecological Supervision of Roof Removal

The removal of the roof must be undertaken as a controlled soft-strip exercise under the direct supervision of the licensed bat ecologist and in accordance with the conditions of the derogation licence. Before works begin, the ecologist should provide a toolbox talk explaining the legal protection afforded to bats, the locations and types of features that may be used, the agreed working method and the procedure to follow if a bat is encountered.
Immediately before roof stripping, the ecologist should undertake a pre-works inspection of accessible potential roost features. Slates, ridge tiles, flashing, fascia boards and other materials capable of concealing bats should be removed carefully by hand, working progressively in accordance with the ecologist's instructions. Potential roost features should not be removed until they have been examined and cleared by the ecologist.
The ecologist must have the authority to stop works where a bat, suspected bat evidence or an unexpected potential roost feature is identified.

6.5. Procedure if a Bat is Encountered

If a bat is discovered during vegetation clearance, roof stripping or any other works:

- Works must cease immediately in the affected area;
- The bat must not be handled by contractors;
- The feature and surrounding materials must be left undisturbed;
- The supervising bat ecologist must be contacted immediately; and
- Works may recommence only when authorised by the bat ecologist and in accordance with the derogation licence.

Any bat requiring handling may only be handled by a suitably licensed person. A grounded or exposed bat should be protected from injury and disturbance while advice is obtained.

6.6. Roost Compensation and Enhancement

The refurbishment of the Former Schoolhouse has the potential to result in the loss of a suspected intermittently used brown long-eared bat feeding perch and/or day roost within the eastern classroom or associated roof structure. Given the limited and intermittent nature of the recorded use, compensatory provision will comprise three Schwegler 2FN, or equivalent cavity-type, bat boxes. This box type provides a relatively spacious internal cavity suitable for brown long-eared bats and has been shown to be preferentially used by the species in Irish bat-box schemes (McAney & Hanniffy, 2015).
The boxes will be installed on the retained ash tree before the suspected feeding perch or other potential roost features are disturbed. Where practicable, boxes will be placed on different aspects to provide a range of microclimatic conditions. The proposed site layout and landscaping are shown on the Landscape Plan prepared by Kinta Oakes (Drawing No. 106B, dated 26 May 2025), reproduced in Appendix 2.
The provision of three appropriate cavity boxes, together with careful timing and ecological supervision of the works, is considered proportionate to the potential loss of this suspected low-status feeding perch and/or day roost. Final locations will be specified by the project ecologist and

included in the derogation licence method statement. Additional boxes suitable for crevice-dwelling bat species may subsequently be incorporated as a general ecological enhancement.
Following completion of the works, the licensed ecologist will submit the required derogation licence return to the NPWS. The return will describe the mitigation measures undertaken, record any bats or evidence of bats encountered during the works, and confirm the installation and location of the replacement roosting provision. The replacement roosting provision will be inspected following installation to confirm that it has been installed correctly and remains suitable for use by bats. Any additional monitoring required as a condition of the derogation licence will be undertaken in accordance with that condition.

6.7. Lighting and Retained Habitat

The adjoining vegetation, mature gardens and scrub provide potential commuting and foraging habitat for bats. Vegetation removal should therefore be kept to the minimum necessary for access, survey and construction.
Permanent external lighting should avoid illuminating retained vegetation, potential flight routes, building-mounted roost features and any replacement bat boxes. Lighting should be designed in accordance with current bat-sensitive lighting guidance, using the minimum intensity and duration required and directing light downward and away from retained habitat.

Many bat species are sensitive to artificial lighting, which can affect roosting, foraging and commuting through the landscape. Woodland specialist species, including brown long-eared, whiskered, Natterer's and Daubenton's bats, are particularly sensitive to light pollution, while common pipistrelle, soprano pipistrelle and Leisler's bat, although still affected by artificial lighting, tend to show greater tolerance of illuminated environments (Roche et al., 2014).
Given that bat activity has been recorded within the site, external lighting should be designed to minimise illumination of the retained ash tree and replacement planting.

Appropriate luminaire specifications
Lighting during both the construction and operational phases should follow **Guidance Note GN08/23, Bats and Artificial Lighting at Night (BCT/ILP, 2023)**, including the following:

- All luminaires should lack UV elements. Metal halide and compact fluorescent sources should not be used.
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity and dimming capability.
- A warm-white light source of **2700 K or lower** should be adopted to reduce the blue-light component.
- Light sources should feature peak wavelengths higher than 550 nm.
- Column heights should be carefully considered to minimise light spill and glare.
- Only luminaires with negligible or zero Upward Light Ratio and good optical control should be used.
- Luminaires should be mounted horizontally, with no upward tilt or light output above 90°.
- Bollard and low-level downward-directional luminaires should generally be avoided due to their potential for glare, upward light scatter and inefficient light distribution.
- Where required, baffles, hoods or louvres may be used to further restrict light spill, but should not be relied upon as a substitute for appropriate luminaire selection, positioning and optical control.

Any external lighting associated with the development should follow these principles and, in particular, should avoid unnecessary illumination of retained and replacement vegetation used by bats.

6.8. Nesting Birds

No active bird nests or other evidence of nesting birds were identified during the surveys. Tree and vegetation clearance will be undertaken outside the main bird-nesting season (1 March to 31 August); therefore, no specific mitigation for nesting birds is required.
If the proposed timing changes and clearance become necessary during this period, the vegetation should first be inspected for active nests by a suitably experienced ecologist. Any active nest identified must remain undisturbed until the young have fledged and the nest is no longer in use.

7. Conclusion

Bat surveys undertaken at the Former Schoolhouse during August and September 2026 comprised a daytime inspection of the building and trees, two dusk emergence surveys supported by infrared and thermal imaging, and passive detector monitoring within the eastern classroom.

The building was assessed as having *Moderate* suitability for roosting bats. No bats were observed emerging during either dusk survey. However, brown long-eared bat calls were recorded by the passive detector within the eastern classroom, and butterfly-wing feeding remains were identified beneath a potential feeding perch. A bat consistent with brown long-eared bat was also observed by thermal camera in vegetation immediately north of the building. These findings give rise to a reasonable suspicion that the building is used by brown long-eared bat as a roost and/or internal feeding perch. Survey visibility was constrained by dense vegetation, which obscured the western third of the building, including parts of the northern and southern elevations and the western gable wall.

Four bat species were recorded: common pipistrelle, soprano pipistrelle, Leisler's bat and brown long-eared bat. Common pipistrelle and brown long-eared bat were recorded using the site, while soprano pipistrelle and Leisler's bat were recorded in the surrounding area. The site is considered to be of *Local Importance (Lower Value)* for bats.

The trees within the site were assessed as having negligible suitability for roosting bats. Nevertheless, the existing trees and scrub provide sheltered foraging habitat, particularly for brown long-eared bats. One ash tree will be retained, and the proposed landscaping includes substantial replacement tree, hedge, shrub and perennial planting.

No active bird nests or other evidence of nesting birds were identified during the surveys.

The proposed stripping and removal of the existing roof could result in the disturbance of bats and the loss of potential roosting features. A derogation licence should therefore be obtained from the NPWS before these works commence. Following vegetation clearance, the previously inaccessible parts of the building should be inspected and further surveys undertaken where practicable. Roof stripping and the removal of potential roost features must be undertaken as a controlled soft strip under the direct supervision of the licensed bat ecologist.

Subject to compliance with the derogation licence and implementation of the mitigation measures set out in Section 6, including further inspection, ecological supervision of vegetation clearance and roof stripping, advance provision of three permanent compensatory bat boxes suitable for brown long-eared bats, replacement planting and bat-sensitive lighting, significant adverse effects on the local bat population are not anticipated.

8. References

Bat Conservation Trust (2022). Interim guidance note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys. May 2022, Bat Conservation Trust

BTHK. 2018. Bat Roosts in Trees – A Guide to Identification and Assessment for Tree-Care and Ecology Professionals. Pelagic Publishing, Exeter UK

Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn). The Bat Conservation Trust, London.

Gunnell, K., Grant, G. & Williams, C. (2012). *Landscape and Urban Design for Bats and Biodiversity*. Bat Conservation Trust.

Jones, G., Rydell, J. (1994). Foraging strategy and predation risk as factors influencing emergence time in echolocating bats. Philos. T. R. Soc. B. 346, 445–455.

Lundy, M.G., Aughney, T., Montgomery, W.I., & Roche, N. (2011) Landscape conservation for Irish bats and specific roosting characteristics. Bat Conservation Ireland. Accessed: 9/9/2026.

McAney, K. & Hanniffy, R. (2015). *The Vincent Wildlife Trust's Irish Bat Box Schemes*. The Vincent Wildlife Trust.BCT (2023)

Marnell, F., Kelleher, C. & Mullen, E. (2022) Bat mitigation guidelines for Ireland v2. Irish Wildlife Manuals, No. 134. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland

NRA (2006a) Best practice guidelines for the conservation of bats in the planning of national road schemes. National Roads Authority, Dublin, Ireland

NRA (National Roads Authority, now TII). (2009). Guidelines for Assessment of Ecological Impacts of National Roads Schemes. Revision 2, 1st June 2009. NRA, Dublin.

Roche, N., Aughney, T., Marnell, F., and Lundy, M. (2014). *Irish Bats in the 21st Century*. Bat Conservation Ireland, Ulex House, Drumheel, Lisduff, Virginia, Co. Cavan, Ireland. ISBN 978-0-9930672-0-4

Roche, N. & Torsney, A. (2021). *Identification Guide to Ireland's Bats*. National Biodiversity Data Centre / Bat Conservation Ireland, December 2021.

Appendix 1. Photographs

1. *Southern elevation (Moderate roost suitability)*



Plate 1. *Southern elevation of the former schoolhouse, showing the heavily vegetated surroundings. Recent replacement of slates was noted at the western end (red arrow). A significant PRF is indicated by a green arrow. Photograph taken from outside the site boundary on Balglass Road.*



Plate 2. *Detail of the southern roof slope, showing an opening within the older slate covering indicated by the green arrow in Plate 1. The opening may provide access beneath the slates and constitutes a potential roost feature (PRF).*



Plate 3. *Southern elevation, showing the rough rubble-stone wall where much of the former lime render has been lost. Photo taken from SE corner.*



Plate 4. *Eastern section of the southern elevation, heavily obscured by bramble scrub and other vegetation, which restricted inspection of the wall and eaves.*



Plate 5. Western end of the southern elevation, showing damaged roof slates, exposed and deteriorated roof timbers, gaps beneath the eaves and a broken windowpane providing potential access to the building interior.



Plate 6. *Detail of the southern eaves, showing extensive deterioration and decay of the exposed timberwork. The red arrow indicates a significant gap that may provide access beneath the roof covering and constitutes a potential roost feature.*

2. *Eastern elevation (Moderate roost suitability)*



Plate 7. *Wider view of the eastern gable wall of the former schoolhouse, with part of the northern elevation visible to the right.*



Plate 8. *Eastern gable viewed from the north-east, showing exposed rubble masonry, remnants of lime render and overhanging eaves.*



Plate 9. *Southern section of the eastern gable, showing irregular openings along the wall–eaves junction. The circular vent leading into the attic appears to have grille openings too small to be used by bats.*



Plate 10. *Northern section of the eastern gable, showing a major crack extending upwards through the masonry towards the circular opening near the apex.*



Plate 11. *Detail of gaps between the irregular masonry and roof timbers along the southern eaves.*



Plate 12. *Detail of the northern eaves and circular gable opening, with crevices visible in the adjoining deteriorated masonry.*

3. Northern elevation (Moderate roost suitability)



Plate 13. General view of the northern elevation, showing the pitched slate roof, timber windows and overhanging eaves. Vegetation is dense towards the western end (right)



Plate 14. Western section of the northern elevation, largely obscured by dense trees and scrub, which restricted inspection of the wall and eaves. The vegetation immediately adjoining the building also restricts flight access and reduces the suitability of this section for roosting bats.



Plate 15. Detail of the exposed roof timbers along the northern eaves, showing several gaps and openings at the wall–roof junction.



Plate 16. Detail of the northern eaves above a window opening, showing exposed rafters and localised gaps beneath the roof covering.



Plate 17. Oblique view along the northern elevation, showing the rubble-stone wall, overhanging eaves and mesh-covered windows.



Plate 18. Detail of a northern window fitted with external wire mesh. A missing upper windowpane provides an opening into the building interior (red arrow)

School House Interior



***Plate 19**. Former eastern classroom, showing extensive ceiling collapse and exposure of the roof structure. The red arrow indicates an opening in the roof covering. No bats or evidence of bat use were recorded.*



***Plate 20**. Room adjoining the former eastern classroom. The ceiling was intact, with no openings into the roof space. No evidence of bat use was recorded.*



***Plate 21.** Former western classroom, the ceiling above was intact, with no apparent access into the roof space. No evidence of bat use was recorded.*



***Plate 22**. Room adjoining the former western classroom. The suspended ceiling had partially collapsed, but the original ceiling above remained intact. No evidence of bat use was recorded.*



***Plate 23**. Hallway and toilet area at the western end of building.*



***Plate 24**. Discarded butterfly wings in eastern classroom*

Selected still images from night-vision cameras and nighttime site conditions



***Plate 25**. Still image taken from thermal video footage of the southern elevation and roof slope during the emergence survey.*



***Plate 26.** Still image taken from thermal video footage of the northern elevation and roof slope during the emergence survey.*



***Plate 27**. Still image taken from infra-red video footage of the eastern elevation during the emergence survey.*



***Plate 28.** Nighttime view of Balglass Road outside the site boundary, showing substantial light spill from the surrounding streetlights. The former schoolhouse is indicated by the red arrow. This existing lighting reduces the suitability of the street-facing side of the site and is likely to restrict connectivity between the building and the wider landscape, particularly for light-sensitive bat species.*

Appendix 2. Landscape Plan – Kinta Oakes, Drawing No. 106B, 26 May 2025

