NOTE TO FILE

JBA Project Code	2025s0812
Contract	Catherine Street Amended Planning application
Client	EKO Integrated Services
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Author	Mia Heigh BSc, Assistant Ecologist
Reviewer / Sign off	Anne Mullen BSc MSc, Senior Ecologist
Subject	Supporting Information

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1 Introduction

1.1 Project Objective

The objective of the proposed development is the redevelopment and renovation of 34-41 Catherine Street, Limerick City. The buildings are proposed for redevelopment and heritage adaptation into 76 residential units. The works include demolition, internal refurbishment, major construction, and new foul and surface water drainage systems, incorporating Sustainable Urban Drainage Systems (SUDS).

Surveys conducted in 2025 confirmed the presence of a small Common pipistrelle roost within the fabric of No. 35 Catherine Street. The roost is satellite in its use and is considered of local ecological value. A derogation under Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) is required to proceed with the development.

1.2 Ecology Team

Prepared by:

Mia Heigh, BSc – Assistant Ecologist

Mia holds a BSc in Zoology and has +2 years' experience in ecological surveying, bat emergence monitoring, bat mitigation measures, and static detector analysis. Mia Heigh conducted surveys under NPWS Bat Survey Licence No. 2025-234 & 2025-235 and Photography Licence No. 028/2025, issued for the 2025 season.

She conducted the field surveys and prepared the bat report and derogation application. Mia has authored previous bat survey reports and successful derogation licence applications.

Reviewed and Authorised by:

Anne Mullen BSc MSc – Senior Ecologist

Anne is a senior ecologist with experience in bat ecology, licensing, and mitigation design. She holds a bat survey licence (no. 2025-234) issued by the National Parks and Wildlife Service and has worked on a number of projects involving Annex species. Anne supervised the survey work and authorised the final report.

All survey work was conducted in accordance with the Bat Conservation Trust's *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)* (Collins 2024) and the *Bat Mitigation Guidelines for Ireland* (Marnell et al. 2022).

2 Background

The proposed development is located at 34-41 Catherine Street, Limerick City, within a series of derelict structures formerly used for mixed commercial and residential purposes, including a bar, nightclub, and printing works. The site, measuring approximately 2,050 m^2, is situated within the Newtown Perry Architectural Conservation Area and lies approximately 300m from the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA, designated sites of high ecological importance.

The existing buildings vary in condition, with some sections severely compromised due to fire damage and structural collapse, while others remain partially intact. The site has been unoccupied for several years and is currently in a state of advanced disrepair. While certain elements of the protected structures at Nos. 35-37 Catherine Street retain architectural merit, the overall condition necessitates significant intervention to ensure structural safety and compliance with modern building standards.

The planning proposed seeks to redevelop and adapt the site for residential use, delivering 76 apartments comprising of 41 two-bedroom units and 35 one-bedroom units, distributed across two to six storeys. The development includes:

- Retention and refurbishment of protected structures at Nos. 35-37 Catherine Street, accommodating six apartments.
- Retention and repair of the historic stone arch at No. 34 Catherine Street to form a new courtyard entrance.
- Demolition of structurally unsound buildings (Nos. 38-41) and construction of new apartment blocks.
- Basement-level car parking and secure bicycle storage.
- Installation of new foul and surface water drainage systems, incorporating Sustainable Urban Drainage Systems to align with best practice in urban water management.

The development is consistent with national and local planning objectives, including urban regeneration, reuse of existing building stock, and conservation of built heritage within designated Architectural Conservation Areas.

In accordance with statutory requirements under the Wildlife Acts (1976-2023) and the EU Habitats Directive (1992), bat surveys were commissioned to assess the ecological value of the site. All bat species in Ireland are strictly protected under national and European legislation, and any works affecting roosts require a derogation licence from the NPWS.

Surveys were undertaken between May and July 2025, two dusk emergence surveys and static acoustic monitoring, plus a desktop review of historical bat records within a 2km radius.

Results confirmed regular bat activity at the site, with strong evidence of a Common pipistrelle *Pipistrelleus pipistrelleus* roost within the fabric of No. 35 Catherine Street.

Emergence surveys recorded two to three bats repeatedly emerged from a second-storey window, flew several hundred meters, and returned multiple times before beginning intermittent foraging near the roost. This pattern indicates an initial phase of light-testing, transitioning into early foraging activity prior to commuting to other foraging sites. Static monitoring detected high levels of nocturnal activity, including foraging passes and return flights indicative of roost use. Occasional activity from Soprano pipistrelle *Pipistrelleus pygmaeus* and Leisler's bat *Nyctalus leisleri* was also recorded, suggesting the site functions as a commuting and opportunistic foraging habitat.

Although the roost type could not be confirmed due to structural instability preventing internal inspection, the evidence supports classification as a satellite roost of local value, with the potential for hibernation use. The precautionary principle therefore applies, requiring robust mitigation measures and licencing prior to any works.

Under Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended), a derogation licence is required to permit actions that otherwise constitute an offence, such as disturbance or destruction of a bat roost.

A mitigation strategy has been prepared in line with the Bat Mitigation Guidelines for Ireland and includes:

- Pre-refurbishment checks of masonry for bats (if possible – dependent on building condition).
- Exclusion measures implemented by a licenced bat ecologist (if required).
- Replacement of roost features, including installation of bat boxes.
- Implementation of a bat-sensitive lighting plan to minimise disturbance.

3 Proposed Works Covered by Derogation

The proposed works covered by the derogation involves the comprehensive refurbishment of the protected structure at No. 35 Catherine Street, which is currently in a severely dilapidated condition and lacks a roof. The intervention will include structural stabilisation, reinstatement of the roof structure, and internal refurbishment to restore the building's integrity.

The specific works anticipated include:

- Roof Reconstruction: Installation of a new timber roof structure and appropriate roofing materials.
- Internal Refurbishment: Repair and replacement of damage floors, ceilings, and internal partitions, ensuring retention of original features where feasible.
- Stonework Conservation: Repointing and repair of masonry using lime-based mortars compatible with the historic fabric.
- Structural Repairs: Localised demolition of unsafe sections as advised by structural engineers, followed by reconstruction using traditional techniques.
- Associated Works: Upgrading of services and integration of conservation led interventions to ensure long-term stability and usability of the building.

Due to the building's current condition and heritage status, all works will be carried out under strict conservation guidelines and informed by ongoing structural assessments. The refurbishment process is expected to last approximately 18-24 months.

These works have the potential to impact bat roosts within the structure, particularly during roof reinstatement and internal works. Mitigation measures will be implemented in accordance with the derogation license and ecological recommendations.

4 Ecological Surveys and Site Assessment

4.1 Pre-existing Data

A review of historical records was undertaken using the National Biodiversity Data Centre (NBDC) database. Within a 2km radius of the site, records indicate the presence of several bat species:

Species	Record Count	Date of Last Record	Title of Dataset
Daubenton's bat *Myotis daubentonii*	5	23/09/2019	National Bat Database of Ireland
Lesser Noctule / Leisler's bat *Nyctalus leisleri*	45	07/08/2021	National Bat Database of Ireland
Common pipistrelle *Pipistrellus pipistrellus*	7	02/06/2021	National Bat Database of Ireland
Soprano pipistrelle *Pipistrellus pygmaeus*	6	23/09/2019	National Bat Database of Ireland
Brown Long-eared bat *Plecotus auritus*	2	04/08/2021	National Bat Database of Ireland
Lesser Horseshoe bat *Rhinolophus hipposideros*	4	27/01/2015	National Lesser Horseshoe Bat Database

Occasional records of Lesser Horseshoe bat (*Rhinolophus hipposideros*) were also noted, though these date back to 2015 and are considered unlikely to relate to the current site given its urban context.

Previous surveys conducted in 2020 identified low to moderate potential for roosting within the former nightclub structure (Nos. 38-41), while other buildings were deemed largely unsuitable due to fire damage and structural collapse. The courtyard area offered negligible foraging habitat following vegetation clearance.

4.2 Status of Species

All bat species in Ireland are protected under the Wildlife Acts and the Habitats Directive.

All species recorded in the area are listed as Least Concern on the IUCN Red list, both on a European and National level.

4.3 Survey Objective

The primary objectives of the ecological surveys were to:

- Confirm the presence or absence of bat roosts within the site.
- Assess the level of bat activity and species composition.

- Identify potential impacts of the proposed development on bat populations.
- Inform mitigation measures and licencing requirements under the Wildlife Acts and EU Habitats Directive.
- To support a derogation licence application under Regulation 54.

4.4 Survey Area

The survey encompassed the area of the site boundary within 34-41 Catherine Street, all structures were surveyed externally due to safety concerns about the derelict building's structural soundness. Particular attention was given to features offering potential roosting opportunities, such as broken windows, roof gaps, and masonry crevices.

4.5 Methodology

Surveys were undertaken in accordance with:

- Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition).
- Bat Mitigation Guidelines for Ireland – Volume 2.

The methodology included:

- Desktop Study: Review of NBDC records within a 2 km grid.
- Dusk Emergence Surveys: Conducted on 2nd July and 31st July 2025 under suitable weather conditions (clear, calm, 14–17°C).
- Static Acoustic Monitoring: Deployed from 9th to 14th July 2025 using Titley Scientific Chorus detector positioned at the second-storey window of No. 35 Catherine Street.
- Data Analysis: Echolocation calls analysed using Anabat Insight, with species identification based on call frequency and structure.

4.6 Survey Results

Emergence Survey: Both dusk surveys confirmed regular emergence of Common pipistrelle from a second-storey window at No. 35 Catherine Street. Observations included:

- 2nd July: Two to three individuals recorded emerging between 22:27 and 22:42, with repeated passes and brief foraging behaviour.
- 31st July: Two individuals emerged at 21:59, followed by sustained activity until 22:30.

No other species were observed visually during emergence surveys, though echolocation calls indicated occasional presence of Soprano pipistrelle.

Static Monitoring: Continuous monitoring over five nights recorded:

- High activity levels of Common pipistrelle, with peak passes exceeding 600 per hour during early morning periods.

- Regular but lower activity from Soprano pipistrelle, suggesting opportunistic foraging.
- Intermittent detections of Leisler's bat, consistent with commuting behaviour.

The consistency of emergence location and acoustic activity strongly supports the presence of a satellite roost of local ecological value within No. 35 Catherine Street.

4.7 Population Size Class Assessment

Based on emergence counts and acoustic data, the roost is assessed as supporting a small population (<3 individuals), typical of satellite roosts used by Common pipistrelle and occasionally Soprano pipistrelle. No evidence of breeding was confirmed.

5 Evidence to Support the Derogation Tests

5.1 Test 1 – Reason for Derogation

The proposed redevelopment of 34-41 Catherine Street, Limerick City, is justified on the grounds of overriding public interest, encompassing both public safety and broader social and environmental benefits. The existing structures are in a state of advanced disrepair, with collapsed roofs, unstable masonry, and evidence of water ingress and structural decay. Without intervention, the integrity of these buildings will continue to deteriorate, creating a significant risk of partial or complete collapse. Such an event would not only endanger human safety but would also result in the loss of a confirmed bat roost within No. 35 Catherine Street, a species protected under Annex IV of the EU Habitats Directive.

The proposed works involve the conversion of the derelict site into 76 residential units, supporting national and local planning objectives related to urban regeneration, sustainable housing provision, and the conservation of built heritage. The project contributes to the reuse of existing building stock and the revitalisation of Limerick City, addressing the acute housing demand while preserving architectural features of cultural significance. The condition of the building fabric, however, means that the roost in situ is not feasible. As the precise location of the roost is unknown, the roost cannot be maintained safely, and its removal is unavoidable to comply with building regulations and ensure structural integrity.

While the roost will be lost, the proposed development incorporates a comprehensive mitigation strategy designed to maintain the favourable conservation status of the species. Measures include the installation of bat boxes, such as Schwegler 1WI Summer and Winter Bat Boxes, at suitable external locations, including sheltered walls. Following the stabilisation of the building, but before restoration, it is proposed that an internal bat inspection survey is carried out possibly identify the roost location. The survey will be undertaken with the safety of the bat ecologist in mind, and dependent on the results of an adequate asbestos survey. All exclusion procedures (if necessary) will be advised and carried out under licence by a qualified bat ecologist. A review of the proposed lighting plan has been carried out to minimise disturbance during and after construction.

In this context, the public interest in safeguarding life, property, and cultural heritage—combined with proactive measures to compensate for roost loss—clearly outweighs the temporary and mitigated impact on a species under strict protection. The development represents a balanced approach that addresses urgent structural and housing needs while ensuring compliance with national and European conservation legislation.

5.2 Test 2 – Absence of Alternative Solutions

Do-Nothing Alternative

The first alternative considered was to take no action and leave the site in its current state. While this option would avoid direct interference with the bat roost, it is fundamentally unsatisfactory for several reasons. The site at 34-41 Catherine Street is currently derelict, posing significant public safety hazards due to structural instability and attracting anti-social behaviour. Leaving the site untouched would perpetuate these risks and fail to address the urgent housing shortage in Limerick City, where the demand for residential units is acute. Furthermore, this approach is in line with the objectives of the National Planning Frameworks and the Limerick City Development Plan, both of which prioritise compact urban growth and regeneration of brownfield sites. In addition, the roost itself is not guaranteed long-term protection under this scenario; ongoing structural degradation could lead to uncontrolled destruction of the roost without mitigation or monitoring. For these reasons, the do-nothing alternative is socially, economically, and ecologically unsatisfactory.

Complete Avoidance of Works

The option of relocating the proposed development to an alternative site was also examined. This alternative is impractical because the catherine street is strategically important for urban regeneration and is zoned for high-density residential development. No equivalent site within the city offers the same opportunity to deliver housing while conserving heritage structures. Relocation would result in significant delays and cost escalation, undermining the delivery of housing targets and the retention objectives set out in national and local planning policy. It would mean the loss of an opportunity to refurbish and retain protected architectural structures on Catherine Street, which is integral to heritage conservation goals. Consequently, complete avoidance of works is not a satisfactory solution.

Exclusion Without Compensation

Another alternative considered was the exclusion of bats without providing compensatory roosting habitat. This approach was rejected because it is not in line with NPWS best practice and the Bat Mitigation Guidelines for Ireland, which require that roost loss be offset by suitable replacement habitat. Exclusion without compensatory roosting measures carries a high risk of stress or mortality for bats and does not maintain ecological connectivity or ensure favourable conservation status. Furthermore, this option would still require a derogation licence as a last-resort measure, making it legally and ecologically inadequate. For these reasons, exclusion without compensatory measures cannot be considered a satisfactory alternative.

All alternatives were evaluated against ecological, legal, social, and economic criteria. None provide a solution that meets the imperative public interest objectives while ensuring compliance with conservation legislation. The proposed approach— further internal surveys following stabilisation, compensatory roost provision, potential exclusion measures, and post-construction monitoring—represents the only viable solution that balances development needs with bat conservation requirements.

5.3 Test 3 - Impact of a Derogation on Conservation Status

If unmanaged, the proposed works would result in the permanent loss of the identified roost. Additional impacts could arise from construction related noise, vibration and artificial lighting, which may alter bat behaviour and reduce access to foraging areas. While the species recorded are adaptable and the site is in a highly urban context, uncontrolled impacts could lead to localised reductions in roosting opportunities and minor disruption to commuting routes. These risks underscore the necessity of a mitigation strategy to ensure compliance with Article 16 of the Habitats Directive.

Given the uncertainty about the exact location of the roost within No. 35, all works to this building will proceed under a precautionary approach. A bat ecologist licensed under Section 23, employed by the client, will oversee any works to No. 35 to monitor for bats and implement mitigation immediately if bats are encountered. The bat ecologist will have the authority to halt works and apply NPWS-approved exclusion protocols if necessary.

Specific measures include:

- Internal Survey: Following the stabilisation of the building, but before restoration, an internal bat inspection survey will be carried out to locate the roost and inform the exclusion process. The survey will be undertaken with the safety of the bat ecologist in mind, and dependent on the results of an adequate asbestos survey.
- Exclusion Strategy: Prior to restoration of, and following the internal survey of No. 35, once the programme of works is supplied, a strategy for exclusion will be created in consultation with the bat ecologist. It will include measures such as the use of bat-safe netting, and all windows, doors, gaps, and holes sealed or covered to prevent bats from re-entering once exclusion is confirmed. This will only occur under licenced bat ecologist supervision.
- Timing: When the roost is located by internal survey, exclusion of bats will occur prior to any works taking place in the vicinity of the roost.
- On-Site Monitoring: The licenced bat ecologist will inspect cavities, crevices, and roof spaces during works, prior to restoration works beginning (if safe to do so). If

bats are found, exclusion will be carried out using one-way devices in accordance with NPWS best practice.

- Compensatory Roost Provision: A minimum of three high-quality bat boxes will be installed on retained structures or suitable locations within the development site, positioned in low-light areas to replicate microclimatic conditions.
- A toolbox talk will be given by the bat ecologist to all staff working on site, this should include advice on what to do if a bat is discovered. Following this, works can proceed with the expectation that bats could be encountered during the works. Should bats be encountered, the site bat ecologist will be on-call to put emergency measures in place.
- Lighting: External lighting has been designed to minimise light spill, using directional, low-lux fittings and warm-spectrum LEDs, ensuring commuting routes remain viable.

The removal of a satellite roost of Common pipistrelle, with occasional use by Soprano pipistrelle, will not significantly affect population viability due to the species' wide distribution and adaptability. With mitigation and compensation measures in place, including licenced ecologist supervision, sealing of access points, and provision of alternative roosts, the derogation will not be detrimental to maintaining these species at a favourable conservation status within their natural range. This approach satisfies the requirements of the EU Habitats Directive and the Wildlife Acts, ensuring that impacts are minimised and compensated appropriately.

6 Monitoring Impacts

The recent surveys conducted by JBA in 2025 have confirmed the use of this site by bats, with emergence counts of 2-3 individuals, with some seasonal variation. This suggests that the site is a transitional roost.

For the Catherine Street development, monitoring will focus on confirming the effectiveness of exclusion procedures, the uptake of compensatory roosting features, and the continued presence of bat activity within the site and its immediate environs. Following completion of the development, during and post-construction monitoring will be undertaken to assess the success of compensatory measures.

Monitoring results will be documented in formal reports and submitted to the National Parks and Wildlife Service (NPWS) as part of licence compliance requirements. Reports will include:

- Dates and methods of surveys,
- Raw and processed data (e.g., check bat boxes for occupation),
- Photographic evidence of installed mitigation features,
- An evaluation of whether the derogation objectives have been met.

If monitoring indicates that mitigation measures have not been effective, corrective actions will be implemented under the guidance of NPWS. These may include installing additional roosting features or adjusting lighting to further reduce disturbance.

The applicant is committed to facilitating access for NPWS representatives and to sharing monitoring data collected during construction and any subsequent monitoring period required by the derogation licence. This collaborative approach ensures transparency, supports adaptive management, and strengthens the evidence base for future conservation planning.

References

Collins, J. 2024. *Bat Surveys for Professional Ecologists: Good Practice Guidelines 4th Edition*. Bat Conversation Trust, London.

Marnell, Ferdia, Conor Kelleher, and Enda Mullen. 2022. *Bat Mitigation Guidelines For Ireland*. No. 134. Irish Wildlife Manuals. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.