



Enviroguide

a DNV company

enviroguide.ie

Ecological Assessment

PRESENTED TO

The Iveagh Trust

**Proposed Development at 43-50 Dolphin's Barn
Street, Dublin 8**

January 2025

Environmental Consultancy Services

Client	The Iveagh Trust
Project Title	Proposed Development at 43-50 Dolphin's Barn Street, Dublin 8
Document Title	Ecological Assessment

Revision	Status	Author(s)	Reviewed	Approved	Issue Date
00	Internal Draft	SC <i>Ecologist</i>	WMC <i>Ecologist</i>	-	-
01	Draft for Client Review	SC <i>Ecologist</i>	WMC <i>Ecologist</i>	SOD <i>Principal Ecologist</i>	29.01.2025
02	Final	CS <i>Ecologist</i>	-	-	28.02.25

REPORT LIMITATIONS

Synergy Environmental Ltd. t/a Enviroguide Consulting (hereafter referred to as “Enviroguide”) has prepared this Report for the sole use of The Iveagh Trust, in accordance with the Agreement under which our services were performed. No other warranty, expressed or implied, is made as to the professional advice included in this Report or any other services provided by Enviroguide.

The information contained in this Report is based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested and that such information is accurate. Information obtained by Enviroguide has not been independently verified by Enviroguide, unless otherwise stated in the Report.

The methodology adopted and the sources of information used by Enviroguide in providing its services are outlined in this Report.

The work described in this Report is based on the conditions encountered and the information available during the said period of time. The scope of this Report and the services are accordingly factually limited by these circumstances.

All work carried out in preparing this Report has used, and is based upon, Enviroguide’s professional knowledge and understanding of the current relevant national legislation. Future changes in applicable legislation may cause the opinion, advice, recommendations or conclusions set out in this Report to become inappropriate or incorrect. However, in giving its opinions, advice, recommendations and conclusions, Enviroguide has considered pending changes to environmental legislation and regulations of which it is currently aware. Following delivery of this Report, Enviroguide will have no obligation to advise the client of any such changes, or of their repercussions.

Enviroguide disclaim any undertaking or obligation to advise any person of any change in any matter affecting the Report, which may come or be brought to Enviroguide’s attention after the date of the Report.

Certain statements made in the Report that are not historical facts may constitute estimates, projections or other forward-looking statements and even though they are based on reasonable assumptions as of the date of the Report, such forward-looking statements by their nature involve risks and uncertainties that could cause actual results to differ materially from the results predicted. Enviroguide specifically does not guarantee or warrant any estimate or projections contained in this Report.

Unless otherwise stated in this Report, the assessments made assume that the Site and facilities will continue to be used for their current or stated proposed purpose without significant changes.

The content of this Report represents the professional opinion of experienced environmental consultants. Enviroguide does not provide legal advice or an accounting interpretation of liabilities, contingent liabilities or provisions.

If the scope of work includes subsurface investigation such as boreholes, trial pits and laboratory testing of samples collected from the subsurface or other areas of the Site, and environmental or engineering interpretation of such information, attention is drawn to the fact that special risks occur whenever engineering, environmental and related disciplines are applied to identify subsurface conditions. Even a comprehensive sampling and testing programme implemented in accordance with best practice and a professional standard of care may fail to detect certain conditions. Laboratory testing results are not independently verified by Enviroguide and have been assumed to be accurate. The environmental, ecological, geological, geotechnical, geochemical and hydrogeological conditions that Enviroguide interprets to exist between sampling points may differ from those that actually exist. Passage of time, natural occurrences and activities on and/or near the Site may substantially alter encountered conditions.

Copyright © This Report is the copyright of Enviroguide Consulting Ltd. any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.

TABLE OF CONTENTS

REPORT LIMITATIONS	II
LIST OF FIGURES.....	IV
1 INTRODUCTION	1
1.1 QUALITY ASSURANCE AND COMPETENCE	1
2 DESCRIPTION OF THE PROPOSED DEVELOPMENT.....	3
2.1 SITE LOCATION	3
2.2 PROPOSED DEVELOPMENT DESCRIPTION	3
2.2.1 <i>Surface Water Drainage</i>	4
2.2.2 <i>Foul Water</i>	5
3 METHODOLOGY	1
3.1 SUMMARY OF SURVEYS CONDUCTED	1
3.2 PRELIMINARY ECOLOGICAL APPRAISAL (PEA)	2
3.3 APPROPRIATE ASSESSMENT (AA)	2
3.4 ECOLOGICAL ASSESSMENT	4
3.5 INVASIVE PLANT SPECIES SURVEY	4
3.6 BIRD SCOPING SURVEY.....	5
3.7 BAT SURVEYS	5
3.7.1 <i>Preliminary Bat Roost Assessment</i>	5
3.7.2 <i>Dusk Emergence Survey</i>	6
3.7.3 <i>Data Analysis</i>	6
3.8 LIMITATIONS	7
4 ECOLOGICAL ASSESSMENT	8
4.1 DESK STUDY RESULTS	8
4.1.1 <i>Hydrology, Geology and Hydrogeology</i>	8
4.1.2 <i>Designated Sites</i>	9
4.1.3 <i>European sites – Appropriate Assessment (AA)</i>	9
4.1.4 <i>Other Designated Sites</i>	10
4.1.5 <i>National and International Designated Sites</i>	10
4.2 FIELD SURVEY RESULTS.....	16
4.2.1 <i>Habitats</i>	16
4.2.2 <i>PEA Findings</i>	18
4.2.3 <i>Invasive Flora Survey</i>	18
4.2.4 <i>Bird Scoping Survey</i>	18
4.2.5 <i>Bat Surveys</i>	20
4.3 POTENTIAL FOR IN-COMBINATION EFFECTS	25
4.3.1 <i>Relevant Plans and Policies</i>	25
4.3.2 <i>Existing Planning Permissions</i>	25
5 MITIGATION	27
5.1 MITIGATION 1: BREEDING BIRDS AND TIMING OF VEGETATION CLEARANCE AND DEMOLITION.....	28
5.2 MITIGATION 2: EXTERNAL LIGHTING DESIGN	28
5.3 MITIGATION 3: LANDSCAPE DESIGN AND CONSTRUCTION PHASE LIGHTING ON BATS	28
6 BIODIVERSITY ENHANCEMENT PLAN	29

6.1	ENHANCEMENT 1: SWIFT BOXES	29
6.2	ENHANCEMENT 2: BAT BOXES	30
7	CONCLUSION	31
8	REFERENCES	32

LIST OF FIGURES

Figure 1. Site Location.	3
Figure 2. Proposed foul and surface water drainage design (JJ Campbell, 2024 Drawing no. C1).	1
Figure 3. Habitats on Site.....	17
Figure 4. PRF 1 – Tower structure.....	21
Figure 5. PRF 2 – a broken window.....	21
Figure 6. PRF 3 – Bricked up windows.....	22
Figure 7. Emergence survey details.	24

1 INTRODUCTION

Enviroguide was commissioned by The Iveagh Trust to prepare an Ecological Assessment ('Report') to accompany a planning application for a Large Residential Development (LRD) to Dublin City Council, in relation to a Proposed Development at 43-50 Dolphin's Barn Street, Dublin 8, hereafter referred to as 'Proposed Development' or 'Site' when referring to the site area of the Proposed Development.

This Ecological Assessment provides a summary of the ecological surveys and findings that have been carried out as part of this LRD application and the methodologies used therein. This will inform the assessment of the ecological features present (e.g., habitats and species; particularly those protected by national and international legislation or those that are considered to be of particular nature conservation importance on or adjacent to the Site), as part of the planning submission.

1.1 Quality Assurance and Competence

Enviroguide is a multi-disciplinary consultancy specialising in the areas of the Environment, Waste Management and Planning. All of our consultants carry scientific or engineering qualifications and have a wealth of experience working within the Environmental Consultancy sectors, having undergone extensive training and continued professional development.

Enviroguide as a company remains fully briefed in European and Irish environmental policy and legislation. Enviroguide staff members are highly qualified in their field. Professional memberships include the Chartered Institution of Wastes Management (CIWM), the Irish Environmental Law Association and Chartered Institute of Ecology and Environmental Management (CIEEM).

All surveying and reporting have been carried out by qualified and experienced ecologists and environmental consultants. Shane Connolly (SC) authored this report while surveying was conducted by ecologists SC, Cara Shields (CS), Kelly Macken (KM), and Charith Rakesh Kumar (CRK).

SC is an experienced Ecologist with a B.Sc. (Hons) in Botany from the University of Galway. SC has extensive experience in surveying bats, birds, mammals, plants, habitats, reptiles, amphibians, and invasive species and holds a valid bat disturbance licence (DER/BAT 2024-107). SC's experience in ecological report writing extends from Appropriate Assessment (AA) Screenings and Natura Impact Statements (NIS) to Ecological Impact Assessments (EcIA), Bat Reports, Constraints Reports, Invasive Species Management Plans (ISMP), and supporting submissions in Environmental Impact Assessment Report (EIAR) chapters.

CS is a Consultant Ecologist with Enviroguide and has a B.Sc. (Hons) in Zoology from University of Aberdeen and a M.Sc. in Biodiversity and Conservation from Trinity College Dublin. CS has experience in conducting desktop assessments of environmental statements, ecological surveys and mitigation for major planning applications such as wind farms and large-scale residential developments, as well as practical field experience including habitat surveys and ornithological surveys. CS has broad understanding of ecological legislation, best practice methodologies for ecological surveys and mitigation measures, and legal compliance for planning conditions.

KM is an intern Ecologist with a wealth of experience in desktop research, report writing, and QGIS mapping, as well as practical field and laboratory experience including bat surveys, freshwater macroinvertebrate surveys, and water quality analysis. KM has prepared several Municipal District Summaries and Stage I Appropriate Assessment Reports.

CRK is an intern Ecologist with a M.Sc. in Biodiversity and Conservation from Trinity College Dublin. CRK's experience as an ecologist is with a broad variety of ecological reports and literature, and field surveys conducted. CRK has experience in surveying habitats, birds, plants, bats, mammals and invasive species, with some experience in assessing welfare conditions of animals using behavioural repertoires as indicators. CRK's experience in ecological report writing extends from Research associated literature reviews to AA screening reports and Municipal District Summary reports

2 DESCRIPTION OF THE PROPOSED DEVELOPMENT

2.1 Site Location

The Site of the Proposed Development is located on the west side of Dolphin's Barn Road in the Dolphin's Barn area, Dublin 8. The Site covers an area of 0.358 ha encompassing former factory buildings to the rear with a strip of buildings fronting onto Dolphin's Barn Street (No's 43-50). The Site is bound by Dolphin's Barn Street to the east, No. 51 Dolphin's Barn Street to the northeast, No. 7 Poole Terrace to the south and boundaries of rear gardens of the residential properties located on Reuben Street and Emerald Square to the west and north of the application site respectively. The Site is situated across from The Coombe Women and Infants Hospital located directly to the east, and approx. 330m to the north of the Grand Canal. The Fatima Luas Red-line stop is located approx. 370m to the north of the Site. (See **Error! Reference source not found.** for Site location).

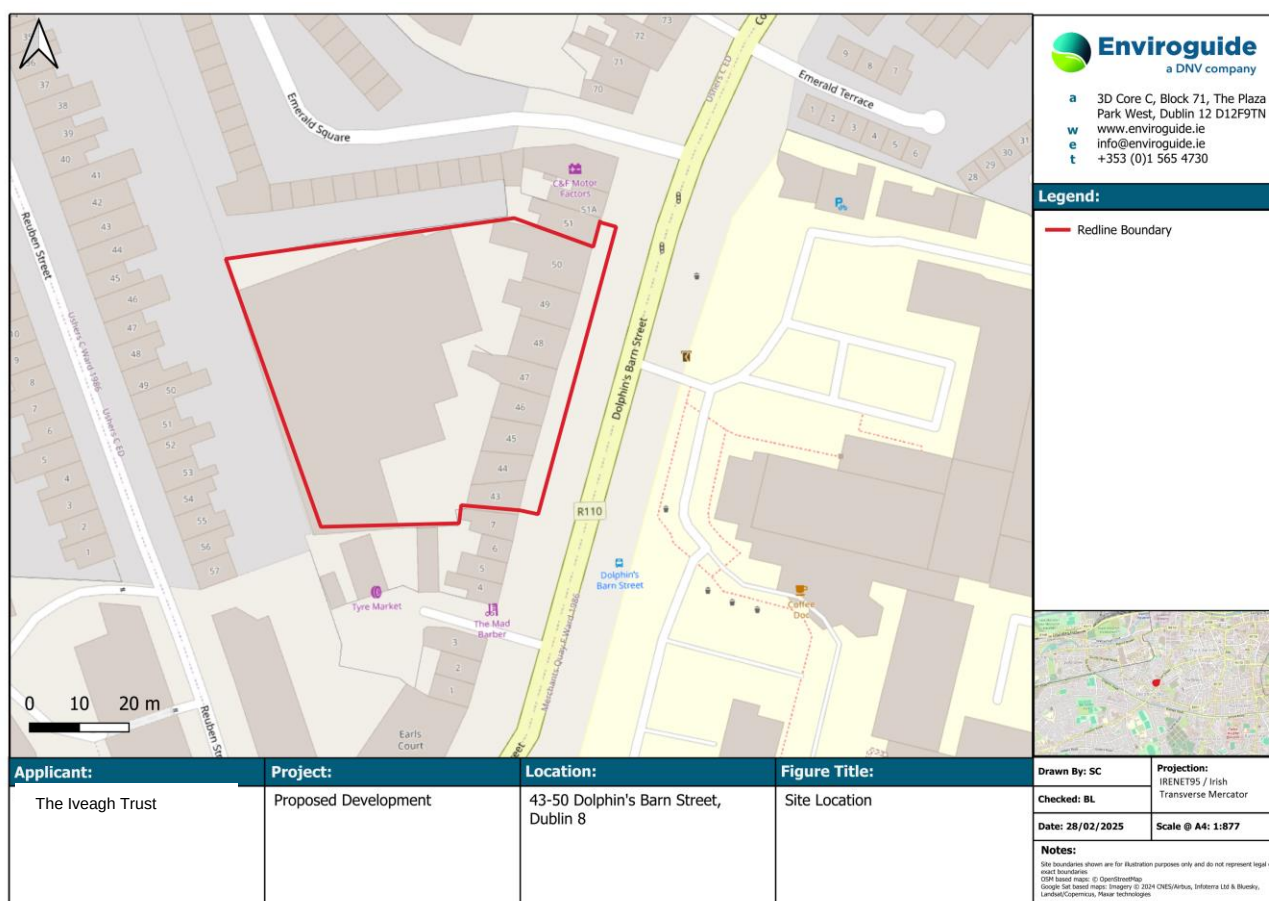


FIGURE 1. SITE LOCATION.

2.2 Proposed Development Description

The proposed development consists of the following:

- The demolition of all existing buildings on site (comprising the former factory building to the rear of the site and buildings which front onto Dolphin's Barn Street (No's 43-50)), which have a total gross floor area of c.3,243.5 sqm.
- The construction of a 1-9 storey Large Scale Residential Development (LRD) comprising 119 no. apartments (70 no. 1 bed units and 49 no. 2 bed units) and a community hub space at ground floor level totalling c.523.5 sqm.
- All apartments are provided with balconies/terraces, which are located on the eastern, western, southern and northern elevations of the building.
- The proposal includes external communal open space areas (c.707 sqm) at ground floor level, and provision of PV panels at roof level.
- The proposal provides a total of 15 no. car parking spaces (12 no. for residents, 2 no. for the community hub, including 1 no. accessible parking space, and 1 no. car sharing space). 172 no. cycle parking spaces are provided for residents, and 60 no. cycle parking spaces are provided for visitors to the residential element of the development. 2 no. long stay cycle parking spaces, and 6 no. short stay cycle parking spaces are provided associated with the community hub element of the development.
- The proposal includes for alterations and upgrade of the site boundary walls / treatment.
- The proposal includes 1 no. shared pedestrian/ vehicular entrance point from Dolphin's Barn Street, alterations to the public footpath/street along Dolphins Barn Street, the provision of 2 no. ESB sub-station's, plant and storage rooms, a comms room, a LV switch room, a life safety room, bin stores and all associated and ancillary works.
- The associated site and infrastructural works include provision for water services; foul and surface water drainage and connections; attenuation proposals; permeable paving; all landscaping works including hard and soft landscaping; blue/green roofs; boundary treatment; internal roads and footpaths; electrical services; and all associated site development works above and below ground.

The following drainage information has been extracted from the Engineering Service Report by JJ Campbell and Associates (2025).

2.2.1 Surface Water Drainage

There is a 225Ø storm sewer East of the proposed development on Dolphins Barn Street and an existing 300Ø storm sewer on Dolphins Barn Street, close to the Coombe Hospital. These storm networks flow north easterly towards Cork Street.

Surface water runoff from the proposed development will all drain by gravity and will be attenuated prior to discharge into the existing 225Ø surface water sewer on Dolphins Barn Street. This flows north-easterly, ultimately leading to the Liffey, and Dublin Bay.

Peak surface water runoff will be restricted to 2 litres per second for operation purposes of the Hydro-Brake.

Dublin City Council (DCC) drainage construction standards will be applied to all external spaces which are to be taken in charge by DCC in accordance with the Greater Dublin Regional Code of Practice.

Attenuation for the proposed development will be via the Green and Blue Roof, Tree Pits and Wavin Aquacells or similar approved system at ground level.

All storm drainage work within the proposed development lands shall be designed as constructed in accordance with the following:

- SUDS strategy
- Greater Dublin Strategic Drainage Study (GSDSDS)
- CIRIA SUDS Manual C753

The following SUDS techniques will be incorporated into the design:

- Permeable paving at car parking bays
- Porous asphalt for access road, Roadstone Duraflow
- Green and blue roof
- Tree pits

By passing water through several stages of treatment, sediment and other pollutants will be removed and maintenance costs are reduced.

The topmost roof and lower terraces shall be a minimum of 70% green and 100% blue roofs, intercepting / treating the first 5mm of rainfall and also attenuating storm water. All car parking spaces shall be permeable paving, intercepting / treating the first 5mm of rainfall. Even if the soil has poor infiltration some infiltration will take place in the stone below the areas and the overflow pipe will retain flow which will slowly infiltrate or evaporate. The access road shall be porous / permeable asphalt, intercepting / treating the first 5mm of rainfall. Soft landscaping shall allow interception / treatment. Soft landscaping shall also incorporate tree pits which provide long term SuDS benefits such as attenuating surface water and filtering out pollutants. 6 no. SuDS tree pits are proposed for the development.

2.2.2 Foul Water

All proposed storm water shall be separate to the foul and shall discharge to the 250Ø storm sewer in Dolphins Barn Street. There are two existing foul sewer networks in proximity to the Site; a 250Ø foul sewer east of the subject development on Dolphins Barn Street, and a 900Ø foul sewer on Dolphins Barn Street, close to the Coombe Hospital. Both sewers discharge in a north easterly direction towards Cork Street ultimately leading to Ringsend Wastewater Treatment Plant (WwTP).

Foul water from the proposed development will all drain by gravity and will be designed to take discharges from the new residential and associated community hub at ground floor. The proposed system will handle 3.72 l/s (residential) and 0.04 l/s (community hub) at peak flow. Feasibility has been confirmed by Irish Water. The foul system will connect to the existing 250Ø foul sewer east of the proposed development on Dolphins Barn Street. Discharge rates shall be calculated using Irish Water Code of Practice.



3 METHODOLOGY

3.1 Summary of Surveys Conducted

The Site was subject to a Preliminary Ecological Appraisal (PEA) walkover survey on the 28th of May 2024 in conjunction with an invasive species survey. The PEA assessed the ecology of the Site and noted very little biodiversity, largely due to the Site's location. The Site is situated in the heart of Dublin city centre and is comprised of hardstanding areas of buildings and footpaths.

The only flora present were stands of the non-native invasive species butterfly bush (*Buddleia davidii*). The PEA identified some small passerine bird species flying through the Site along with some potential for roosting bats. No other habitats or species or habitats of significance were recorded.

Following the findings of the PEA, a screening for appropriate assessment (AA) was recommended, along with a bat emergence survey and the compiling of an invasive species management plan. No other surveys were required. The results of the bat surveys and invasive species survey and the AA screening accompany this application under separate cover (Enviroguide 2024a, 2024b, 2025).

3.2 Preliminary Ecological Appraisal (PEA)

A PEA was conducted on the 28th of May 2024. The PEA includes a desk-based assessment and walkover field surveys to identify any ecological constraints within, or in proximity to the Site. The purpose of the PEA is to provide an accurate scope of further ecological investigations required to manage and mitigate ecological constraints associated with the Proposed Development.

The desk study resources include, but are not limited to the following sources:

- Information on species records and distributions, obtained from the National Biodiversity Data Centre (NBDC) at maps.biodiversityireland.ie.
- Information on waterbodies, catchment areas and hydrological connections obtained from the Environmental Protection Agency (EPA) at gis.epa.ie.
- Information on bedrock, groundwater, aquifers and their statuses, obtained from Geological Survey Ireland (GSI) at www.gsi.ie;
- Information on the network of designated conservation sites, site boundaries, qualifying interests and conservation objectives, obtained from the National Parks and Wildlife Service (NPWS) at www.npws.ie;
- Satellite imagery and mapping obtained from various sources and dates including Google, Digital Globe, Bing and Ordnance Survey Ireland.
- Information on the existence of permitted development, or developments awaiting decision, in the vicinity of the Proposed Development from the National Planning Application Database and the Dublin City County Council online planning applications map viewer; *and*
- Information on the extent, nature and location of the Proposed Development, provided by the applicant and/or their design team.

The field survey for the PEA includes habitat mapping, and a general search for signs of protected species that may be expected to be present based on the desk study, as well as an initial assessment of habitat suitability for same.

The findings from the PEA will inform on whether any targeted species or habitat surveys will be required ahead of the next stage of the LRD planning application. The PEA will also allow for a preliminary assessment of potential ecological impacts and recommended biodiversity enhancements, based on the findings of the desk study and field survey, and the level of detail available on the Proposed Development design at the time.

3.3 Appropriate Assessment (AA)

An AA Screening Report has been prepared by Enviroguide and accompanies this application under separate cover (Enviroguide, 2025) to assess whether the Proposed Development is likely to have a significant effect on European sites and whether a Stage 2 AA is required.

The AA process is a four-stage process. Each stage requires different considerations, assessments and tests to ultimately arrive at the relevant conclusion for each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

The four stages of an AA, can be summarised as follows:

- **Stage 1: Screening.** The Screening for AA considers whether a plan or project is directly connected to or necessary for the management of a European site, or whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a European site in view of its conservation objectives.
- **Stage 2: Natura Impact Statement (NIS).** Where Stage 1 determines that significant effects are likely, uncertain or unknown, the preparation of a NIS is required. The NIS must include a scientific examination of evidence and data to classify potential impacts on any European site(s) in view of their conservation objectives in the absence of mitigation. The NIS will identify appropriate mitigation to remove the potential for likely significant adverse effects on any European site(s). If the competent authority determines that the plan or project would have an adverse effect on the integrity of any European site(s) despite mitigation, it can only grant consent after proceeding through stages 3 and 4.
- **Stage 3: Assessment of alternative solutions.** If the outcome of Stage 2 is negative i.e., adverse impacts to the sites cannot be scientifically ruled out, despite mitigation, the plan or project should proceed to Stage 3 or be abandoned. This stage examines alternative solutions to the proposal.
- **Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain.** The final stage is the main derogation process examining whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project to adversely affect a European site, where no less damaging solution exists.

The Habitats Directive promotes a hierarchy of avoidance, mitigation, and compensatory measures. First the project should aim to avoid any negative effects on European sites by identifying possible effects early in the planning stage and designing the project to avoid such effects. Second, mitigation measures should be applied, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If the project is still likely to result in adverse effects, and no further practicable mitigation is possible, a refusal for planning permission may be recommended. In this case, the project will generally only be considered where no alternative solutions are identified and the project is required for IROPI, or, in the case of priority habitats, considerations of health or safety, or beneficial consequences of primary importance for the environment or to other IROPI. Then compensation measures are required for any remaining adverse effects.

The Screening Report will be undertaken in accordance with the following guidance:

- *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities.* (Department of Environment, Heritage and Local Government, 2010 revision).
- *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities.* Circular NPW 1/10 & PSSP 2/10.
- *Communication from the Commission on the precautionary principle* (European Commission, 2000).
- *Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC* (European Commission, 2019).

- *Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC* Brussels, 28.9.2021 C (European Commission, 2021); and
- *Appropriate Assessment Screening for Development Management, OPR Practice Note PN01, Office of the Planning Regulator March 2021.*

3.4 Ecological Assessment

The Ecological Assessment will identify, quantify and evaluate potential effects of the Proposed Development on habitats, species and ecosystems. The ecology assessment will be completed in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment in the UK and Ireland and will consider the applicable legislative requirements including but not limited to those of the Wildlife Act 1976 (as amended), EU Habitats Directive 1992 and the EC Birds and Habitats Regulations 2011. When an EcIA is undertaken as part of an EIA process it is subject to the EIA Regulations (under the EU Planning and Development [Environmental Impact Assessment] Regulations 2001-2018).

The report will rely on data gathered from the completion of the following:

- A desktop study of existing data and records of habitats, species and other ecological features of interest in the area.
- Completion of field surveys as required for the Site. The extent of surveys will be informed by the desk study, the PEA survey and the bat surveys carried out at the Site in 2024.
- Consultation with representatives from the National Parks and Wildlife Service (NPWS), Dublin City Council and the Inland Fisheries Ireland, where relevant.

The report will assess the potential impacts that the Proposed Development may have on the ecology of the Site and its environs. Where the potential for a risk to the environment is identified, mitigation measures will be proposed on the basis that by deploying these mitigation measures the risk is eliminated or reduced to an insignificant level. The report is provided to assist the Competent Authority with its decision making in respect of the Proposed Development.

3.5 Invasive Plant Species Survey

The Site was assessed for the presence of IAS on the 28th of May 2024, particularly those listed in the Third Schedule of *European Communities (Birds and Natural Habitats) Regulations 2011* (SI 477 of 2011, as amended). The survey was conducted following the methodology outlined in the 'Guidelines on The Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads' (NRA, 2010).

Non-native species in Ireland to date have been assessed by Kelly, O' Flynn and Maguire (2013) and attributed an impact rating of either 'High', 'Medium' or 'Low' impact based on a number of factors that determine a species' potential to become established in this country and have significant impacts. Invasive species can also be rated as an 'Amber-list species',

which signifies a '*Medium*' impact potential or established invasive species that may pose a threat to conservation goals (Invasive Species Ireland, Unknown).

The survey was conducted within the typical growing period (April to September) for plant species in Ireland, following best practice guidance (NRA, 2010).

3.6 Bird Scoping Survey

A bird scoping survey was conducted on the 28th of May as part of the PEA, to scope out the breeding and non-breeding bird potential at the Site based on habitats present. All birds encountered during the PEA site visit were recorded and activity noted where possible.

The aim of Bird Scoping survey was to assess the presence of breeding and wintering birds at the Site, and whether the Site provided suitable habitat for same. This will inform whether further surveys such as an in-depth breeding bird survey or non-breeding bird survey is required for the Site.

3.7 Bat Surveys

3.7.1 Preliminary Bat Roost Assessment

A daytime inspection of the Site was undertaken on the 28th of May 2024. The aim of the inspection was to search for indication of the presence of roosting bats, and to assess the habitat for its ability to support commuting and foraging bats. Any structures (buildings, bridges, ruins etc.) and trees on Site were visually assessed with the aid of a torch and binoculars.

The roost inspection comprised a detailed inspection of structures and trees on Site. These were subject to exterior and interior inspections (where possible) to search for evidence of bat use. This includes live and dead specimens, droppings, feeding remains, oil staining and noise (Collins, 2023). Buildings were assessed for cracks and crevices, or entry points to the roof that might support roosting bats, while trees were searched for Potential Roosting Features (PRFs) such as hollow trunks, knot holes, peeling bark, splits, cracks, and crevices (Andrews, 2018).

Collins (2023) recommends that structures and trees are assessed for their ability to support roosting bats under separate categorizations using professional judgement.

A structure with roosting potential can be further divided into one of five sub-categories as presented in Table 4.1 (Collins, 2023).

- None – No habitat features on site likely to be used by any roosting bats at any time of the year.
- Negligible – No obvious features observed, however, a small element of uncertainty remains.
- Low – A structure with one or more roost features as used by individual bats opportunistically at any time of year.
- Moderate – A structure with one or more roost features that could be used by bats on a regular basis or by a larger number of bats; and

- High – A structure with one or more roost features that are obviously suitable for use by a larger number of bats on a regular basis, and potentially for longer periods of time. These features have the potential to support high conservation status roosts.

Trees are categorized separately according to Table 4.2 of Collins (2023). These classifications are:

- NONE – Either no PRFs in the tree or highly unlikely to be any.
- FAR – Further assessment required to establish if PRFs are present in the tree; and
- PRF – A tree with at least one PRF present.

Where a tree contains at least one PRF, each PRF is further assessed according to Table 6.2 (Collins, 2023). PRF's are scored as either:

- PRF-I – PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
- PRF-M – PRF is suitable for multiple bats and may therefore be used by a maternity colony.

3.7.2 Dusk Emergence Survey

Dusk emergence surveys were carried out following the preliminary assessment. The aim of a dusk emergence survey is to observe if bats are emerging from a previously identified Potential Roost Features (PRFs). Surveyors watch, listen and record any bats exiting/entering any PRFs identified during the daytime inspection. The survey also aims to identify bat species present on Site and gather information on foraging and commuting behaviour where possible.

Emergence surveys should be undertaken in the period from April to September in suitable weather conditions. The number of surveys required, and methodology followed during emergence/re-entry surveys is in line with best practice guidelines (Collins, 2023 and Marnell *et al.*, 2022).

Surveyors were equipped with handheld full spectrum Elekon bat detectors (M2), head torches, and infrared cameras (Nightfox Whisker). Surveyors were positioned at locations that allowed observation of previously identified PRFs.

Species identification was made in the field where possible and behaviour such as call type, feeding indications and commuting directions were recorded. All bat echolocation was recorded for subsequent analysis to confirm species identifications. The dusk emergence surveys commenced 15 minutes before sunset and were completed for a minimum of 1.5 hours after sunset (Collins, 2023).

3.7.3 Data Analysis

Species were identified from any Batlogger equipment using Elekon's BatExplorer software (Version 2.1.11.2) and species assigned to each record with reference to species identification guides such as Russ (2012).

Each record i.e., a sequence of bat calls/pulses, is noted as a bat pass and indicates the level of bat activity for each species recorded. It is important to note that bat passes are representative of activity levels and do not necessarily denote individual bats. For example, some bats such as pipistrelle species may continuously circle a treeline or hedgerow, and

multiple calls may represent one individual circling an area. Alternatively, Leisler's bats recorded early in a survey are likely to be commuting high overhead, and each call may represent a singular bat. Therefore, a bat pass is a measure of activity and is not representative not of the number of bats present.

3.8 Limitations

Due to health and safety concerns, it was not possible to observe the rooftops and it is possible that nesting opportunities for gull species are present. This has been considered in the design and mitigations and as such, is not a limitation that would prevent a conclusive ecological appraisal being drawn at the Site.

4 ECOLOGICAL ASSESSMENT

4.1 Desk Study Results

4.1.1 Hydrology, Geology and Hydrogeology

The Site is located in the Liffey and Dublin Bay (Catchment ID_09) and in the Dodder_SC_010 Sub-catchment (Sub-catchment I.D.09) (EPA, 2024).

The closest waterbodies to the Site are the Grand Canal (IE_09_AWB_GCMLE) which is 343m south, Poddle (IE_EA_09P030800) which is culverted under the city, located 896m east, Camac (IE_EA_09C020500), located 872m northwest of the Site, and the Liffey Estuary Upper (IE_EA_090_0400) 1.3km north of the Site. All waterbodies surrounding the Site flow into the Liffey Estuary ultimately leading into Dublin Bay (IE_EA_090_0000) (EPA, 2024).

The EPA water quality monitoring data for the stations on the Liffey Estuary Upper and the Camac River located closest to the Site is summarised in Table 1. The reported Q-value results indicate that water quality in the Liffey Estuary Upper in the vicinity of the Site is poor. The EPA data indicates that the lack of pollution sensitive macroinvertebrate fauna and dominance of pollution tolerant taxa were the main drivers of Q-value for the watercourse for the period 2016-2021 in this area. (EPA, 2024).

TABLE 1. EPA MONITORING STATIONS AND ASSIGNED Q VALUES

EPA Monitoring Station name	Station Code	Location from Site	Distance from Site	Assigned Q value
LIFFEY - Island-bridge-UCD Boat Club	RS09L012400	North upstream	2.089km	3 "Poor"
Camac Close Emmet Rd	RS09C020500	North-west upstream	1.96km	3 "Poor"

The Site of the Proposed Development is situated on the Dublin (IE_EA_G_008) groundwater body. The bedrock aquifer identified beneath the Site is mapped as "Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones" (LI) (GSI, 2024).

The Groundwater Vulnerability Rating assigned to groundwater beneath the Site is mapped as "*Moderate*" (M) (GSI, 2024).

The soil beneath the majority of the Site is mapped as "Urban – soil concreted over" and the subsoil at the Site is mapped as *man-made* (EPA, 2024), to be expected within Dublin City.

The Waterbody Status for river, groundwater, transitional and coastal water bodies relevant to the Site as recorded by the EPA (2023) in accordance with European Communities (Water Policy) Regulations 2003 (SI no. 722/2003), Part IV of the European Communities Environmental Objectives (Surface Waters) Regulations 2009 and Part IV of the European Communities Environmental Objectives (Groundwater) Regulations 2010, are provided in Table 2.

TABLE 2. WFD RISK AND WATER BODY STATUS

Waterbody Name	Water body; EU code	Location from Site	Distance from Site (km)	WFD water body status (2016-2021)	WFD 3 rd cycle Risk Status	Hydraulic Connection to the Site
Surface Water Bodies						
The Grand Canal Main Line (Liffey and Dublin Bay)	IE_09_AWB_GCMLE	South	0.36	Good	Not At risk	Not Connected to Site
Camac_040	IE_EA_09C020500	North-west	0.91	Poor	At risk	Not Connected to Site
Poddle_010	IE_EA_09P030800	East	0.94	Poor	At risk	Not Connected to Site
Liffey Estuary Upper	IE_EA_090_0400	North	1.29	Good	Under Review	Downstream of Site drainage
Liffey Estuary Lower	IE_EA_090_0300	North-east	3.14	Moderate	At risk	Downstream of Site Drainage
Coastal Water Bodies						
Dublin Bay	IE_EA_090_0000	East	7.67	Good	Not at Risk	Downstream of Site Drainage
Groundwater Bodies						
Dublin Groundwater Body	IE_EA_G_076	N/A	N/A	Good	Under Review	Underlying ground-water-body

4.1.2 Designated Sites

All European sites potentially linked to the Proposed Development have been identified and fully assessed in the AA Screening Report accompanying this submission under separate cover (Enviroguide, 2025). A summary of the AA conclusion is given below.

Other nationally or internationally designated sites potentially linked to the Proposed Development are identified in section 4.1.4 below.

4.1.3 European sites – Appropriate Assessment (AA)

The following conclusion is extracted from the AA accompanying this application under separate cover:

“The Proposed Development at 43-50 Dolphins Barn Street, Dublin 8 has been assessed taking into account:

- The nature, size and location of the proposed works and possible impacts arising from the construction works.*
- The QIs and conservation objectives of the European sites*
- The potential for in-combination effects arising from other plans and projects.*

In conclusion, upon the examination, analysis and evaluation of the relevant information and applying the precautionary principle, it is concluded by the authors of this report that the

possibility **may be excluded** that the Proposed Development will have a significant effect on any of the European sites listed below:

- North Dublin Bay SAC (000206)
- South Dublin Bay SAC (000210)
- North Bull Island SPA (004006)
- North-west Irish Sea SPA (004236)
- South Dublin Bay and River Tolka Estuary SPA (004024)

In carrying out this AA screening, any targeted ecological mitigation measures and/or measures intended or included for the purposes of avoiding adverse effects arising as a result of the Proposed Development on any European site have not been taken into account.

On the basis of the screening exercise carried out above, it can be concluded, on the basis of the best scientific knowledge available and objective information, that the possibility of any significant effects on the above listed European sites, whether arising from the project itself or in combination with other plans and projects, can be excluded in light of the above listed European sites' conservation objectives. Thus, there is no requirement to proceed to Stage 2 of the Appropriate Assessment process; and the preparation of a NIS is not required."

As such, European sites are not considered further in this report.

4.1.4 Other Designated Sites

The AA Screening ruled out any pathways to European sites. Several other designated sites considered as part of this assessment such as NHAs and pNHAs share the same pathways with SACs and SPAs assessed in the AA Screening (Enviroguide, 2024) and are designated for analogous reasons e.g., the same waterbird species, habitats etc. It is deemed that the AA Screening has therefore assessed the potential impact of the Proposed Development on these other designated sites by proxy. As such, the potential for likely significant effects to occur to these designated sites has been assessed in the AA Screening and they will not be assessed further as part of this report. Any other designated sites that do not overlap with a similar European site that has been addressed in the AA screening, will be addressed further.

4.1.5 National and International Designated Sites

A designated site will only be at risk from likely significant effects where an SPR link of note exists between the Proposed Development and the designated site. An SPR link of note is one in which the two sites are within such a distance that significant negative effects may arise. For example, two sites may be connected by 100km of river, but due to significant dilution factor, this would not be considered an SPR link of note. All designated sites considered as part of the SPR method are listed in Table 3.

Those sites with notable SPR links to the Proposed Development are assessed further in this report as KERs of 'National Importance' (pNHAs and NHAs) or 'International Importance' (SACs/SPAs, UNESCO sites, Ramsar sites, etc.).

In conclusion, the desk study determined that there are a total of no NHAs, 2 pNHAs, 1 Ramsar, and 1 UNESCO sites within the ZoI of the Proposed Development Site and with an SPR link of note.

TABLE 3. DESIGNATED SITES CONSIDERED WITH THE SOURCE-PATHWAY-RECEPTOR (S-P-R) METHOD TO ESTABLISH NOTABLE LINKS BETWEEN THE SOURCES OF EFFECTS ARISING FROM THE PROPOSED AMENDMENTS, AND ANY RELEVANT DESIGNATED SITES. THOSE SITES WITH NOTABLE S-P-R LINKS THAT ARE FURTHER ASSESSED IN THIS REPORT ARE HIGHLIGHTED IN GREEN (IF ANY).

Site Name & Code (Receptor)	Distance to Site of Proposed Development	Designation Rationale / Site Description	Potential Pathways
Other Internationally Designated Sites			
Dublin Bay UNESCO Biosphere	Approx. 6.2 km E	In 1981, UNESCO recognised the importance of Dublin Bay by designating North Bull Island as a Biosphere because of its rare and internationally important habitats and species of wildlife. To support sustainable development, UNESCO's concept of a Biosphere has evolved to include not just areas of ecological value but also the areas around them and the communities that live and work within these areas. There have since been additional international and national designations, covering much of Dublin Bay, to ensure the protection of its water quality and biodiversity. To fulfil these broader management aims for the ecosystem, the Biosphere was expanded in 2015. The Biosphere now covers Dublin Bay, reflecting its significant environmental, economic, cultural and tourism importance, and extends to over 300km². Over 300,000 people live within the newly enlarged Biosphere.	None – Hydrological pathway assessed by proxy in AA Screening and deemed insignificant due to distance (see AA Screening (Enviroguide, 2025) for details).
Sandymount Strand / Tolka Estuary Ramsar Site (832)		An intertidal system supporting a large bed of eelgrass (<i>Zostera noltii</i>) with extensive areas of sandflats. The site is important for various species of waterbirds, supporting internationally important numbers of Brent Geese and large numbers of roosting gulls and terns. Various species of annalids, bivalves and small gastropods occur. Bait-digging is a regular activity on the sandy flats.	
Proposed Natural Heritage Areas			

Site Name & Code (Receptor)	Distance to Site of Proposed Development	Designation Rationale / Site Description	Potential Pathways
North Dublin Bay pNHA (000206)	Approx.. 5.6 km NE	The Conservation Objectives for this pNHA are not specified, and as such the QIs for North Dublin Bay SAC (000206) and North Bull Island SPA (004006) are referred to: Conservation Objectives Version 1 (NPWS, 2013): Habitats 1140 Mudflats and sandflats not covered by seawater at low tide 1210 Annual vegetation of drift lines 1310 Salicornia and other annuals colonising mud and sand 1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) 1410 Mediterranean salt meadows (<i>Juncetalia maritimi</i>) 2110 Embryonic shifting dunes 2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes) 2190 Humid dune slacks Species 1395 <i>Petalophyllum ralfsii</i> (Petalwort) Conservation Objectives Version 1 (NPWS, 2015): SCI Birds A046 Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) A048 Shelduck (<i>Tadorna tadorna</i>) A052 Teal (<i>Anas crecca</i>) A054 Pintail (<i>Anas acuta</i>) A056 Shoveler (<i>Anas clypeata</i>) A130 Oystercatcher (<i>Haematopus ostralegus</i>) A140 Golden Plover (<i>Pluvialis apricaria</i>) A141 Grey Plover (<i>Pluvialis squatarola</i>) A143 Knot (<i>Calidris canutus</i>) A144 Sanderling (<i>Calidris alba</i>) A149 Dunlin (<i>Calidris alpina</i>)	None – Hydrological pathway assessed by proxy in AA Screening and deemed insignificant due to distance (see AA Screening (Enviroguide, 2025) for details).

Site Name & Code (Receptor)	Distance to Site of Proposed Development	Designation Rationale / Site Description	Potential Pathways
		A156 Black-tailed Godwit (<i>Limosa limosa</i>) A157 Bar-tailed Godwit (<i>Limosa lapponica</i>) A160 Curlew (<i>Numenius arquata</i>) A162 Redshank (<i>Tringa totanus</i>) A169 Turnstone (<i>Arenaria interpres</i>) A179 Black-headed Gull (<i>Chroicocephalus ridibundus</i>) A999 Wetland and Waterbirds Additional species as per SDF update (2020c) A050 Wigeon (<i>Anas penelope</i>) A053 Mallard (<i>Anas platyrhynchos</i>) A069 Red-Breasted Merganser (<i>Mergus serrator</i>) A137 Ringed Plover (<i>Charadrius hiaticula</i>) A147 Curlew Sandpiper (<i>Calidris ferruginea</i>) A151 Ruff (<i>Philomachus pugnax</i>) A161 Spotted Redshank (<i>Tringa erythropus</i>) A164 Greenshank (<i>Tringa nebularia</i>) A182 Common Gull (<i>Larus canus</i>) A222 Short-Eared Owl (<i>Asio flammeus</i>)	
South Dublin Bay pNHA (000210)	Approx. 5.1 km E	The Conservation Objectives for this pNHA are not specified, and as such the QIs for South Dublin Bay SAC (000210) and South Dublin Bay and River Tolka Estuary SPA (004024) are referred to: Conservation Objectives Version 1 (NPWS, 2013): Habitats 1140 Mudflats and sandflats not covered by seawater at low tide 1210 Annual vegetation of drift lines 1310 Salicornia and other annuals colonising mud and sand 2110 Embryonic shifting dunes Conservation Objectives Version 1 (NPWS, 2015):	None – Hydrological pathway assessed by proxy in AA Screening and deemed insignificant due to distance (see AA Screening (Enviroguide, 2025) for details).

Site Name & Code (Receptor)	Distance to Site of Proposed Development	Designation Rationale / Site Description	Potential Pathways
		SCI Birds A046 Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) A130 Oystercatcher (<i>Haematopus ostralegus</i>) A137 Ringed Plover (<i>Charadrius hiaticula</i>) A141 Grey Plover (<i>Pluvialis squatarola</i>) A143 Knot (<i>Calidris canutus</i>) A144 Sanderling (<i>Calidris alba</i>) A149 Dunlin (<i>Calidris alpina</i>) A157 Bar-tailed Godwit (<i>Limosa lapponica</i>) A162 Redshank (<i>Tringa totanus</i>) A179 Black-headed Gull (<i>Chroicocephalus ridibundus</i>) A192 Roseate Tern (<i>Sterna dougallii</i>) A193 Common Tern (<i>Sterna hirundo</i>) A194 Arctic Tern (<i>Sterna paradisaea</i>) A999 Wetland and Waterbirds Additional species as per SDF update (2020b) A005 Great Crested Grebe (<i>Podiceps cristatus</i>) A017 Cormorant (<i>Phalacrocorax carbo</i>) A069 Red-Breasted Merganser (<i>Mergus serrator</i>) A160 Curlew (<i>Numenius arquata</i>) A169 Ruddy Turnstone (<i>Arenaria interpres</i>) A176 Mediterranean Gull (<i>Larus melanocephalus</i>)	
Grand Canal pNHA (002104)	Approx. 400m S	n/a	An air and land pathway is considered insignificant due to the intervening landscape. The area is surrounded by large urban buildings such as Our Lady of Dolours Church, residential housing, An Post Dublin 8 Delivery Office and the Coombe hospital. Significant quantities of dust are unlikely to ever reach the canal as they would be intercepted by buildings and most likely disperse into the storm water system over time. This hydrological pathway has been

Site Name & Code (Receptor)	Distance to Site of Proposed Development	Designation Rationale / Site Description	Potential Pathways
			assessed in the AA screening under separate cover (Enviroguide, 2025). No other pathways exist.
Dolphins, Dublin Docks pNHA (00201)	Approx. 6.3 km E	The Conservation Objectives for this pNHA are not specified, and as such the QIs for South Dublin Bay and River Tolka Estuary SPA (004024) are referred to: Conservation Objectives Version 1 (NPWS, 2015): SCI Birds A046 Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) A130 Oystercatcher (<i>Haematopus ostralegus</i>) A137 Ringed Plover (<i>Charadrius hiaticula</i>) A141 Grey Plover (<i>Pluvialis squatarola</i>) A143 Knot (<i>Calidris canutus</i>) A144 Sanderling (<i>Calidris alba</i>) A149 Dunlin (<i>Calidris alpina</i>) A157 Bar-tailed Godwit (<i>Limosa lapponica</i>) A162 Redshank (<i>Tringa totanus</i>) A179 Black-headed Gull (<i>Chroicocephalus ridibundus</i>) A192 Roseate Tern (<i>Sterna dougalli</i>) A193 Common Tern (<i>Sterna hirundo</i>) A194 Arctic Tern (<i>Sterna paradisaea</i>) A999 Wetland and Waterbirds Additional species as per SDF update (2020b) A005 Great Crested Grebe (<i>Podiceps cristatus</i>) A017 Cormorant (<i>Phalacrocorax carbo</i>) A069 Red-Breasted Merganser (<i>Mergus serrator</i>) A160 Curlew (<i>Numenius arquata</i>) A169 Ruddy Turnstone (<i>Arenaria interpres</i>) A176 Mediterranean Gull (<i>Larus melanocephalus</i>)	None – Hydrological pathway assessed by proxy in AA Screening and deemed insignificant due to distance (see AA Screening (Enviroguide, 2024) for details).

4.2 Field Survey Results

4.2.1 Habitats

Habitats identified on Site were BL3 – Buildings and artificial surfaces and ED3 Recolonising bare ground in the form of stands of butterfly bush growing through the concrete (Figure 3).

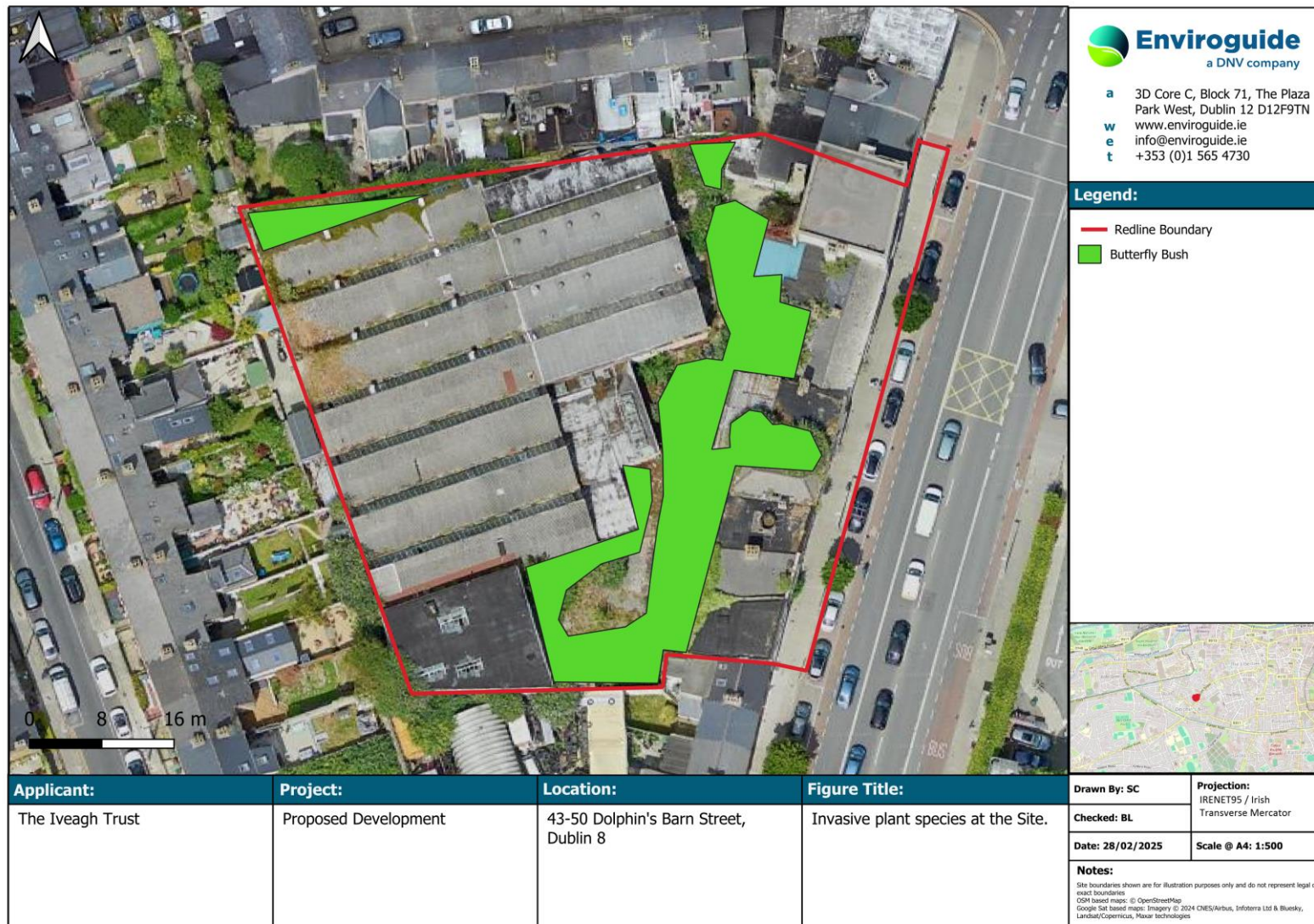


FIGURE 3. HABITATS ON SITE.

4.2.2 PEA Findings

The PEA conducted on the 28th of May 2024 identified the following potential ecological constraints:

- Invasive plant species.
- Potential bat roosting features.
- Breeding birds.
- Requirement for an AA screening.

A comprehensive invasive plant species survey was carried out on the same day. The Site was subject to one further bat emergence survey.

4.2.3 Invasive Flora Survey

An invasive species survey was carried out on the 28th of May 2024. This included a detailed search for signs of any invasive flora, with any incidental observations of evidence for invasive species, their location and extent on Site, recorded. A particular focus was given to any species that appear on the Third Schedule of S.I. No. 477/2011.

One invasive plant species, namely butterfly bush (*Buddleja davidii*) was recorded onsite. This species is not listed on the Third Schedule of S.I. No. 477/2011; however, it is a non-native species that exhibits invasive characteristics. This species is listed as a 'medium' impact invasive species in the assessment of non-native species in Ireland by Kelly, O' Flynn and Maguire (2013). A Site-specific Invasive Species Management Plan (ISMP) is included under separate cover (Enviroguide, 2024) which outlines the recommended control and management of the butterfly bush at the Site to ensure that no invasive flora is spread or introduced to the Site of the Proposed Development.

4.2.4 Bird Scoping Survey

A bird scoping survey was conducted on the 28th of May 2024 as part of the PEA. The survey aimed to identify birds of high conservation concern, as well as habitats that may support these species on Site. This included a scoping survey for breeding and wintering birds. As this Site consists of mainly buildings and urban habitat, the survey included an assessment of any entrance points into the buildings, flat roof surfaces and rafters, any sheltered ledges or crevices, as well as a search for nests or evidence of nesting birds.

The Site contained very limited suitable habitat for any wintering bird species. The Site is comprised entirely of buildings and footpaths.

The Site contained roosting feral pigeons (*Columba livia*) along girders and support beams within the entranceway to the Site. A small number of common passerine species were noted at the Site including wren (*Troglodytes troglodytes*), robin (*Erithacus rubecula*), blue tit (*Cyanistes caeruleus*), and blackbird (*Turdus merula*). No red listed or Annex I species were recorded on Site. The stands of invasive butterfly bush may provide occasional nesting opportunities for small passerine species but does not provide significant nesting habitat for any bird species, including red listed or Annex I species. Similarly, while they could not be observed, the flat roofs on some of the buildings may provide potential habitat for nesting gulls.

Due to the limited and low suitability nesting habitat available at the Site, further breeding bird surveys are not considered necessary as there will be no significant loss of habitat. Mitigation measures that will prevent any harm occurring to bird species during construction works will be detailed below. This will include but is not limited to vegetation clearance and demolition works occurring outside of the breeding bird season which spans from the 1st of March to the 31st of August inclusive, unless under the Supervision of an Ecological Clerk of Works (ECOW) that has confirmed no nests are present prior to the commencement of works.

4.2.4.1 Collision Risk

Tall structures such as electrical pylons, wind farms and tall buildings can lead to fatal collisions with commuting bird species. This is particularly true for those species considered to be “poor” fliers, with relatively low manoeuvrability compared to other more agile bird species (see Eirgrid, 2012).

Some of the most at-risk groups (classified as ‘medium’ and ‘high’ collision risk species) include wader species; waterfowl such as geese, swan and duck species; and some raptor species. Gulls such as black-headed gull (*Larus ridibundus*), herring gull (*Larus argentatus*), and lesser black-backed gull (*Larus fuscus*) are classed as ‘low’ collision risk species due to their superior manoeuvrability when flying (Eirgrid, 2012).

Likelihood of Collision Impacts

The physical location of buildings and structures can influence the likelihood of bird collisions, with structures placed on or near areas regularly used by large numbers of feeding, breeding, or roosting birds, or on local flight path, such as those located between important foraging and roosting areas, can present a higher risk of collision.

The Site is located in the heart of Dublin City Centre and is not deemed to be located in a sensitive area in terms of bird flight paths i.e., it is not located along the coast, or adjacent to any SPAs designated for wetland bird populations.

Building Height

The Proposed Development entails the construction of apartments and as such, the risk of migrating birds colliding with the structure due to its height is deemed to be negligible (Migrating species tend to commute far above this with Swans and Geese flying up to 2500ft (ca.750m) during migration along Irish Coasts (Irish Aviation Authority, 2020). Birds that fly over the Site to commute between feeding grounds at various locations would fly lower than this, however, once the proposed structures are made of visible materials i.e., not entirely comprised of reflective materials such as glass, the birds would simply fly around or over them. In the context of the Site location, the building height is not proposed to be significantly taller than any structures around it, and so birds are not likely to have to change altitude or make sharp movements to avoid the Proposed Development.

Building Appearance

The overall façades of the proposed buildings are diverse, with a varied material composition interspersing any reflective areas. These architectural design features provide important visible cues as to the presence and extent of the proposed structures to any commuting/foraging bird species should they be in the vicinity of the Site. This overall visual heterogeneity of the building façades will be sufficient to further ensure that the risk of bird collisions as a result of

the Proposed Development is negligible. These architectural design features are part of the overall design of the Proposed Development and are not considered to represent specific mitigation measures to prevent collisions, however, they will contribute to the overall effect in this regard. It is noted that birds are not deemed to be at any particular risk of collisions with the proposed buildings at the Site.

As such, based on the heights of the proposed structures, their physical appearance and the nature of their location, it is deemed that birds including any 'at-risk' species, do not have the potential to be impacted by the Proposed Development in terms of collisions and the risk is therefore deemed to be **imperceptible** in the absence of any mitigation.

4.2.5 Bat Surveys

4.2.5.1 Preliminary Bat Roost Assessment

The preliminary bat roost assessment (PBRA) of Potential Roosting Features (PRFs) within the Site was conducted on the 28th of May 2024.

The PBRA recorded three PRFs. These were a tower structure (Figure 4), a broken window (Figure 5) and two bricked up windows with exposed crevices (Figure 6).

The PRFs were classified overall as having "Low" bat roosting potential (Collins, 2023) based on the type of PRFs, the Site location, lack of habitat connectivity, and the significant lighting present at the Site from the surrounding urban landscape.

4.2.5.2 Dusk Emergence Survey

One dusk emergence survey was conducted at the Site on the 18th of July 2024 by two surveyors, assisted by three Nightfox Whisker IR cameras and Batlogger M2 detectors. Weather was suitable according to the guidance outlined in Collins (2023) and is described in Table 4.

A summary of the results is provided below, but a full and comprehensive bat report accompanies this submission under separate cover (Enviroguide, 2024a).



FIGURE 4. PRF 1 – TOWER STRUCTURE.



FIGURE 5. PRF 2 – A BROKEN WINDOW.



FIGURE 6. PRF 3 – BRICKED UP WINDOWS.

No bats were recorded emerging from any of the identified PRFs on Site.

Incidental bat recordings were picked up from bats in the vicinity of surveyors and equipment. Bat activity was generally quite low with a small number of bats utilizing the Site for foraging. The composition of incidental recordings is detailed in Table 5.

While a small number of bats were recorded foraging, it is noted that the Site is overgrown with the invasive plant species butterfly bush which is scheduled to be removed and replaced with native species. While this may result in the temporary loss of forage, it would not be considered a significant loss, and the removal of an invasive species and replanting of native species is considered to provide an overall net positive ecological benefit.

It is also important to note that the detections recorded below are not representative of individual bats, but rather activity. Due to the small nature of the Site, it is likely that the same bats are being recorded multiple times across each detector as they repeatedly circle the same area.

TABLE 4. DUSK SURVEY EFFORT.

Date	Survey Type	Sunset/Sunrise	Survey Start	Weather at start
18th of July 2024	Dusk Emergence	21:41	21:25	Temperature: 20 C Wind: Beaufort 1 Cloud Cover: 100 % Rain: None

TABLE 5. INCIDENTAL BAT RECORDINGS.

Species	PRF 1	PRF 2	PRF 3	Total
---------	-------	-------	-------	-------

Common pipistrelle	26	131	21	178
Leisler's bat	32	20	46	98
Soprano pipistrelle	0	2	3	5

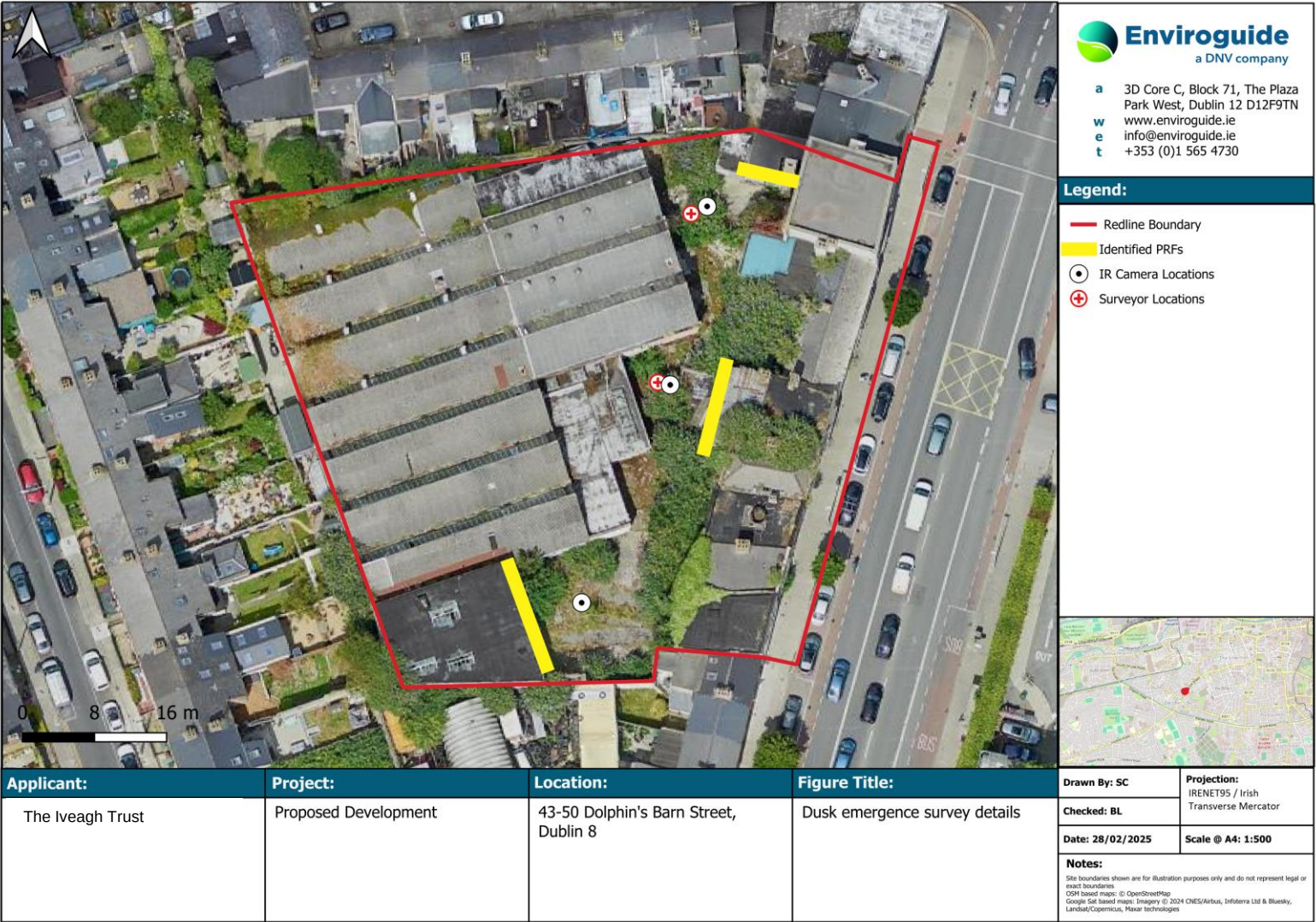


FIGURE 7. EMERGENCE SURVEY DETAILS.

4.3 Potential for In-Combination Effects

4.3.1 Relevant Plans and Policies

The following plans and policies were reviewed and considered for possible in-combination effects with the Proposed Development.

- Dublin City Development Plan 2022 – 2028
- Dublin City Biodiversity Action Plan 2021 - 2025

No specific projects or plans within the Dublin City Development Plan 2022 – 2028 were identified that could act in-combination with the Proposed Development and cause adverse effects on the KERs identified in this report. Additionally, the County Development Plan (CDP) has directly addressed the protection, enhancement, and incorporation of biodiversity through specific Policies and Objectives, as well as through its Development Management Standards (see Appendix I for details). The Dublin City Biodiversity Action Plan 2021 - 2025 is set out to protect and improve biodiversity in the local area, and as such will not result in negative in-combination effects with the Proposed Development.

Therefore, on examination of the above it is considered that there are no means for the Proposed Development to act in-combination with any plans or projects that would cause any likely significant effects to nearby ecological sensitivities.

4.3.2 Existing Planning Permissions

There are several existing planning permissions on record in the area ranging from small-scale extensions and alterations to existing residential properties to some larger-scale developments. The larger existing developments identified within 300m of the Site within the last 5 years and along the same impact pathways as the Proposed Development are identified below in Table 6 and the potential for possible in-combination effects with the Proposed Development are assessed.

TABLE 6. ASSESSMENT OF POTENTIAL IN-COMBINATION EFFECTS OF THE PROPOSED DEVELOPMENT AND OTHER DEVELOPMENTS PENDING OR GRANTED PERMISSION IN THE LAST 5 YEARS. DEVELOPMENTS ALONG THE SAME IMPACT PATHWAYS AS PROPOSED DEVELOPMENT WERE CONSIDERED WITHIN A 300M RADIUS.

Planning Reference	Planning Authority	Status	Location
TA29S.308917	An Bord Pleanála	Granted with Conditions 15/04/2021	Player Wills, Dublin City Council Lands at South Circular Road, Dublin 8
Development Description Demolition of all buildings excluding the original fabric of the former Player Wills Factory, construction of 492 no. Build to Rent apartments, 240 no. Build to Rent shared accommodation along, creche and associated site works. Potential for In-combination effects This site is approximately 150m west of the Site. As the construction of this site is in phases estimating up to 42 months, this is likely still in construction phase. An AA screening was prepared for the overall masterplan, which concluded that there would be no significant impacts to any designated sites due to the distance from the site, and the insignificant hydrological pathways. Due to the designated sites being outside of the ZOI from both of these sites, should the construction phase of the			

sites overlap, this is still unlikely to have a significant impact on the designated sites in proximity to the Site.

TA29S.307221	An Bord Pleanála	Granted with Conditions 14/09/2020	Former Bailey Gibson Site 326-328 South Circular Road, Dublin 8.
---------------------	-------------------------	---	---

Development Description

Demolition of all structures, construction of 416 no. residential units (4 no. houses, 412 no. apartments) and associated site works

Potential for In-combination effects

This site is under 200m west of the Site. As the construction of this site is in phases estimating up to 36 months. An AA screening was prepared for the overall masterplan, which concluded that there would be no significant impacts to any designated sites due to the distance from the site, and the insignificant hydrological pathways. Due to the designated sites being outside of the ZOI from both of these sites, should the construction phase of the sites overlap, this is still unlikely to have a significant impact on the designated sites in proximity to the Site. The combined increase of surface and foul water is unlikely to have a significant impact on downstream designated sites due to the distance and scale of the developments.

2013/20	Dublin City Council	GRANT PERMISSION	Site of 0.25 hectares at The Coombe Women & Infants Hospital, Dolphin's Barn Street, Dublin 8, D08 XW7X
----------------	----------------------------	-------------------------	--

Development Description:

Planning permission for development at a site of 0.25 hectares at the Coombe Women and Infants Hospital, Dolphin's Barn Street, Dublin 8, D08 XW7X. The proposed development comprises of a two storey (plus roof plant room) emergency department building located to the north-west of the wider Coombe Women and Infants Hospital site. The proposed development will also comprise a new entrance feature for the hospital, with feature canopy to the west elevation of the new emergency department. The total gross floorspace of the proposed building is 1,1010 sq.m. The proposed development includes minor remodelling of the ground floor of the existing hospital to the south of the new building. 2 no. existing structures (a smoking shed and a security hut) will be removed from the site to facilitate the proposed development. The existing car parking on the site will be re-arranged and upgraded to facilitate the development, with no amendment to the number of existing car parking spaces. 24 no. bicycle parking spaces will be provided. The proposed development includes all associated and ancillary works, including landscaping, a new single storey security hut, site services and use of existing northern fire tender access point from Dolphin's Barn Street as a staff and emergency vehicle egress.

Potential for In-combination effects

An AA screening was submitted which found that significant effects were not likely to arise, either alone or in combination with other plans and projects.

3537/21	Dublin City Council	GRANT PERMISSION	The Coombe Women and Infants University Hospital, Dolphin's Barn Street, Dublin 8, D08 XW7X
----------------	----------------------------	-------------------------	--

Development Description:

Planning permission for development at the Coombe Women and Infants University Hospital, Dolphin's Barn Street, Dublin 8, D08 XW7X on a 0.15 hectare site to the south-east of the hospital site, such site also including the existing Colposcopy building.

The development for which planning permission is sought comprises of the development of a new dedicated Colposcopy/Women's Health Unit building of 3 no. storeys plus rooftop plant room which will be attached to the existing Colposcopy building to the west by way of glazed link. The development will include the partial demolition of the eastern meeting room and lobby area wing to the existing Colposcopy building to facilitate the connection to the new building. The proposed building comprises of a 988 sq.m gross floor area building. The building will comprise of: (i) at ground floor level; a waiting area, 2 wc's (1 accessible), 1 plant room, 1 meeting room, 3 gynaecology examination rooms (with associated changing rooms), 1 utility room, a waste room, an early pregnancy assessment unit with dedicated entrance, 2 assessment rooms, reflection room, 1 wc, and an

office/reception; (ii) at first floor; a waiting area, a check in room, a supplies store, 2 wc's (1 accessible), 4 colposcopy examination rooms and with associated changing and consultation areas, a utility and a waste room; (iii) at second floor; a meeting room, 2 staff changing rooms (1 accessible with shower and wc), a wc, a staff canteen, a photocopier room and 4 staff office rooms.

The proposed Colposcopy building will involve the loss of 10 existing parking spaces, at the south- eastern corner of the hospital site. 2 number accessible car parking spaces will be provided to the south of the proposed extension.

Planning permission is also sought for site drainage, a glazed link to the existing Colposcopy building, site landscaping works, and all other associated and ancillary works. Access is via the main hospital campus which is accessed from Dolphin's Barn Street.

Potential for In-combination effects

An AA screening was submitted which found that significant effects were not likely to arise, either alone or in combination with other plans and projects.

3581/24	Dublin City Council	GRANT PERMISSION	Site at the corner of South Circular Road, 33-37 Dolphin's Barn Street, Dublin 8
---------	---------------------	------------------	--

Development Description:

The development will consist of: 1) The demolition of the existing derelict buildings and structures on the site; 2) The construction of a part two storey to part eight storey mixed-use building comprising: community/social enterprise use (Class 10) or retail use (Class 1) at ground and mezzanine floor levels (subject to future tenant requirements) and 25 no. residential units at the upper floors - 12 no. one bedroom apartments, 11 no. two bedroom apartments and 2 no. two bedroom duplex apartments; 3) The development will also include the provision of balconies and terraces on the south-eastern, north-western and south-western elevations; communal open space at mezzanine floor level on the northern elevation; roof terraces on the north-western elevation at fourth floor level, and the north-western and north-eastern elevations at sixth floor level; 51 no. bicycle parking spaces; bin storage facilities and ESB substation at ground floor level; solar PV panels at sixth floor and roof level; and all associated site development works above and below ground to facilitate the development.

Potential for In-combination effects

An AA screening was submitted which found that significant effects were not likely to arise, either alone or in combination with other plans and projects.

It is considered that there is no potential for the Proposed Development to act in-combination with other permitted developments in the vicinity that could cause likely significant effects on any nearby KERs.

5 MITIGATION

The PEA did not identify any significant habitat or species, nor the potential for significant numbers of any species to occur on Site excluding the potential for bats, and as such, no further surveys were required.

The bat survey subsequently found no roosting bats on Site, and as such, no mitigation for roosting bats is required.

Bats were recorded passing through the Site and foraging during the emergence survey and so bats are present in the vicinity. The bat report has included mitigation for this occurrence (Enviroguide, 2024a) but which is also copied in below for ease of reference, namely

mitigations 3 and 4 below. A Site-specific management plan for the removal of butterfly bush is included in the ISMP (Enviroguide, 2024b).

The construction phase could cause potential harm or disturbance to other species utilising the Site such as foraging bats or breeding birds that aren't necessarily breeding on Site but may be calling for a mate and so mitigation is required to prevent these occurrences. Relevant mitigations should be implemented and/or overseen by an Ecological Clerk of Works (ECOW) that should be appointed prior to any works commencing.

5.1 Mitigation 1: Breeding Birds and Timing of Vegetation Clearance and Demolition

To ensure compliance with the Wildlife Act 1976 as amended, the removal of areas of vegetation including invasive species, and demolition works to any roof structures should not take place within the nesting bird season (March 1st to August 31st inclusive). If this cannot be adhered to, the areas must be checked and confirmed to be free of breeding birds by the Project Ecologist before any works can commence. This is to ensure that no significant impacts (i.e., nest/egg destruction, harm to juvenile birds) occur as a result of the Proposed Development.

Should nesting birds be found either in vegetation, or protected gull species found nesting on rooftops, the area in question will be noted and suitably protected until the ecologist confirms the young have fledged. Only once the young have fledged can works recommence in the specified area.

5.2 Mitigation 2: External Lighting Design

The final lighting plan will be reviewed by an ecologist prior to installation and should seek to avoid disturbing bats on Site wherever possible. The lighting plan should aim to follow best practice guidelines for bats (Institution of Lighting Professionals, 2023 and Marnell et al., 2022) including but not limited to:

- Lighting should not be directed at key commuting routes or foraging areas. In this case, this will be on newly landscaped areas where bats are likely to forage.
- Warm white lighting (2700K or lower) should be used to minimize blue light emissions.
- Luminaires should be selected without UV elements, with preference given to LEDs that have sharp cut-offs to limit light spill.
- Dimming and part-night lighting should be employed where possible and safe to do so, reducing light levels during periods of low human activity and ensuring lights are off during peak bat activity.
- Glare should be minimized by selecting luminaires with low glare potential, ensuring bats are not disturbed over a wide area.

5.3 Mitigation 3: Landscape Design and Construction Phase Lighting on Bats

The landscape design will be reviewed by an ecologist prior to final submission. The landscape plan should provide as much native and locally sourced vegetation as possible, while also seeking to follow landscaping guidelines for bats (Gunnell et al., 2013 and BCI, 2023) including but not limited to:

- Native plant species should be incorporated where possible to support a higher variety of insects, providing more food for bats.
- The ecologist will review the planting schedule to ensure no invasive species are included.
- Night-scented and pale flowers should be planted to attract nocturnal insects, boosting food availability for bats.

These measures aim to ensure minimal disturbance to bats and other foraging species as a result of any vegetation clearance at the Site and to replace the invasive plants with native plants and subsequently provide more insects and forage.

Any night-time lighting required during the Construction Phase for security etc., will be directed away from areas in which bats are likely to forage (hedgerows, woodland, or areas of dense vegetation) and will not be directed skyward. Lighting will be focused into the centre of the Site and only on equipment and machinery that needs to be illuminated.

An Ecologist will review the Construction Phase lighting with the Contractor prior to implementation and make recommendations as required to ensure the lighting is maintained as bat friendly for the duration of the works.

6 BIODIVERSITY ENHANCEMENT PLAN

The Proposed Development is located in an area of hardstanding surfaces, derelict buildings, and is overrun with non native invasive species. As such, this Site offers an easy opportunity to increase the biodiversity of the area. Enhancement opportunities are detailed below.

6.1 Enhancement 1: Swift Boxes

A Swift box scheme is proposed to be installed at the Site of the Proposed Development and three no. swift boxes should be implemented with the landscape plan so as to enhance the potential bird nesting habitat in the area during its Operational Phase.

It is recommended that swift boxes or bricks are incorporated into the Proposed Development where possible. The incorporation of swift boxes or bricks would help recover the declining swift population, which are now Red Listed in Ireland (Gilbert et al., 2021). The following recommendations are extracted from “Saving Swifts” by Birdwatch Ireland.

Swift bricks/boxes:

- will be constructed of long-lasting material and securely fixed in position.
- will be erected at least five metres above ground level.
- will be erected in sheltered cool areas out of the sun, or under an overhang and /or under the eaves. Bricks can be placed at any aspect, as they tend not to overheat the way that externally fitted boxes can, although north or east facing are preferable.
- will have a clear airspace in front for access.
- will be grouped (side by side in rows) as swifts are colony nesters.
- will avoid sites which can be accessed by predators- cats, squirrels, magpies, rats.
- will avoid sites near plate glass windows because they are a known collision hazard for birds.

- will not be placed directly above ledges or other obstructions. Swifts drop before taking flight and can collide with obstacles below the nest entrance.
- will not be one above the other.
- will not be near spotlights or later fit spotlights near them.
- Must be accompanied by a swift call playback system to attract breeding pairs to the swift bricks/boxes.

The swift boxes/bricks will be installed at least 5 metres above the ground, in safe areas where they will not be disturbed. The location of the boxes will be advised by a suitably qualified ecologist.

Guidelines for the bird box scheme should also follow guidelines published by Swift Conservation Ireland, and those published by Birdwatch Ireland entitle “Saving Swifts” (2009/2010).

6.2 Enhancement 2: Bat boxes

Two summer bat boxes (e.g., Schwegler Woodcrete 1FF design or similar) will be erected on Site as part of the Proposed Development. The boxes will be installed as part of the landscaping works, so as to not delay their deployment and potential positive impacts.

Bat boxes will be sited carefully, and this will be undertaken by a bat specialist/project ecologist. The ecologist will denote the locations, orientation and height of the bat boxes to be erected with assistance from the contractor. Some general points that will be followed include:

- Bat boxes will be erected on trees, telegraph poles, or on a suitable wall with no crowding branches or other obstructions for at least 1 metre above and below the bat box.
- Bat boxes should not be placed above entrances or windows.
- The diameter of chosen trees should be wide and strong enough to hold the required number of boxes.
- Locate bat boxes in areas where bats are known to forage or adjacent to suitable foraging areas. Locations will be sheltered from prevailing winds.
- Bat boxes will be erected at a height of 4-5 metres to reduce the potential for vandalism and predation of roosting bats.
- The recommended Schwegler Woodcrete 1FF design is open at the bottom, allowing the droppings to fall out, and so does not need cleaning.
- Alternative makes/models may be used as long as they meet the following criteria:
 - Are made from woodcrete or other similarly durable material.
 - Are open bottomed to prevent a build-up of droppings.
 - Are of sufficient thickness to provide insulating properties.

7 CONCLUSION

The desktop survey combined with the PEA field survey have informed the requirement for any further surveys and assessments at the Site. The Site contained limited habitat suitability and biodiversity and only one further bat survey was required.

An invasive species survey was conducted on the day of the PEA and a Site-specific management plan has been provided under separate cover (Enviroguide, 2024b).

The Site required one bat emergence survey during which no roosting bats were found. A comprehensive bat report is provided under separate cover (Enviroguide, 2024a) which includes appropriate mitigations to prevent harm or disturbance to bats utilising the Site for foraging.

Due to limitations in accessing the rooftops, mitigation for breeding birds has been applied and which similarly applies to potential breeding birds in the stands of butterfly bush on Site.

No other protected species or habitats which have the potential to support protected species were recorded on Site.

The proposed mitigation measures have been recommended to prevent harm to any species that may be utilising the Site and following their successful implementation, no significant negative effects on any protected species or habitats are expected as a result of the Proposed Development.

8 REFERENCES

- CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester, UK.
- Collins, J. (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London.
- Enviroguide (2024a) Invasive Species Management Plan for 43-50 Dolphins Barn.
- Enviroguide (2024b) Bat Report for 43-50 Dolphins Barn.
- Enviroguide (2025) Appropriate Assessment Screening Report for 43-50 Dolphins Barn.
- EPA. (2022). Guidelines on the information to be contained in Environmental Impact Assessment Reports. Published by the Environmental Protection Agency, Ireland.
- EPA, (2023). Environmental Protection Agency Online Mapping [ONLINE] Available at: <http://www.epa.ie/>
- Gilbert, G., Gibbons, D.W., and Evans, J. (1998): Bird Monitoring Methods: a manual of techniques for key UK species. Sandy: RSPB.
- Gillings, S., Wilson, A.M., Conway, G.J., Vickery, J.A., Fuller, R.J., Beavan, P., Newson, S.E., Noble, D.G. & Toms, M.P. (2007) Winter Farmland Bird Survey. BTO Research Report No.494.
- GSI, (2023). Geological Survey of Ireland website [ONLINE] Available at: <http://www.gsi.ie/>
- JJ Campbell, (2025) 43 - 50 DOLPHINS BARN STREET DUBLIN 8, FOUL AND STORM
- 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.
- NBDC, (2023). National Biodiversity Data Centre online mapping [ONLINE] Available at: <http://maps.biodiversityireland.ie/Map.aspx>.
- NPWS. (2013a). Conservation Objectives: South Dublin Bay SAC [000210]. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS. (2013c). Conservation Objectives: North Dublin Bay SAC [000206]. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2014a). North Bull Island Special Protection Area (Site Code 4006) & South Dublin Bay and River Tolka Estuary Special Protection Area (Site Code 4024). Conservation Objectives Supporting Document VERSION 1.
- NPWS. (2015a). Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA [004024]. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS. (2015b). Conservation Objectives: North Bull Island SPA [004006]. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2023). Conservation Objectives: North-west Irish Sea SPA (004236)Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage
- O'Flynn, C., Kelly, J. and Lysaght, L. (2014). Ireland's invasive and non-native species – trends in introductions. National Biodiversity Data Centre Series No. 2. Ireland

OPR (2021). Office of the Planning Regulator. Appropriate Assessment Screening for Development Management, OPR Practice Note PN01.



Head Office

3D, Core C, Block 71, The Plaza, Park West, Dublin 12, D12F9TN, Ireland.

Tel: +353 1 565 4730

Email: info@enviroguide.ie

Southwest Regional Office

19 Henry Street, Kenmare, County Kerry, V93 CVH0, Ireland.

Tel: +353 646 641932

Email: info@enviroguide.ie

Southeast Regional Office

M10 Wexford Enterprise Centre, Strandfield Business Park, Rosslare Rd, Strandfield, Kerlogue, Co. Wexford, Y35 W5RD, Ireland.

Tel: +353 1 565 4730

Email: info@enviroguide.ie