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ECOLOGICAL IMPACT ASSESSMENT OF A PROPOSED RESIDENTIAL DEVELOPMENT (PART 8) AT SUSSEX STREET AND EBLANA AVENUE, DÚN LAOGHAIRE, CO. DUBLIN



*Dún Laoghaire–Rathdown County Council
c/o Traynor Environmental Ltd
Belturbet Business Park
Creeny
Belturbet
Co. Cavan*

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1. INTRODUCTION

1.1 THE AIM OF THE REPORT

This Ecological Impact Assessment (EcoIA) addresses the potential ecological and biodiversity impacts that may occur in the future arising from a proposed Part 8 development at the former Boylan Community Centre at Sussex St and Eblana Ave, Dún Laoghaire, Co. Dublin.

This EcIA was prepared in accordance with the CIEEM 2018 guidance on EcIA (CIEEM, V. 1.2, updated April 2022), whilst also having regards to the CIEEM EcIA Checklist (2019):

It follows a standard approach based upon the description of the existing baseline conditions within the application site. An evaluation of the likely habitats and species currently present within the application site is also given, along with the identification of the potential ecological impacts (if any) arising from the construction and operation of the proposed development. An assessment of the likely significance of the identified impacts on valued ecological receptors (VERs), both within and close to the application site is also made. Where a significant negative impact has been identified, then suitable remedial mitigation measures are provided in order to prevent, reduce or offset the impact.

1.2 LEGISLATIVE AND POLICY CONTEXT

Legislative Context

The Irish Wildlife Act 1976 (and its amendment of 2000) provides protection to most wild birds and animals. Interference with such species can only occur under licence. Under the act it is an offence to “wilfully interfere with or destroy the breeding place or resting place of any protected wild animal”. The basic designation for wildlife is the Natural Heritage Area (NHA). This is an area considered important for the habitats present or which holds species of plants and animals whose habitat needs protection. Under the Wildlife Amendment Act (2000) NHAs are legally protected from damage.

The Flora Protection Order 1999 provides statutory protection in Ireland to a number of rare plant species from being wilfully cut, picked, uprooted or damaged. It is also illegal under this order to alter, damage or interfere with their habitats.

The Birds Directive (Council Directive 2009/147/EC) recognises that certain species of birds should be subject to special conservation measures concerning their habitats. The Directive requires that Member States take measures to classify the most suitable areas as Special Protection Areas (SPAs) for the conservation of bird species listed in Annex 1 of the Directive.

SPAs are selected for bird species (listed in Annex I of the Birds Directive), that are regularly occurring populations of migratory bird species and the SPA areas are of international importance for these migratory birds.

The EU Habitats Directive (92/43/EEC) requires that Member States designate and ensure that particular protection is given to sites (Special Areas of Conservation) which are made up of or support particular habitats and species listed in annexes to this Directive.

The Water Framework Directive (WFD) (2000/60/EC), which came into force in December 2000, establishes a framework for community action in the field of water policy. The WFD was transposed into Irish law by the European Communities (Water Policy) Regulations 2003 (S.I. 722 of 2003). The WFD rationalises and updates existing legislation and provides for water management on the basis of River Basin Districts (RBDs). RBDs are essentially administrative areas for coordinated water management and are comprised of multiple river basins (or catchments), with cross-border basins (i.e. those covering the territory of more than one Member State) assigned to an international RBD. The aim of the WFD is to ensure that waters achieve at least good status by 2027 and that status doesn't deteriorate in any waters.

Planning Policies

National

Nationally, the Government's commitment to sustainable development is set out in a number of documents including the National Planning Framework and the National Development Plan 2018 – 2027.

Regional

Planning at the regional level is now guided by the Regional Spatial and Economic Strategy (RSES). The RSES is a strategic plan which identifies regional assets, opportunities and pressures and provides appropriate policy responses in the form of Regional Policy Objectives.

Local

Planning policy at the local level is provided by the Dún Laoghaire-Rathdown County Development Plan 2022-2028. This plan contains a number of objectives and policies relevant to ecology, green infrastructure, biodiversity and nature conservation (Chapter 8). Some of these relevant measures are outlined in Table 1.

Reference	Objective / Policy
<p>Policy Objective GIB1: Green Infrastructure Strategy</p>	<p>It is a Policy Objective to continue to implement, and update, the DLR Green Infrastructure (GI) Strategy, to protect existing green infrastructure and encourage and facilitate, in consultation with relevant stakeholders, the development, design and management of high quality natural and semi-natural areas. This recognises the ecosystems approach and the synergies that can be achieved with regard to sustainable transport, provision of open space, sustainable management of water, protection and enhancement of biodiversity.</p>
<p>Policy Objective GIB18: Protection of Natural Heritage and the Environment</p>	<p>It is Council policy to protect and conserve the environment including, in particular, the natural heritage of the County and to conserve and manage Nationally and Internationally important EU designated sites – such as Special Protection Areas, candidate Special Areas of Conservation, proposed Natural Heritage Areas and Ramsar sites – as well as non-designated areas of high nature conservation value which serve as “stepping stones” for the purposes of the Habitats Directive.</p>
<p>Policy Objective GIB19: Habitats Directive</p>	<p>It is a Policy Objective to ensure the protection of natural heritage and biodiversity, including European Sites that form part of the Natura 2000 network, in accordance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and Guidelines.</p>
<p>Policy Objective GIB21: Designated Sites</p>	<p>It is a Policy Objective to protect and preserve areas designated as proposed Natural Heritage Areas, Special Areas of Conservation, and Special Protection Areas. It is Council policy to promote the maintenance and as appropriate, delivery of ‘favourable’ conservation status of habitats and species within these areas.</p>
<p>Policy Objective GIB22: Non-Designated Areas of Biodiversity Importance</p>	<p>It is a Policy Objective to protect and promote the conservation of biodiversity in areas of natural heritage importance outside Designated Areas and to ensure that notable sites, habitats and features of biodiversity importance - including species protected under the Wildlife Acts 1976 and 2000, the Birds Directive 1979, the Habitats Directive 1992, Birds and Habitats Regulations 2011, Flora (Protection) Order, 2015, Annex I habitats, local important areas, wildlife corridors and rare species - are adequately protected. Ecological assessments will be carried out for all developments in areas that support, or have potential to support, features of biodiversity importance or rare and protected species and appropriate mitigation/avoidance measures will be implemented. In implementing this policy, regard shall be had to the Ecological Network, including the forthcoming DLR Wildlife Corridor Plan, and the recommendations and objectives of the Green City Guidelines (2008) and ‘Ecological Guidance Notes for Local Authorities and Developers’ (Dún Laoghaire-Rathdown Version 2014).</p>
<p>Policy Objective GIB23: County Wide Ecological Network</p>	<p>It is a Policy Objective to protect the Ecological Network which will be integrated into the updated Green Infrastructure Strategy and will align with the DLR County Biodiversity Action Plan. Creating this network throughout the County will also improve the ecological coherence of the Natura 2000 network in accordance with Article 10 of the Habitats Directive. The network will also include non-designated sites.</p>
<p>Policy Objective GIB24: Rivers and</p>	<p>It is a Policy Objective to maintain and protect the natural character and ecological value of the river and stream corridors in the County and where</p>

Waterways	possible to enhance existing channels and to encourage diversity of habitat and nature-based solutions that incorporate biodiversity features. It is also policy (subject to the sensitivity of the riverside habitat), to provide public access to riparian corridors, to promote improved passive recreational activities.
Policy Objective GIB25: Hedgerows	It is a Policy Objective to retain and protect hedgerows in the County from development, which would impact adversely upon them. In addition, the Council will promote the protection of existing site boundary hedgerows and where feasible require the retention of these when considering a grant of planning permission for all developments. The Council will promote the County's hedgerows by increasing coverage, where possible, using locally native species and to develop an appropriate code of practice for road hedgerow maintenance. The Council will promote the protection of existing hedgerows when considering a grant of planning permission for all developments.
Policy Objective GIB28: Invasive Species	It is a Policy Objective to prepare an 'Invasive Alien Species Action Plan' for the County which will include actions in relation to Invasive Alien Species (IAS) surveys, management and treatment and to also ensure that proposals for development do not lead to the spread or introduction of invasive species. If developments are proposed on sites where invasive species are or were previously present, the applicants will be required to submit a control and management program for the particular invasive species as part of the planning process and to comply with the provisions of the European Communities Birds and Habitats Regulations 2011 (S.I. 477/2011).
Policy Objective GIB29: Nature Based Solutions	It is a Policy Objective to increase the use of Nature Based Solutions (NBS) within the County, and to promote and apply adaption and mitigation actions that favour NBS, which can have multiple benefits to the environment and communities. NBS has a role not only to meet certain infrastructure related needs (e.g. flooding management), and development needs, but also to maintain or benefit the quality of ecosystems, habitats, and species.

Table 2 – Local Policies Relevant to Ecology and Nature Conservation

Heritage Plans

Ireland's National Biodiversity Plan identifies actions that need to be taken in order to understand and protect biodiversity in Ireland. It states that biodiversity and ecosystems in Ireland should be conserved and restored, to deliver benefits that are essential to all sectors of society and that Ireland should contribute to the efforts to halt the loss of biodiversity and the degradation of ecosystems in the EU and globally.

The Dún Laoghaire-Rathdown Heritage Plan 2021-2025 and the Dún Laoghaire-Rathdown Biodiversity Action Plan 2021-2025 also identify a number of objectives and policies in order to protect the natural heritage and biodiversity of the Dún Laoghaire-Rathdown area.

2. METHODOLOGY

This EclA has been prepared having regards to the following guidelines:

- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (Department of Housing, Planning & Local Government, 2018).
- Guidelines for Ecological Impact Assessment in the UK and Ireland, (Chartered Institute of Ecology and Environmental Management) (CIEEM, 2018, updated 2022).
- Ecological Impact Assessment (EclA) Checklist (CIEEM, 2019)
- Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report (European Commission, 2017).
- Guide to Habitats in Ireland (Fossitt, 2000).
- Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, 2022).
- Guidelines for Assessment of Ecological Impacts of National Roads Schemes: Revision 2 (National Roads Authority, 2009).
- Best Practice Guidance for Habitat Survey and Mapping (Smith et al., 2011).

2.1 STATEMENT OF COMPETENCY

The EclA report was compiled by Noreen McLoughlin MCIEEM. Noreen is the principal ecologist at Whitehill Environmental. Noreen holds a BA (Hons) in Natural Science (Mod) Zoology and an MSc in Freshwater Ecology (TCD, Dublin). She has been a full member of the CIEEM (Chartered Institute of Ecology and Environmental Management) for over 18 years. Noreen has over 20 years' experience as a professional ecologist in Ireland.

2.2 STUDY AREA / ZONE OF INFLUENCE

The study area encompassed the entire area of land within the former Boylan Centre in Dún Laoghaire. Any important ecological habitats, species and receptors outside this area yet within the Zone of Influence of the proposed development were also considered.

The Zone of Influence (Zol) is a distance within which the proposed works could affect key ecological receptors. The Zol is likely to vary for each receptor, and ultimately it will depend on the source and type of the impact, the longevity of the impact, the sensitivity of the receptor and the presence of a pathway between the two. In this instance, the most significant impacts will arise from the construction works and the potential for these to generate pollution to local surface waters, along with habitat loss and disturbance of habitats and species

2.3 DESK BASED STUDIES

The desk study involved the examination of aerial photographs, current and historical maps and plans and drawings of the site. In addition, information was collated on designated nature sites within a 15km or 5km radius of the proposed site and on protected and rare species within the 1km square of the site.

The following websites were used to access information and data:

- National Parks and Wildlife Service - Aerial photographs and maps of designated sites, information on habitats and species within these sites and information on protected plant or animal species, conservation objectives, site synopses and standard data forms for relevant designated sites.
- Environmental Protection Agency (EPA)- Information pertaining to water quality, geology and licensed facilities within the area;
- Myplan.ie – Mapped based information;
- National Biodiversity Data Centre (NBDC) – Information pertaining to protected plant and animal species within the study area;
- Bing maps & Google Street View – High quality aerials and street images;
- Traynor Environmental Ltd – Plans and Information Pertaining to the Development
- Dún Laoghaire–Rathdown County Council – Plans and Supplementary Information on the Proposed Development

2.4 FIELD BASED STUDIES

Habitats and Flora

Habitats within the site were previously assessed by personnel from Traynor Environmental in July 2024. The site was surveyed in accordance with the Heritage Council's *Habitat Survey Guidelines* (Smith et al., 2010) and the Institute of Environmental Assessment's *Guidelines for Baselines Ecological Assessment* (IEA, 1995). Habitats within the development site were classified in accordance to Level 3 of *A Guide to Habitats in Ireland* (Fossit, 2000). These habitats are denoted in the text along with their habitat code, e.g., the habitat code for improved agricultural grassland is GA1.

Bats

Day Time Surveys

A day time bat survey of the site was carried out on May 1st 2025 by Dr Tina Aughney of Bat Eco Services. This survey was carried out to determine if the buildings on site have bat roost potential.

Dusk Surveys

Dusk surveys of the centre were completed on the 8th and 12th May 2025. The surveys started 15 minutes prior to sunset and were undertaken for 2 hours of surveying. Surveys were completed during mild and dry weather conditions.

The following handheld bat detectors were used:

- Surveyor 1: Anabat Walkabout Full Spectrum Bat Detector.
- Surveyor 2: Elekon Bat Logger M2 Full Spectrum Bat Detector

A Night Vision Aids (NVA) was also used to support dusk surveys. The following NVA was used:

- A Guide TrackIR Pro25 thermal imagery scope.

Preparation for dusk survey started approximately 60 minutes prior to sunset and the following actions were undertaken:

- Re-inspection of building to be surveyed to determine surveyor and filming locations (external and internal (where possible) inspections).
- Internal inspection of building (applicable only to derelict structures and agricultural buildings) to document any visible bats or audible noises (bats are more audible prior to dusk activity).
- Positioning of filming equipment and surveyor.
- Completion of dusk survey.
- Post surveys, a repeat internal inspection of the surveyed building was undertaken (only applicable only to derelict structures and agricultural buildings) to document any visible bats within the structure.

All audio files recorded by full spectrum bat detectors were analysed using Wildlife Acoustics Kaleidoscope Pro and validation of bat records was completed by the principal bat surveyor prior to mapping. This data was then entered onto an Excel file for mapping.

All filming was watched post surveys and any emerging bats were noted and compared to audio recordings also recorded by surveyors.

Static Surveys

Static bat surveys involved leaving a static bat detector unit (with ultrasonic microphone) in a specific location, set to record for a specified period of time (i.e. a bat detector is left in the field, there is no observer present and bats which pass near enough to the monitoring unit are recorded and their calls are stored for analysis post surveying). The bat detector was effectively used as a bat activity data logger. This results in a far greater sampling effort over a shorter period of time and increases the opportunity to record less common bat species as the units are set to continuously record ultrasonic noise, when triggered, from 30 minutes for sunset to 30 minutes after sunrise.

The microphones were positioned horizontally to prevent rain damage, and static bat detectors recorded echolocation calls in real time, storing sonograms on SD cards for later analysis. Data were expressed as graphs showing bat passes per species per night, representing activity levels rather than individual bats, as species such as pipistrelles often generate multiple passes while Leisler's bats typically pass through quickly. Recordings were analysed using *Wildlife Acoustics Kaleidoscope Pro*, with manual verification by a bat specialist following strict quality checks: at least 20% of *Pipistrellus* spp. and Leisler's bat calls, and all *Nathusius' pipistrelle*, *brown long-eared bat*, *Myotis* spp., and "Unidentified" calls were manually reviewed. Each file was counted as one bat pass, with results presented as the average number of passes per survey night. Three *SongMeter Mini Bat 2 FS* units with full-spectrum SMM-U2 microphones were deployed—one inside the building and two outside. One external unit on a nearby roof was removed after one night for security reasons. The survey took place from 1–7 May 2025.

2.5 CONSTRAINTS OF THE STUDY

The habitats within the site were assessed in July 2024 and given the limited extent of natural or semi-natural habitats present, the timing of the survey did not present any constraints to the assessment. Similarly, the bat survey was undertaken at an optimum seasonal period, and no temporal limitations or constraints were identified in relation to survey timing.

2.6 ASSESSMENT METHODOLOGY

Evaluation of Ecological Features

The methodologies used to determine the value of ecological resources, to characterise the impacts of the proposed scheme, and to assess the significance of impacts and any residual effects are described below. This approach is in accordance with EPA guidance and the CIEEM's (Chartered Institute of Ecology and Environmental Management) guidelines.

CIEEM suggest that to ensure a consistency of approach, ecological features are valued in accordance with their geographical frame of reference, as defined below:

- International
- National (Ireland)
- Regional (East)
- County (Dublin / Dún Laoghaire-Rathdown)
- Local/Townland (Sussex St, Eblana Ave)

The above categories are then applied to the ecological features identified. Ecological features can be defined as:

- Designated sites (i.e., SACs, SPAs, NHAs, pNHAs, National Nature Reserves) or non-statutory locally designated sites and features.
- Non-designated sites and habitats and features of recognised biodiversity value, such as rivers and streams. The features being evaluated can be considered in the context of the site and locality and thus a more accurate assessment of the impacts in the locality can be made.

Assessment of Impacts

The assessment of potential ecological impacts has been carried out using guidelines published by the EPA and the CIEEM. They can be summarised as:

- The identification of the range of potential impacts which can reasonably be expected to occur should the proposed developments receive planning consent;
- The consideration of the systems and processes in place to avoid, reduce and mitigate the possible effects of these impacts;
- The identification of opportunities for ecological enhancement within the site.

Impacts are defined as being positive, negative or neutral. A significant impact is defined as an impact upon the integrity of a defined ecosystem and/or the conservation status of a habitat or species within a given area.

Where a potential negative impact has been identified, mitigation measures have been formulated using best practices techniques and guidance to prevent, reduce or offset the impact.

3. DEVELOPMENT DESCRIPTION

Dun Laoghaire Rathdown County Council have indicated their intention to undertake the development of a new residential scheme on a site at the former Boylan Centre at Sussex Street and Elblana Ave, Dún Laoghaire, Co. Dublin.

The works will include:

"Proposed demolition of community building at 10 Eblana Avenue and demolition of community and commercial building and removal of on-street parking at 10 Sussex Street. Construction of a new community facility and housing development comprising of 39nr. 1-bed apartments, 16nr. 2-bed apartments and 4nr. 3-bedroom houses and provision of 1nr. accessible parking space, an accessible drop-off area, 66nr. cycle parking spaces and all associated site works.

An extract from the planning drawings as submitted is shown in Figure 1.



Figure 1 – Extract from Planning Drawings

Foul Water Treatment

It is proposed to discharge the foul water from the proposed apartment block development into the existing public foul sewer network. There are existing 300mm diameter VC foul sewer lines along Sussex Street & Eblana Avenue. It is proposed that foul water from the apartment block will be discharged into the Sussex Street Sewer and the individual dwelling lines will discharge into the Eblana Avenue Line. A Pre-Connection Enquiry form was submitted to Uisce Éireann for 55 Apartments & 4 Houses units, which outlined the proposals for the drainage of wastewater from the development. Uisce Éireann responded with the Confirmation of Feasibility (COF) on 16th October 2025 with a CDS reference number of CDS25006806.

Surface water Treatment

Information on the surface water proposals for the site have been presented in the Drainage Report that has been prepared by Curtins. The surface water drainage design and SuDS Assessment carried out has been undertaken in compliance with the requirements of the DLR County Development Plan 2022- 2028 and CIRIA documents. Surface water will be attenuated as necessary and discharged to the existing public surface water network along Sussex Street into the existing 300mm diameter VC combined sewer. In accordance with the GDSDS it is proposed to limit the discharge from the development site to the equivalent of the pre-development greenfield run-off for the site. The following methods will be employed:

Source Control - Source control is the treatment and management of surface water as close to where the water falls as possible. Green Roofs on each of the apartment buildings, bio retention tree pits, permeable paving and filter drains will be used to provide treatment to surface water at source and will also reduce surface water run-off in low storm events.

Attenuation Tank - An attenuation tank is proposed within the landscaping area of the subject site. The STORMTECH SC-740 attenuation tank consists of a below ground storage area with a top bank level of 18.00 m OD Malin. The bottom of the tank is set at 16.05 m OD Malin.

4. RECEIVING ENVIRONMENT

This section provides an overview of the existing ecological conditions within the site and the surrounding environment.

4.1 SITE LOCATION & GENERAL DESCRIPTION

The application site is 0.25ha and it encompasses the site of the former Boylan Centre. The site is located in Dun Laoghaire town centre, to the north of George’s St Lower. The site is bounded to the east by Sussex St, by Eblana Avenue and neighbouring residential units to the north, by the grounds of St Michael’s Hospital to the west and by a local access road to the south.

Under the Dún Laoghaire-Rathdown County Council Development Plan, the Zoning Objective of the Site is MTC, i.e., *to protect, provide for and-or improve major town centre facilities.*

Site location maps can be seen in Figures 2 and 3.

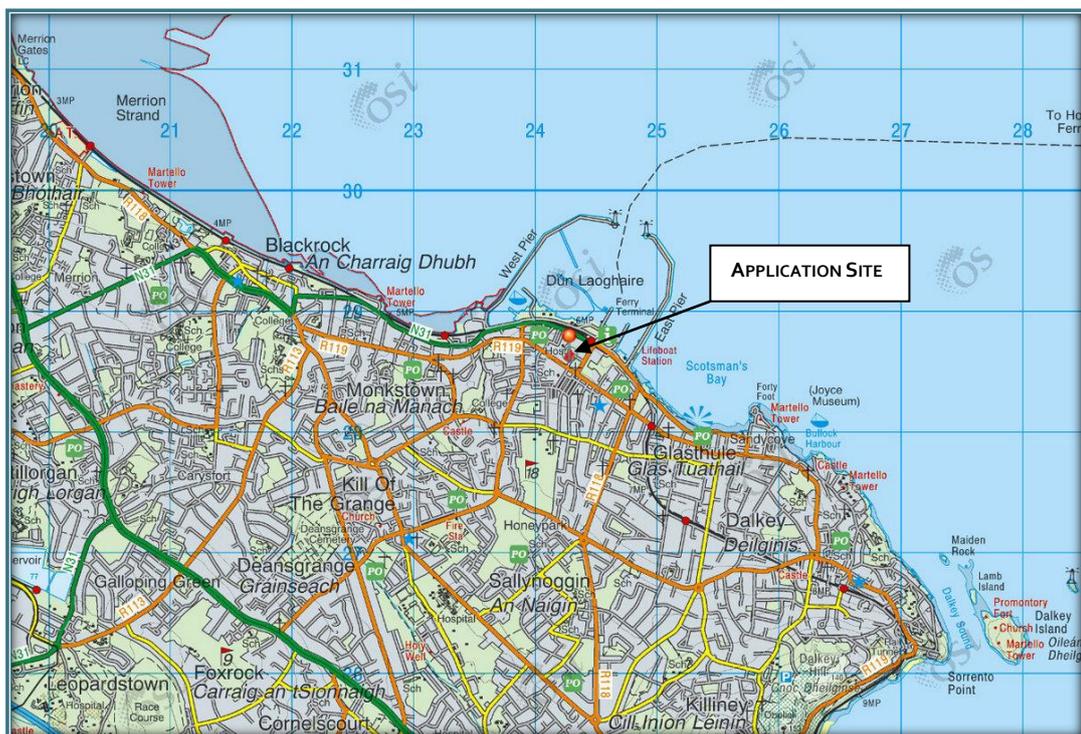


Figure 2 – Site Location Map (Site Entrance Location is Indicated)

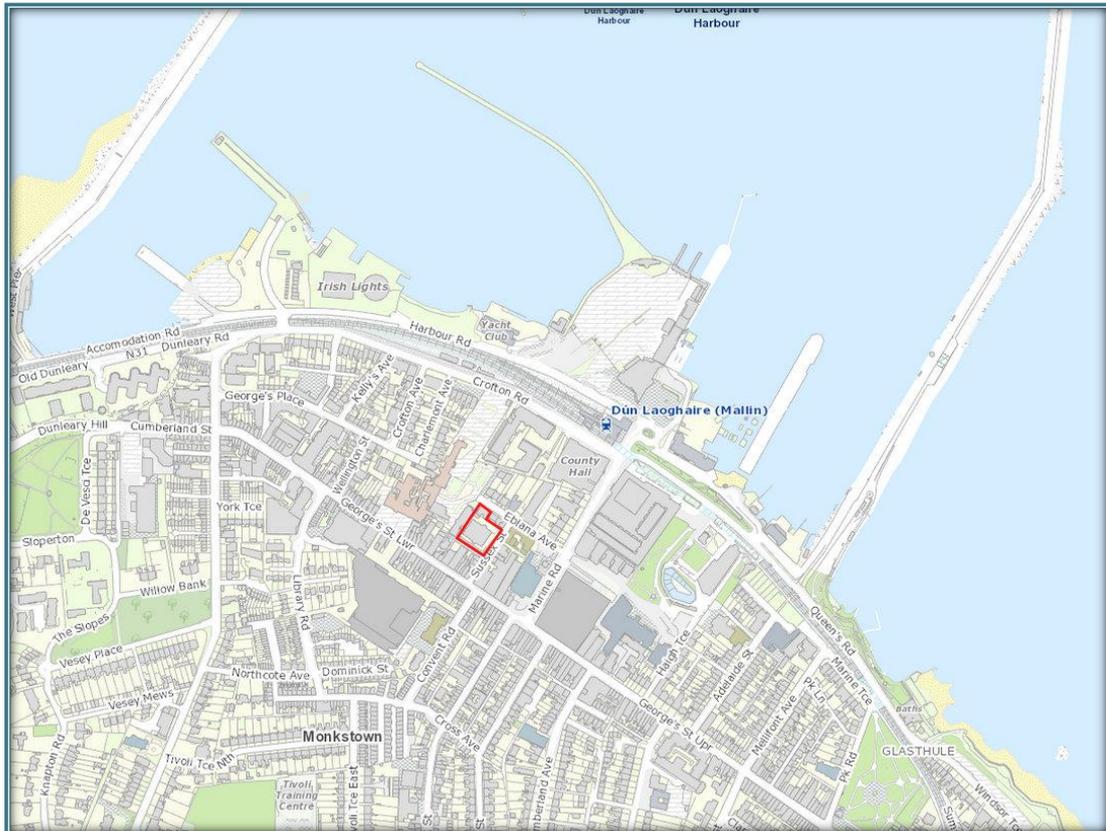


Figure 3 – Site Location Map. Application Site is Outlined in Red.

The main habitats surrounding the site were assessed using up-to-date aerial photographs (Google, OSI, Bing Maps). The site is located in an urban environment and the main habitats represented locally include buildings and artificial surfaces (mostly residential and commercial areas, along with roads and car parks), amenity gardens and grasslands, and scattered trees and parkland. The marine and coastal habitats of Dún Laoghaire harbour are within 300m north of the site.

An overview of the local habitats can be seen in the aerial photograph in Figure 4.

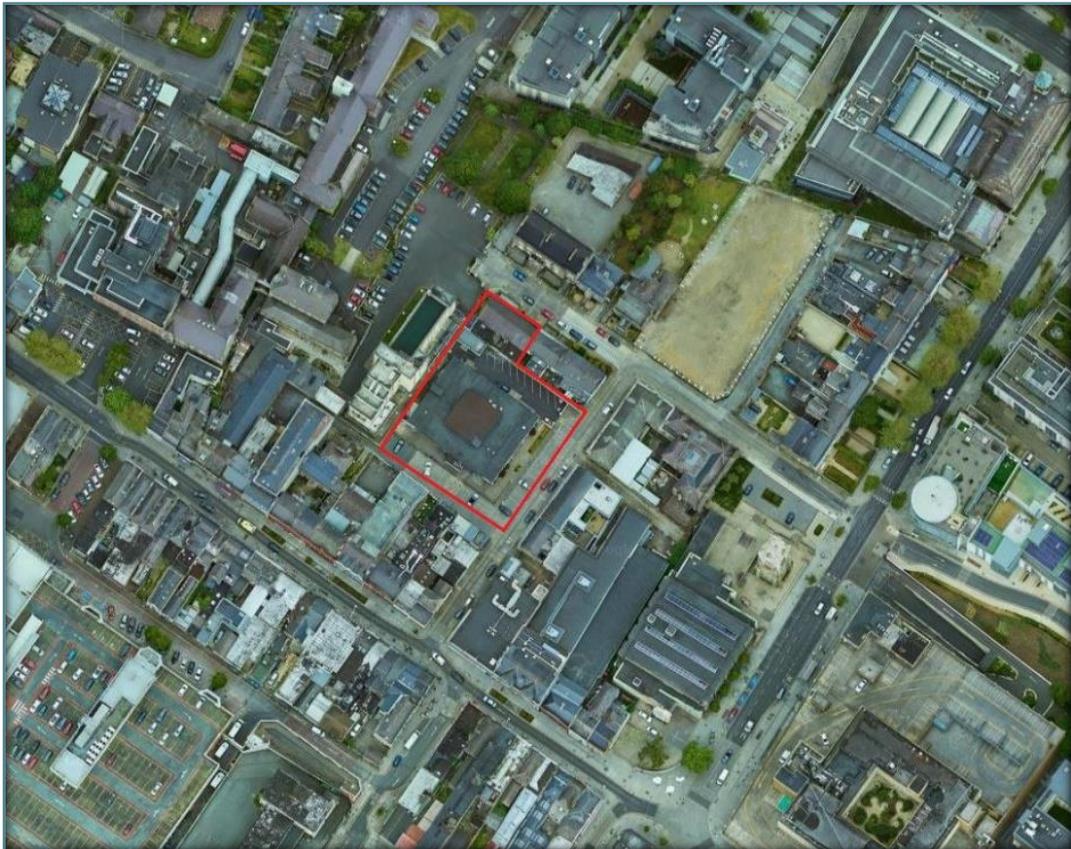


Figure 4 –Aerial Photograph Showing Habitats Surrounding the Site (© Google)

4.2 DESIGNATED SITES

Natura 2000 Sites

The proposed application site is not within or immediately adjacent to any site that has been designated as a Special Area of Conservation (SAC) or a Special Protection Area (SPA) under the EU Habitats or EU Birds Directive.

A total of eighteen Natura 2000 designated sites lie within the potential Zone of Influence (Zoi) of the application site. In line with the Habitats Directive and the precautionary principle, the Zoi for this assessment was extended to include all designated sites within 15 km of the proposed development, as well as sites beyond 15 km where a potential hydrological connection exists. This approach ensures that any possible pathways—however indirect or remote—are fully considered. These sites are summarised in Table 2. The location of the application site in relation to these designated areas is shown in Figure 6 and a full synopsis of these sites can be read online on the website of the National Parks and Wildlife Service (www.npws.ie).

Site Name & Code	Distance from Site	Qualifying Interests	Potential Connectivity
South Dublin Bay and River Tolka Estuary SPA 004024	714m north-west	<ul style="list-style-type: none"> • Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) • Oystercatcher (<i>Haematopus ostralegus</i>) • Ringed Plover (<i>Charadrius hiaticula</i>) • Grey Plover (<i>Pluvialis squatarola</i>) • Knot (<i>Calidris canutus</i>) • Sanderling (<i>Calidris alba</i>) • Dunlin (<i>Calidris alpina</i>) • Bar-tailed Godwit (<i>Limosa lapponica</i>) • Redshank (<i>Tringa totanus</i>) • Black-headed Gull (<i>Chroicocephalus ridibundus</i>) • Roseate Tern (<i>Sterna dougallii</i>) • Common Tern (<i>Sterna hirundo</i>) • Arctic Tern (<i>Sterna paradisaea</i>) • Wetland and Waterbirds 	None
South Dublin Bay SAC 000210	1.1km north-west	<ul style="list-style-type: none"> • Mudflats and sandflats not covered by seawater at low tide • Annual vegetation of drift lines • Salicornia and other annuals colonising mud and sand • Embryonic shifting dunes 	None
Rockabill to Dalkey Island SAC 003000	3.1km east	<ul style="list-style-type: none"> • Reefs • <i>Phocoena phocoena</i> (Harbour Porpoise) 	None
Dalkey Island SPA 004172	3.2km south-east	<ul style="list-style-type: none"> • Roseate Tern (<i>Sterna dougallii</i>) • Common Tern (<i>Sterna hirundo</i>) • Arctic Tern (<i>Sterna paradisaea</i>) 	None
North-West Irish Sea SPA 004236	5.6km north	<ul style="list-style-type: none"> • Red-throated Diver(<i>Gavia stellata</i>) • Great Northern Diver(<i>Gavia immer</i>) • Fulmar(<i>Fulmarus glacialis</i>) • Manx Shearwater(<i>Puffinus puffinus</i>) • Cormorant(<i>Phalacrocorax carbo</i>) • Shag(<i>Phalacrocorax aristotelis</i>) • Common Scoter(<i>Melanitta nigra</i>) • Little Gull(<i>Larus minutus</i>) • Black-headed Gull(<i>Chroicocephalus ridibundus</i>) • Common Gull(<i>Larus canus</i>) • Lesser Black-backed Gull(<i>Larus fuscus</i>) 	None

		<ul style="list-style-type: none"> • Herring Gull(<i>Larus argentatus</i>) • Great Black-backed Gull(<i>Larus marinus</i>) • Kittiwake(<i>Rissa tridactyla</i>) • Roseate Tern(<i>Sterna dougallii</i>) • Common Tern(<i>Sterna hirundo</i>) • Arctic Tern(<i>Sterna paradisaea</i>) • Little Tern(<i>Sterna albifrons</i>) • Guillemot(<i>Uria aalge</i>) • Razorbill(<i>Alca torda</i>) • Puffin(<i>Fratercula arctica</i>) 	
North Bull Island SPA 004006	5.7km north	<ul style="list-style-type: none"> • Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) • Shelduck (<i>Tadorna tadorna</i>) • Teal (<i>Anas crecca</i>) • Pintail (<i>Anas acuta</i>) • Shoveler (<i>Anas clypeata</i>) • Oystercatcher (<i>Haematopus ostralegus</i>) • Golden Plover (<i>Pluvialis apricaria</i>) • Grey Plover (<i>Pluvialis squatarola</i>) • Knot (<i>Calidris canutus</i>) • Sanderling (<i>Calidris alba</i>) • Dunlin (<i>Calidris alpina</i>) • Black-tailed Godwit (<i>Limosa limosa</i>) • Bar-tailed Godwit (<i>Limosa lapponica</i>) • Curlew (<i>Numenius arquata</i>) • Redshank (<i>Tringa totanus</i>) • Turnstone (<i>Arenaria interpres</i>) • Black-headed Gull (<i>Chroicocephalus ridibundus</i>) • Wetland and Waterbirds 	None
North Dublin Bay SAC 000206	5.7km north	<ul style="list-style-type: none"> • Mudflats and sandflats not covered by seawater at low tide • Annual vegetation of drift lines • Salicornia and other annuals colonising mud and sand • Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>) • Mediterranean salt meadows (<i>Juncetalia arenaria</i>) • Embryonic shifting dunes • Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) • Fixed coastal dunes with herbaceous vegetation (grey dunes) • Humid dune slacks <ul style="list-style-type: none"> • <i>Petalophyllum ralfsii</i> (Petalwort) 	None
Howth Head SAC 000202	8.3km north	<ul style="list-style-type: none"> • Vegetated sea cliffs off the Atlantic and Baltic Coasts 	None

		<ul style="list-style-type: none"> • European dry heaths 	
Howth Head Coast SPA 004113	9.3km north	<ul style="list-style-type: none"> • Kittiwake <i>Rissa tridactyla</i> 	None
Ballyman Glen SAC 000713	9.7km south	<ul style="list-style-type: none"> • Petrifying springs with tufa formation (Cratoneurion) • Alkaline fens 	None
Knocksink Wood SAC 000725	10.1km south	<ul style="list-style-type: none"> • Petrifying springs with tufa formation (Cratoneurion) • Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, <i>Alnion incanae</i>, <i>Salicion albae</i>) 	None
Baldoyle Bay SAC 000199	11km north	<ul style="list-style-type: none"> • Mudflats and sandflats not covered by seawater at low tide • Salicornia and other annuals colonising mud and sand • Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) • Mediterranean salt meadows (<i>Juncetalia maritimi</i>) 	None
Baldoyle Bay SPA 004016	11km north	<ul style="list-style-type: none"> • Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) • Shelduck (<i>Tadorna tadorna</i>) • Ringed Plover (<i>Charadrius hiaticula</i>) • Golden Plover (<i>Pluvialis apricaria</i>) • Grey Plover (<i>Pluvialis squatarola</i>) • Bar-tailed Godwit (<i>Limosa lapponica</i>) • Wetland and Waterbirds 	None
Bray Head SAC 000714	11.2km south	<ul style="list-style-type: none"> • Vegetated sea cliffs of the Atlantic and Baltic coasts • European dry heaths 	None
Wicklow Mountains SAC 002122	11.3km south-west	<ul style="list-style-type: none"> • Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) • Natural dystrophic lakes and ponds • Northern Atlantic wet heaths with <i>Erica tetralix</i> • European dry heaths • Alpine and Boreal heaths • Calaminarian grasslands of the <i>Violetalia calaminariae</i> • Species-rich <i>Nardus</i> grasslands, on siliceous 	None

		<p>substrates in mountain areas (and submountain areas, in Continental Europe)</p> <ul style="list-style-type: none"> • Blanket bogs (* if active bog) • Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) • Calcareous rocky slopes with chasmophytic vegetation • Siliceous rocky slopes with chasmophytic vegetation • Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles • <i>Lutra lutra</i> (Otter) 	
Wicklow Mountains SPA 004040	11.6km south-west	<ul style="list-style-type: none"> • Merlin (<i>Falco columbarius</i>) • Peregrine (<i>Falco peregrinus</i>) 	
Ireland's Eye SPA 004117	12.3km north	<ul style="list-style-type: none"> • Cormorant (<i>Phalacrocorax carbo</i>) • Herring Gull (<i>Larus argentatus</i>) • Kittiwake (<i>Rissa tridactyla</i>) • Guillemot (<i>Uria aalge</i>) • Razorbill (<i>Alca torda</i>) 	
Ireland's Eye SAC 002193	12.7km north	<ul style="list-style-type: none"> • Perennial vegetation of stony banks • Vegetated sea cliffs off the Atlantic and Baltic Coasts 	

Table 2 – Natura 2000 Sites Within 15km of the Proposed Site

The generic conservation objectives of these sites are:

To maintain or restore the favourable conservation condition of the species listed as Special Conservation Interests for this SAC / SPA.

The favourable conservation status of a habitat is achieved when:

- Its natural range and area it covers within that range is stable or increasing and the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future;
- The conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- The population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future;

Nationally Important Sites

The application site is not within or immediately adjacent to any nationally designated site, such as a Natural Heritage Area or a proposed Natural Heritage Area. It is within 5km of two sites that have been designated as proposed Natural Heritage Areas. These are summarised in Table 3 and a map showing their location relative to the application site is shown in Figure 6.

Site Name	Distance from Proposed Development
Dalkey Coastal Zone and Killiney Hill pNHA 001206	478m east
South Dublin Bay pNHA 000210	471m north-west

Table 3 – Nationally Important Sites within 5km of the Proposed Development

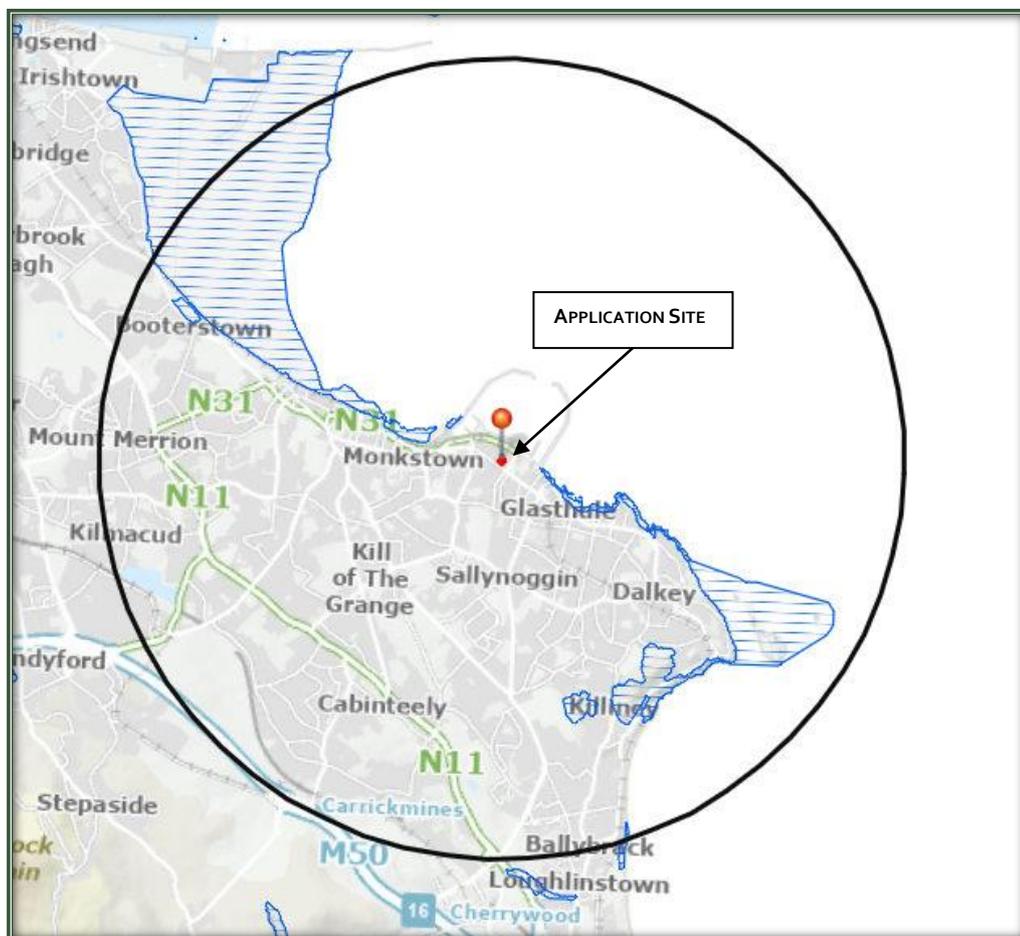


Figure 6 – The Proposed Application Site at Dun Laoghaire in Relation to proposed Natural Heritage Areas (Blue Cross Hatching)

4.3 FLORA AND FAUNA

Habitats within the Study Area

No part of the site lies within any area designated for nature conservation purposes. The application site is entirely brownfield and encompasses an existing derelict community centre and surrounding car park areas and paths. All proposed development works within the application site will take place on areas of zero to low biodiversity value. A close-up aerial photograph showing the habitats on site is presented in Figure 7.

The only habitat within the application site is Buildings and Artificial Surfaces (Fossitt Code BL₃), i.e., the existing buildings and surrounding paths. Small pockets of ground within the site have been colonised by ruderal species typical of this urban setting. The most common scattered species noted included:

- Buddleia (*Buddleja davidii*)
- Red valerian (*Centranthus ruber*)
- Dandelion (*Taraxacum vulgaria*)
- Greater willowherb (*Epilobium hirsutum*)
- Ivy (*Hedera helix*)

All of these species are growing on or through artificial surfaces, or along the fences and walls at the perimeters of the site. There are also some small ornamental flower beds to the front of the site (Flower Beds and Borders BC₄).

There are no habitats of biodiversity value within the site.

Overall Evaluation of Habitats within the Site

Overall, the biodiversity of the application site can be considered as low, as the site is dominated by artificial surfaces. There are no botanical features on the site of any scientific interest and there are no habitats of biodiversity value on the site.

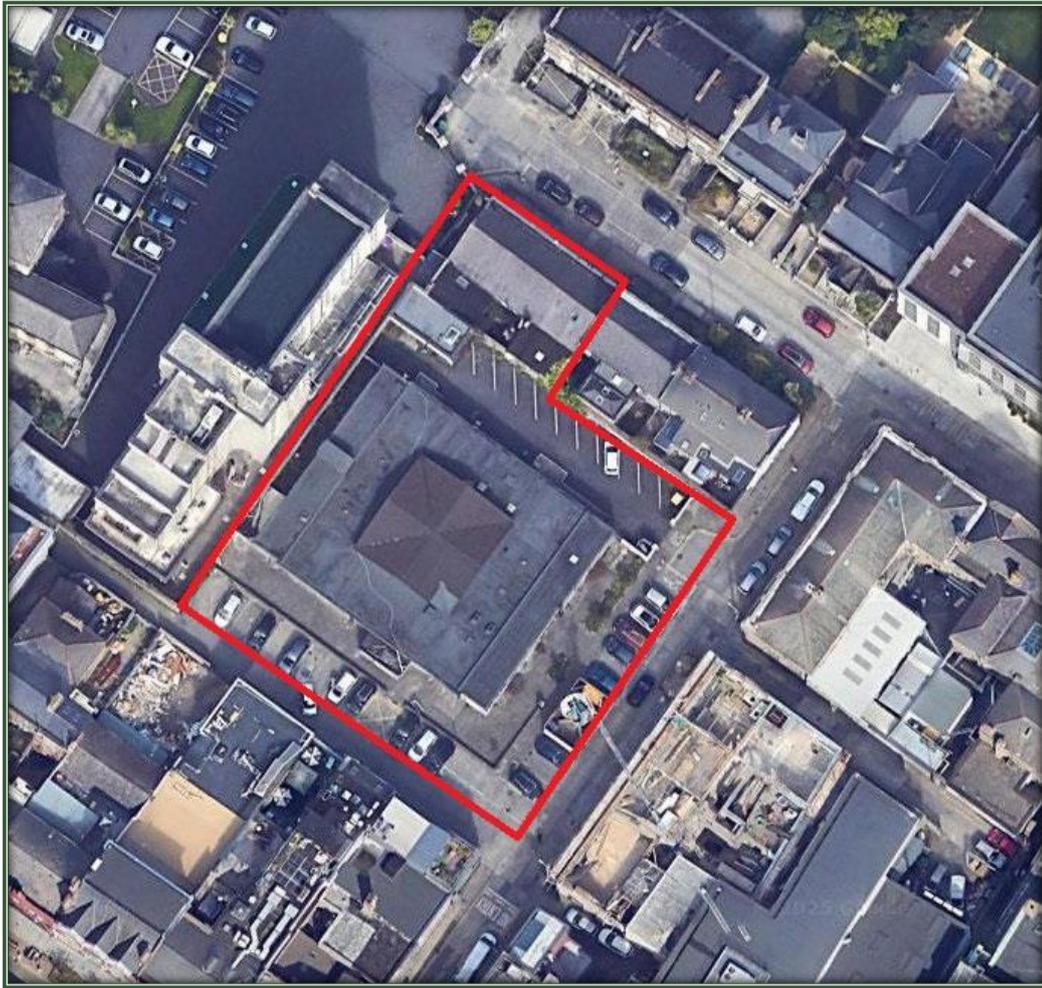


Figure 7 – Close Up Aerial Showing the Main Habitats on the Site

Rare and Protected Plant Species

An examination of the website of the National Parks and Wildlife, the National Biodiversity Data Centre and the Online Atlas of Vascular Plants for Ireland revealed that there are no records for any plant species protected under the Flora Protection Order from within the 1km square (O2428) of the proposed application sites.

Invasive Species

There is a small stand of Japanese knotweed growing out of a planter on the site. Japanese knotweed is a non-native invasive species that is listed in Schedule Three of the Birds and Habitats Regulations (2011).

4.4 FAUNA

Protected Mammals

Records from the National Biodiversity Data Centre reveal the presence of the following mammal species from within the 1km square (O2428) of this proposed application site:

- Brown Rat (*Rattus norvegicus*)
- Common Pipistrelle (*Pipistrellus pipistrellus sensu stricto*)
- Grey Squirrel (*Sciurus carolinensis*)
- Leisler's Bat (*Nyctalus leisleri*)
- Pipistrelle (*Pipistrellus pipistrellus sensu lato*)
- Red Fox (*Vulpes vulpes*)

Of these species, only the three bat species are protected under the Irish Wildlife Acts. Grey squirrel is a non-native invasive species that is listed in Schedule Three of the Birds and Habitats Regulations.

Bats

The results of the bat survey carried out by Dr Tina Aughnet revealed that one bat species was recorded and this was the common pipistrelle. No bats were recorded roosting in the centre but bats were recorded commuting within the survey area. The overall level of bat activity was deemed to be low. Common pipistrelle is one of the three most common bat species in Ireland and this species was recorded at a low level of bat activity.

The survey results indicate that the site is not an important area for local bat populations

Birds

No dedicated bird survey was undertaken; however, given the nature of habitats within the site and the highly urbanised surroundings, the site is considered unlikely to be of significant value to any protected bird species.

4.5 AQUATIC ENVIRONMENT

Water Features and Quality

The application site lies within the Liffey and Dublin Bay Hydrometric Area (09) and Catchment (09), the Dodder Sub-Catchment (010) and the Brewery Stream Sub-Basin (010). There are no watercourses within or adjacent to the application site. The closest water feature to the site is Dún Laoghaire harbour itself and the open water habitats of the harbour are 280m north of the application site. There is no hydrological connectivity between the application site and Dún Laoghaire Harbour or any other water feature.

The EPA have classified the ecological status of the Dublin Bay at Dún Laoghaire as good. Under the requirements of the Water Framework Directive, this is satisfactory and this status must be maintained. All watercourses are obliged to meet good ecological status within the timeframe set out in this directive.

The site is within the Kilcullen Groundwater Body and the current status of this is noted to be good. Groundwater vulnerability throughout the site is noted to be moderate.

4.6 ECOLOGICAL EVALUATION

Summary of the Value of the Application Site

The site at Sussex St and Eblana Ave is within 15km / potential Zone of Influence of eighteen sites designated under the Natura 2000 network. There is no connectivity (source-pathway-receptor linkage) between the application site and any SAC / SPA. An AA screening report was completed for this proposed development as required under Article 6 (3) of the Habitats Directive. This report concluded that the proposed development would not have any significant effects upon any site designated under the Natura 2000 network.

The site is also within 15km of two sites designated as Natural Heritage Areas (NHAs and pNHAs). There is no connectivity (source-pathway-receptor linkage) between the application site and any pNHA / NHA.

Within the application site itself, the habitats are dominated by Buildings And Artificial Surfaces. The habitats within the site are considered to be of low ecological value.

The site is not considered to be of high value to terrestrial mammals, bats or birds.

There are no watercourses on the site.

Overall, the ecological and biodiversity value of the site is considered to be low.

5. POTENTIAL IMPACTS

5.1 INTRODUCTION

The identification of potential impacts and the assessment of their significance typically requires the identification of the type and magnitude of the impacts. For example, will the impacts be short term or long term, direct, indirect or cumulative and will they occur during construction or operation of the development. This section will establish whether ecological impacts of the proposed development in Dún Laoghaire are likely to occur and whether or not they are significant. These potential impacts will be examined with respect to the ecological receptors identified in the previous section.

5.2 IMPACTS UPON DESIGNATED SITES

The Appropriate Assessment Screening report submitted concluded that the proposed development at Dún Laoghaire will have no direct, indirect or cumulative impacts upon any site designated as a Special Area of Conservation or Special Protection Area. It is also considered unlikely that the proposed development will have any impacts upon sites designated as a proposed Natural Heritage Area. There will be no impacts upon these sites, their habitats or species arising from habitat loss or habitat fragmentation.

5.3 IMPACTS WITHIN THE APPLICATION SITE

Development Phase

The following developmental impacts upon the ecological receptors in the site have been considered below.

Habitats and Flora

All construction works will occur within an existing brownfield site and will involve the demolition of existing structures followed by the construction of replacement buildings within the same footprint. As no habitats of ecological or biodiversity value are present, no habitat loss or adverse impacts on flora are anticipated.

Mammals (Terrestrial)

The site is not considered to be of high value to mammals. No impacts upon any protected terrestrial mammal species are anticipated during the construction phase of this project.

Bats

The site is of low value to bats and significant effects upon bats will not arise.

Birds

The site is of low value to bats and significant effects upon birds will not arise.

Water Quality

There are no watercourses on site, and pollution to surface water during construction will not arise.

Operational Phase

Habitats and Flora

No operational negative effects anticipated.

The additional landscaping of the site to include nature-based solutions for surface water management offers some opportunity for biodiversity enhancements within the site. Nature based solutions will offer a positive benefit for ecology and biodiversity within the site.

Mammals (Terrestrial)

The site is not considered to be of high value to mammals. No impacts upon any protected terrestrial mammal species are anticipated during the operation of the site.

Bats

The site is not considered to be of high value to bats. No impacts upon any protected terrestrial mammal species are anticipated during the operation of the site.

Birds

The site is not considered to be of high value to birds. No impacts upon any protected terrestrial mammal species are anticipated during the operation of the site.

Water Quality

No negative effects upon water quality arising during the operation of the site will arise. Surface water management from the site will be managed with enhanced Nature Based Solutions and the existing attenuation area in the north-eastern section of the site will be upgraded.

6. MITIGATION MEASURES

The predicted ecological impacts arising from the proposed development are low and significant effects on the biodiversity of the site are not anticipated. Nonetheless, the following best practice measures are recommended during the construction and operation of the proposed development.

Pre-Construction

- All works associated with the development should be confined to the proposed development site and be done in full accordance with the plans and information submitted.
- The work areas must be kept to the minimum area required to carry out the proposed works and the area should be clearly marked out and cordoned off in advance of work commencement.

General Pollution Control

- Works must not take place in periods of heavy precipitation.
- Best practice in bulk-liquid concrete management must be employed addressing pouring and handling, secure shuttering, adequate curing times etc.
- Washwater from cleaning ready-mix concrete wagons and mixers may be contaminated. Wagons and mixers must be washed off site.
- Raw or uncured waste concrete should be disposed of by removal from the site in a manner that shall not impact on any watercourse.
- All fuels, lubricants and hydraulic fluids should be kept in secure bunded areas. The bunded area should accommodate 110% of the total capacity of the containers within it. Containers should be properly secured to prevent unauthorised access and misuse.
- All refuelling and lubrication of equipment should take place on sealed and bunded surfaces to avoid the potential for accidental spillage of hydrocarbons.
- An effective spillage procedure should be put in place with all staff properly briefed
- Spill kits should be present in all plant machinery.
- Oil booms and oil soakage pads should be kept on site to deal with any accidental spillage.
- Any waste oils or hydraulic fluids should be collected, stored in appropriate containers and disposed of offsite in an appropriate manner.
- All plant and machinery should be regularly maintained and serviced to minimise release of hydrocarbons.

- All waste associated with the development should be disposed of in an environmentally friendly manner. Registered contractors should only be used. This includes any excavated soil.

Lighting

- Mammal friendly lighting should be employed on site to reduce impacts upon nocturnal species, including bats. The recommendations outlined in the guidance “Bats and Lighting Guidance Notes for: Planners, Engineers, Architects and Developers” should be followed. See https://www.batconservationireland.org/wp-content/uploads/2013/09/BCIrelandGuidelines_Lighting.pdf. Luminaire design is extremely important to achieve an appropriate lighting regime. Luminaires come in a myriad of different styles, applications and specifications which a lighting professional can help to select. The following should be considered when choosing luminaires any new lighting within the site, and existing lighting should be upgraded to these specifications. This is taken from the most recent BCT Lighting Guidelines (BCT, 2023).
 - All luminaires should lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used.
 - LED luminaires should be used where possible due to their sharp-cut-off, lower intensity, good colour rendition and dimming capability.
 - A warm white light source (2700 Kelvin or lower) should be adopted to reduce blue light component.
 - Light sources should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats. [Definition: Red Light refers to the light sources in the red spectrum and mainly consist of long wavelength light above 600nm with an RA value of 60 (for good colour recognition). This wavelength of light is considered to have the least impact on bats.]
 - Internal luminaires can be recessed (as opposed to using a pendant fitting) where installed in proximity to windows to reduce glare and light spill.
 - Waymarking inground markers (low output with cowls or similar to minimised upward light spill) to delineate path edges.

- Column heights should be carefully considered to minimise light spill and glare visibility. This should be balanced with the potential for increased numbers of columns and upward light reflectance as with bollards.
- Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered.
- Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt.
- Where appropriate, external security light should be set on motion sensors and set to as short a possible a timer as the risk assessment will allow (e.g. 1-2 minute timer).
- Use of a Central Management System (CMS) with additional web-enabled devices to light on demand.
- Use of motion sensors for the local authority street lighting may not be feasible unless the authority has the potential for smart metering through a CMS.
- The use of bollard or low-level downward-directional luminaires is strongly discouraged.
- Only if all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed.

Biodiversity Enhancement and Landscaping

- A detailed landscaping plan should be prepared for the entire site and the overall aim of the landscaping plan should be to promote biodiversity net gain within the site, with the use of suitable native and / or non-native pollinator friendly plants. Planting guidelines within the All-Ireland Pollinator Plan 2021-2025 should be followed.
- Nature Based Solutions for surface water management within the site should be incorporated, e.g., green roofs, tree pits, swales etc.
- Any additional landscaping or planting on the site should focus primarily on native Irish species. Species that additionally provide benefits to local pollinators should also be included. Areas of the site should be managed for pollinators and wildflower areas should be encouraged. This can be done by cutting at the end of the summer season and removing the grass clippings from the area to compost elsewhere.

Management of Japanese knotweed

A small, likely recent infestation of Japanese knotweed has been identified within an existing flower planter on site. As this species is listed under Schedule 3 of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended), measures will be implemented to prevent its spread during site works and to ensure appropriate control and disposal.

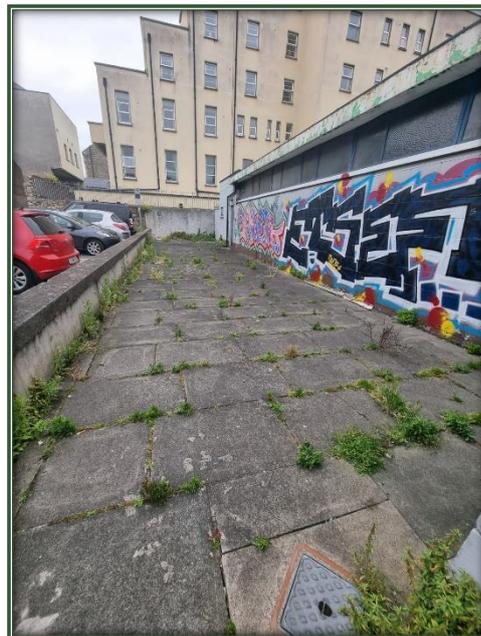
It is recommended that Dun Laoghaire Rathdown County Council engage an indemnified specialist to provide a site specific treatment plan for the control of knotweed.

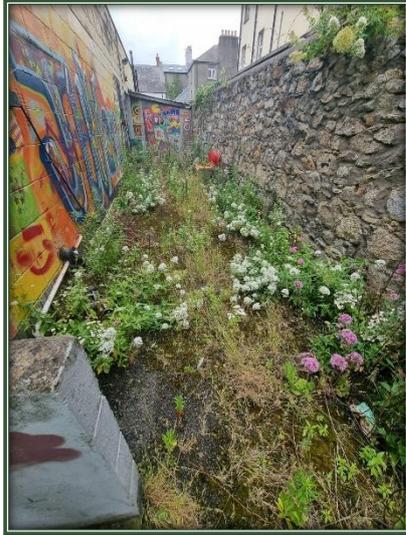
- All works in proximity to the affected area must be carried out in accordance with best-practice guidance, including the Invasive Species Ireland “Best Practice Management Guidelines – Japanese Knotweed” (2011) and the National Roads Authority (NRA) Guidelines on the Management of Noxious Weeds and Non-native Invasive Plant Species on National Roads (2010). The following mitigation and management measures will apply:
- The infestation area will be clearly demarcated and cordoned off prior to site works to prevent accidental disturbance, movement of soil, or plant material.
- No excavation, soil movement, or storage of materials will occur within the demarcated zone unless under the supervision of a suitably qualified invasive species specialist.
- All personnel working on site will be briefed on the identification and risks associated with Japanese knotweed, and on the procedures to prevent its spread.
- Any plant material or contaminated soil requiring removal will be handled and disposed of in accordance with waste management legislation, at a licensed facility authorised to accept invasive plant material.
- Excavated material containing knotweed rhizomes will not be reused on site unless treated and verified as free of viable material.
- Chemical treatment using a suitable herbicide (e.g. glyphosate-based formulation) may be applied by a licensed contractor during the active growing season, with follow-up treatments undertaken as required to ensure eradication.
- The site will be monitored periodically following treatment to confirm successful eradication and to detect any regrowth, with additional control measures implemented if necessary.

7. **RESIDUAL IMPACTS AND CONCLUSION**

With the recommended mitigation measures, it can be concluded that the proposed development at the former Boylan Centre in Dun Laoghaire, Co. Dublin will have a neutral to positive impact upon local ecological receptors. The creation of new habitats on the site will be a positive benefit to local ecology and with proper management of the site and its green areas, then local areas of biodiversity will be allowed to develop.

APPENDIX I- PHOTOGRAPHS









APPENDIX II – REFERENCES AND FURTHER READING

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