

# Ecological Impact Assessment

## Goatstown Student Accommodation Development

On behalf of  
**Orchid Residential Limited**  
Goatstown Road, Goatstown,  
Dublin 14





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**Goatstown Student Accommodation Development**  
**Orchid Residential Limited**  
**Goatstown Road, Goatstown, Dublin 14**

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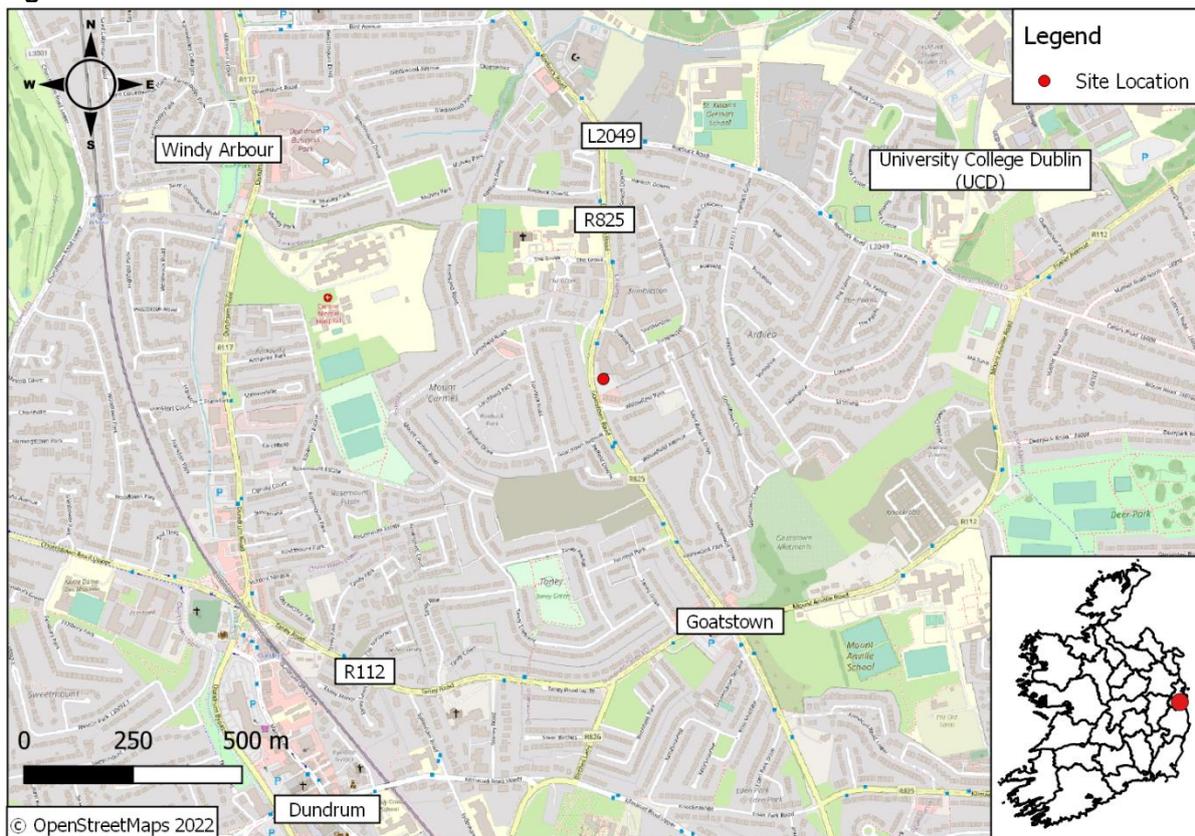
# 1 INTRODUCTION

## 1.1 Background and Purpose of Report

Malone O'Regan Environmental Services (MORES) were commissioned by Orchid Residential Limited ('the Applicant') to undertake an Ecological Impact Assessment (EIA), for a proposed student accommodation development and all associated works on the Vector Motors Site, Goatstown Road, Goatstown, Dublin 14, D14 FD23, Co. Dublin (OS Reference O 17802 28932).

The location of the Proposed Development ('the Site') is shown in Figure 1-1.

**Figure 1-1: Site Location**



The objective of this EIA was to survey and assess the land within and adjacent to the Site for the presence of any habitats or species that could present a constraint on, or an opportunity for, enhancement due to the Proposed Development.

## 1.2 Statement of Authority

The report was prepared by Ms. Jessica Beresford, Environmental Consultant. Jessica is a qualifying member of the Chartered Institute of Ecology and Environmental Management and has over a years' experience working in the ecological consultancy sector, including the preparation of EIAs, habitat surveys and specialist protected species surveys.

The report was approved by Mr. Dyfrig Hubble, Principal Ecologist. Dyfrig is a full member of the Chartered Institute of Ecology and Environmental Management. Dyfrig has over 15 years' experience working in the ecological consultancy sector, including habitat surveys and appraisals, and specialist protected species surveys.

## 1.3 Legislation and Planning Policy Context

### 1.3.1 Legislation Policy Context

Within Ireland, a number of sites of international or national importance to nature conservation, as well as many species of animal and plants are afforded a degree of legal protection, as set out in Box 1 below.

A study of biodiversity related planning policy at both national and local level has been undertaken for the Site and locality in order to highlight any potential conflicts with the relevant legislation and guidance documents.

Box 1	Designated Wildlife Sites and Protected and Otherwise Notable Habitats and Species
<p>The National Parks and Wildlife Service (NPWS) notifies sites in Ireland that are of international or national importance for nature conservation (although some sites that are of national importance for certain species have not been so designated). Internationally important sites may also be designated as:</p> <ul style="list-style-type: none"><li>• Special Areas of Conservation (SACs) and Candidate Special Area of Conservation (cSACs): the legal requirements relating to the designation and management of SACs in Ireland are set out in the European Communities (Birds and Natural Habitats) Regulations 2011-2021.</li><li>• Special Protection Areas (SPAs) and candidate Special Protected Areas (cSPAs): strictly protected sites classified in accordance with Article 4 of the EC Directive on the Conservation of Wild Birds (79/409/EEC), also known as the Birds Directive; and,</li><li>• Ramsar sites: wetlands of international importance designated under the Ramsar Convention, to which Ireland is a signatory.</li></ul> <p>Other statutory site designations relating to nature conservation are:</p> <ul style="list-style-type: none"><li>• National Heritage Areas (NHAs): these represent examples of some of the most important natural and semi-natural terrestrial and coastal habitats in the country and are afforded protection under the Wildlife (Amendment) Act 2000. NHAs are legally protected from damage and receive protection from the date they are formally proposed for designation; and,</li><li>• Proposed Natural Heritage Areas (pNHAs): these sites are not afforded the same protection as NHAs. These sites are proposed by the NPWS but are not statutorily proposed or designated. Prior to statutory designation these are subject to a very limited legal protection. They are, however, sites of significance for wildlife and habitats and are important for the purposes of this EclA report.</li></ul> <p><b>Legally protected species</b></p> <p>Many species of animal and plant receive some degree of legal protection. For the purposes of this study, legal protection refers to:</p> <ul style="list-style-type: none"><li>• Species included in the Wildlife (Amendment) Act 2000, excluding species that are only protected in relation to their sale, reflecting the fact that the site disposal will not include any proposals relating to the sale of species; and,</li><li>• Species afforded protection under the Flora Protection Order 1999.</li></ul> <p><b>Other notable habitat/species categories</b></p> <ul style="list-style-type: none"><li>• Biodiversity Action Plan (BAP) species: those targeted in local or national BAPs as being of particular conservation concern (priority species);</li><li>• Red and Amber List birds: those listed as being of high or medium conservation concern as listed by Birdwatch Ireland (Cummins, 2013); and,</li><li>• Other Irish Red Data Book species and Nationally/Regionally/Locally Notable species where appropriate.</li></ul>	

### 1.3.2 National Planning Context

#### 1.3.2.1 Project Ireland 2040, National Planning Framework

Project Ireland 2040 was launched by the Government in February 2018 (Government of Ireland, 2018) and incorporates two policy documents - the National Planning Framework and the National Development Plan 2021 -2030.

Under the biodiversity section “Project Ireland 2040 National Planning Framework”, the National Policy Objective 59 is to:

*‘Enhance the conservation status and improve the management of protected areas and protected species by:*

- *Implementing relevant EU Directives to protect Ireland's environment and wildlife;*
- *Integrating policies and objectives for the protection and restoration of biodiversity in statutory development plans;*
- *Developing and utilising licensing and consent systems to facilitate sustainable activities within Natura 2000 sites; and,*
- *Continued research, survey programmes and monitoring of habitats and species.'*

The National Policy Objective 60 in the same document is to:

*'Conserve and enhance the rich qualities of natural and cultural heritage of Ireland in a manner appropriate to their significance.'*

### **1.3.3 Local Planning Context**

#### **1.3.3.1 Dún Laoghaire and Rathdown County Development Plan 2016 - 2022**

The Dún Laoghaire and Rathdown County Development Plan 2016-2022 (DLRCC, 2016) contains a number of policies and objectives that relate directly to the protection of biodiversity and natural heritage in the context of proposed developments. The policies and objectives of the DLRCC with regards to the natural environment that are relevant to the Proposed Development are as follows:

##### **Policy LHB19:**

*'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 and 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 Article 10 of the Habitats Directive.'*

##### **Policy LHB20:**

*'It is Council policy 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.'*

##### **Policy LHB22:**

*'It is Council policy to protect and preserve areas designated as proposed Natural Heritage Areas, candidate 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.'*

##### **Objective LHB29:**

*'It is Council policy to support as appropriate the National Parks and Wildlife Service efforts to seek to control and manage alien / invasive species (e.g. Japanese knotweed, Giant hogweed, Himalayan balsam, etc.) and noxious weeds (e.g. ragwort, thistle, dock, etc.) within the County.'*

#### **1.3.3.2 Dún Laoghaire and Rathdown Draft County Development Plan 2022-2028**

The Dún Laoghaire and Rathdown Draft County Development Plan 2022-2028 (DLRCC, 2022) contains a number of policies and objectives that relate directly to the protection of biodiversity and natural heritage in the context of proposed developments (DLRCC, 2022).

The draft policies and objectives of the DLRCC with regards to the natural environment that are relevant to the Proposed Development are as follows:

**Policy Objective GIB12:**

*'It is a Policy Objective to promote, protect and enhance sustainable and appropriate access to the natural heritage of the County, where practicable, in a balanced way while protecting the natural heritage of the County.'*

**Policy Objective GIB16:**

*'It is a Policy Objective to promote and to co-operate in the extension of the Wicklow Mountains National Park.'*

**Policy Objective GIB18:**

*'It is a Policy Objective to protect and conserve the environment including, in particular, the natural heritage of the County and to conserve and manage Nationally and Internationally important and EU designated sites - such as Special Protection Areas (SPAs), Special Areas of Conservations (SACs), proposed Natural Heritage Areas (pNHAs) and Ramsar sites (wetlands) - as well as non-designated areas of high nature conservation value known as locally important areas which also serve as 'Stepping Stones' for the purposes of Article 10 of the Habitats Directive.'*

**Policy Objective GIB19:**

*'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.'*

**Policy Objective GIB21:**

*'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.'*

**Policy Objective GIB28:**

*'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).'*

## **1.4 Assessment Methodology for Prediction of Effects**

Desk study data collection and field survey work were carried out as part of the EclA process, with the objective of ensuring that sufficient data was collected to identify the designated sites, habitat areas and species that could be significantly affected by the Proposed Development. This information then informed the assessment of effects on the potential biodiversity receptors.

The area for which biological data was collected was based on an assessment of the ecological zone of influence of the Proposed Development. The ecological zone of influence is the area that could be affected by the Proposed Development, within which there is the

potential for significant ecological effects. All SPAs and SACs within 15km have been considered to assess their ecological pathways and functional links. As acknowledged in the OPR guidelines (OPR, 2021), few projects have a Zone of Influence this large, however the identification of Natura 2000 sites within 15km and NHAs and pNHAs within 5km has become widely accepted as the starting point. For this reason, all SPAs and SACs in 15km and NHAs and pNHAs in 5km have been identified for consideration. Desk study data were collected for this area (See Section 3.1), whilst field surveys focused on the site of the Proposed Development (See Section 3.2).

It should be noted that there was the potential for the Zone of Influence to be redefined during the assessment process in response to new design or environmental information, and / or for the geographical extent of field surveys to be extended to cover a greater extent of the desk study area (e.g., if the desk study identified species occurring off-site that could be significantly affected by the Proposed Development). In the end, such an increase in the study area was not required for this assessment.

The next stage of the assessment was to determine which, if any, of the sites, habitats and species within the Zone of Influence (referred to in this report as 'potential biodiversity receptors') had the potential to be significantly affected by the Proposed Development (see Section 4). A high level 'scoping' assessment was then undertaken (see Section 4.1) to differentiate effects that were sufficiently likely to be significant as to merit more detailed assessment, from those that could be assessed at a less detailed level as they were classified as not likely to be significant (referred to as 'scoped-out' effects).

The assessment of how the potential biodiversity receptors would likely be affected by the environmental changes associated with the Proposed Development was based not only on the results of the desk study and field surveys, but also on published information on the potential biodiversity receptors' status, distribution, sensitivity to these changes, biology, and knowledge of ecological processes and functions, as appropriate.

## 1.5 Desk Study

A desk-based review of information sources was completed, which included the following sources of information:

- The National Parks and Wildlife Service (NPWS) website was consulted to obtain the most up to date detail on conservation objectives for the Natura 2000 sites relevant to this assessment (National Parks and Wildlife Service, 2022);
- The National Biodiversity Data Centre (NBDC) website was consulted with regard to species distributions within 2km of the Site (NBDC, 2022); and,
- The EPA Envision website was consulted to obtain details about watercourses in the vicinity of the Site (<https://gis.epa.ie/EPAMaps/>) (EPA, 2022).

## 1.6 Field Survey

### 1.6.1 Habitat Survey

A Habitat Survey was undertaken using the Fossitt's Guide to Habitats in Ireland (Fossitt, 2000). The survey aimed to identify the extent and quality of habitats present on the Site. The survey was carried out by two (2no.) suitably qualified and experienced MOR ecologists on September 23<sup>rd</sup>, 2021.

The assessment was extended to also identify the potential for these habitats to support other features of nature conservation importance, such as species afforded legal protection under either Irish or European legislation.

### 1.6.2 Protected / Notable Species

The methodologies used to establish the presence / potential presence of faunal species are summarised below. These relate to those species / biological taxa that the desk study and habitat types present indicated could occur on the Site.

#### Bats

A ground assessment was carried out on the Site to determine the suitability of the habitats within the Site to support bat roosting, foraging and commuting.

There were no mature trees on site. Trees were identified in the gardens of the houses around the boundary of the Site, but these did not possess any features suitable for roosting bats.

The existing car showroom was inspected for the presence of features suitable for roosting bats. An external building inspection was undertaken to determine if there were any signs of bat activity using the following criteria:

- Evidence of bat droppings / urine splashes below the potential access points;
- Evidence of feeding remains, (insect wings on the ground below potential access point); and,
- Evidence of fur-oil staining on walls leading into potential access points.

A Dusk emergence bat survey was undertaken for the Site to confirm if the building was being used by roosting bats.

All survey were undertaken in accordance with recognised best practice (Full details of the survey methodology are provided in the Bat Report attached as Appendix A).

#### Badgers

The NBDC holds records for badger within 2km of the Site (NBDC, 2022).

The field survey aimed to identify and examine areas where badgers (*Meles meles*) might occur by noting any evidence of badger activity. This included:

- Mammal paths;
- Badger hairs caught in sett entrances / fences / vegetation;
- Paw prints;
- Evidence of foraging (usually in the form of 'snuffle holes');
- Latrines; and,
- Badger setts

### Birds

The Site was assessed for its potential to support important assemblages of birds of rare or notable species. Any activity and potential nesting habitats were noted.

### Invasive species

The Site was assessed for the presence of any noxious / invasive species such as Japanese knotweed (*Fallopia japonica*) and any other invasive species.

### Other Species

In addition, an assessment was carried out of the potential for the Site to support any other species considered to be of value for biodiversity.

## **1.6.3 Survey Limitations**

Optimal habitat surveying period is from April to August. However, given the built-up nature of the Site it is not considered that this is a survey limitation.

## **1.7 Assessment Methodology**

The current Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2016) recognise that an ecological assessment cannot consider in detail every individual species or habitat that may potentially be affected by a Proposed Development. The EclA process aims to identify those ecological receptors that could be significantly affected by the Proposed Development i.e., where the effects on the receptor are of sufficient concern that they could influence the planning decision) or for which the development could result in the breach of relevant legislation. The effects of the Proposed Development on these receptors are then assessed, taking into account the sensitive design measures (avoidance measures) and where necessary the mitigation measures incorporated as part of the Proposed Development. The scope of the EclA is determined iteratively.

### **1.7.1 Significance Evaluation Methodology**

As part of the high-level assessment reported in Section 4.1, the conclusion about whether effects are sufficiently likely to be significant as to merit more detailed assessment is informed by a judgement about whether:

- The Site, habitat or species population is of sufficient quality or size that an effect upon it could be significant; and,
- The environmental changes associated with the development are such that there is the potential for a significant effect to occur (i.e., for the integrity of a site or for the conservation status of a habitat area or species population to be affected).

If the answer to both of these questions is yes, the relevant receptor would be subject to more detailed assessment and the significance of effects would be evaluated based on the methodology that is outlined below.

### **1.7.1.1 Negative Effects**

For biodiversity receptors, an effect is assessed as being significant if the favourable conservation status of the specified biodiversity receptor is compromised by the proposed development. Conservation status is defined by CIEEM (2016) as follows:

- *“Habitats – conservation status is determined by the sum of the influences acting on the habitat that may affect its extent, structure and functions as well as its distribution and its typical species within a given geographical area;”* and,
- *“Species – conservation status is determined by the sum of influences acting on the species concerned that may affect its abundance and distribution within a given geographical area.”*

The decision as to whether the conservation status of the specified biodiversity receptor has been compromised has been made using professional judgement, drawing upon the results of the assessment of how each receptor will be affected by the Proposed Development.

A similar procedure has been used for designated sites that are affected by the Proposed Development, except that the focus is on the effects on the integrity of each site, defined as “the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and / or the levels of populations of the species for which it was designated.”

### **1.7.1.2 Positive Effects**

A positive effect is assessed as being ‘significant’ if development activities are predicted to cause:

- An improvement in the condition of a habitat / species population from unfavourable to favourable – condition data are only available for some Natura sites, but professional judgement and a review of available literature has been used to apply the same principle to habitats / species elsewhere; or,
- Partial or total restoration of a site’s favourable condition.

If a species population, habitat or site is already in favourable condition, it is still possible for there to be a significant positive effect. There is however no simple formula for determining when such effects are significant, given the complexities of assessing these types of effects. In such cases, decisions about significance have therefore been made on a case-by-case basis.

## **1.8 Identification of Potential Biodiversity Receptors**

The assessment of the ecological Zone of Influence of the Proposed Development concluded that the development would be likely to result in changes in the extent and / or condition of the existing land cover on the Site, with potential effects on habitats and species on the Site. There is also the potential for effects on any areas that adjoin the site, where fauna might make use of the land cover onsite.

In summary, therefore, the ecological Zone of Influence of the Proposed Development is defined as:

- The Site of the Proposed Development (fauna and flora); and,
- Habitats adjoining the Site (fauna).

In the case of designated sites, a precautionary approach has been taken and the search area extended to identify sites outside of the zone of ecological influence. This information was used to further inform the assessment process and to ensure that the onsite habitats are not of importance for either habitats or species for which these sites have been designated.

As a basis for determining which biodiversity receptors need to be assessed within the Zone of Influence of the development, CIEEM's guidelines on EclA recommend that consideration be given to the biodiversity conservation value of the sites, habitats and species that occur within the zone (as appropriate). The guidelines also refer to the need to consider the legal status that is afforded to some species and habitats (See Box 1).

Legal status needs to be considered because all developments must comply with the requirements of the law. By implication, therefore, there cannot be significant effects as a result of non-compliance with the law. However, it should be noted that, notwithstanding legal requirements, there is the potential for some legally protected species to be significantly affected in relation to their biodiversity conservation value.

In relation to biodiversity conservation value, only those designated sites, habitat types and species that fall within one or more of the categories defined in Box 1 are of sufficient importance that they could be significantly affected by the Proposed Development.

Drawing upon the biological data assembled for the purposes of this EclA (Section 3.), the potential receptors in relation to the Proposed Development are discussed in Section 4.1.

## 2 DESCRIPTION OF THE PROJECT

The Site is located just outside Dublin City, within a predominately residential area. The Site is ca.0.34 hectares (ha) in size. The Site is currently occupied by a car dealership and comprises a showroom and hardstanding surfaces covering all of the remaining site area.

The Site is predominately made up of hardstanding with a showroom building and a hard surface parking area, with vegetation surrounding outside the site boundary from nearby local properties.

### 2.1 Surrounding Land Uses

The Site is zoned Objective 'A' "To provide residential development and/or protect and improve residential amenity" under the Dun Laoghaire Development Plan. The Site is located within a largely residential area and is surrounded by apartment complexes and housing estates. Directly to the south of the Site lies some local retail outlets.

### 2.2 Watercourses within the Vicinity of the Site

The Site and adjacent watercourses are located within the Liffey and Dublin Bay catchment [Catchment: 09] and the Dodder\_SC\_010 subcatchment [Subcatchment\_ID:09\_16] (EPA, 2022)

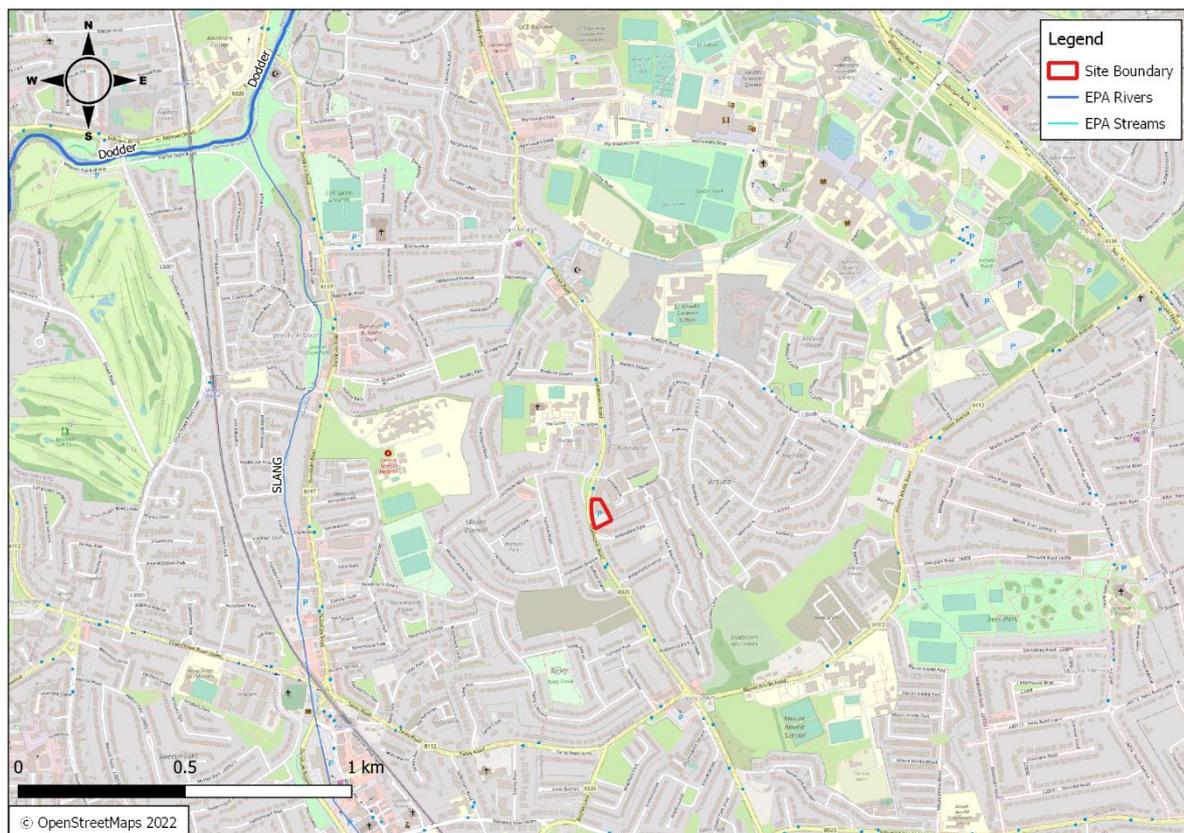
No watercourses or drainage ditches were identified on-site. The nearest hydrological feature to the Site is an unmarked waterway ca.580m northwest at its closest point. However, there is no hydrological connection between the Site and this waterway. This waterway appears to be culverted in sections, flowing for ca.1.5km into a feature named 'The Lake' within the UCD Belfield Campus. This feature appears to discharge into the Elm Park Stream via an underground connection. The Elm Park Stream flows for a further 1.3km before discharging directly into Dublin Bay.

The River Slang is located ca. 900m west of the Proposed Development boundary. This river discharges into the River Dodder ca. 1.5km downstream, which flows in a north-easterly direction for c. 5.1km before joining the River Liffey. The River Liffey then discharges into the Dublin Bay ca. 5.7km east of the point of convergence with the River Dodder.

According to the river waterbody WFD 2013-2018, the water quality within the River Dodder and River Slang is considered to be '*moderate*,' and the status of this river is considered '*at risk*' (EPA, 2022). Its most recent quality data (2019) also indicate that it is '*Slightly polluted*'. The Elm Park Stream belongs to the Brewery\_Stream\_010 WFD surface waterbody which has a '*Moderate*' Status (EPA, 2022) and its WFD risk score is '*Under Review*'. The section of the Liffey Estuary where the River Dodder joins is currently considered to have '*good*' water quality status, however, the risk to the river is currently under review by the EPA (EPA, 2022).

The location of the key surface water features in the vicinity of the Site are illustrated in Figure 2-1 below

Figure 2-1 Watercourses in the Vicinity



## 2.3 Proposed Development

Orchid Residential Limited, intend to apply to An Bord Pleanála for permission for a strategic housing development at this site of approximately 0.34 hectares comprising the car sales premises currently known as Vector Motors (formerly known as Victor Motors), Goatstown Road, Dublin 14, D14FD23.

The development will consist of demolition of the existing building (c.960sqm) and hard surface parking area on site and construction of a purpose built student accommodation development (including use as tourist or visitor accommodation outside the academic term) comprising:

- 221 no. student bedspaces (including 10 no. studios), all within a part single storey, part 4 no. storey and part 6 no. storey 'U'-Shaped building;
- The building is single to 4 no. storeys along the southern boundary (with roof terraces at 4th floor level) and part 5 and 6 storeys along Goatstown Road (with setbacks) and boundary to the north (with roof terrace at 5th floor level fronting onto Goatstown Road);
- Amenity space equating to c. 2,025 sqm is provided across the site consisting of c. 1,516 sqm of external amenity in the form of a central courtyard at ground level and roof terraces at 4th and 5th floor levels;
- Internal amenity space equating to c. 509 sqm is provided in the form of 2 no. ground floor lounge/study areas, kitchen/tearoom, laundry, and concierge/office space;
- Provision of 210 no. bicycle parking spaces distributed within the central courtyard (stacked parking with glass roof cover) and adjacent to the front boundary (north);
- Provision for 6 no. carparking spaces comprising 2 no. disabled parking spaces and 4 no. setdown parking spaces adjacent to the front entrance to the site;

- Vehicular access to the site is via Goatstown Road from 2 no. entrance points [reduction from 3 no. entrances currently];
- Ancillary single storey ESB substation and switch room and refuse store are provided at ground level;
- Provision of surface water and underground attenuation and all ancillary site development works including site wide landscaping works, lighting, planting and boundary treatments.

Full details of the Proposed Development are provided as part of the overall Planning Application. Figures 2-2 below shows the Site Boundary of the Proposed Development.

**Figure 2-2: Proposed Development Site Boundary**



### 2.3.1 Drainage

The foul and storm drainage network for the Proposed Development will connect to existing services already on the Site.

#### Surface Water Drainage

The existing site is comprised of a car showroom to the north of the site and the remaining area consisting of tarmac surfacing. Surface water drains via a series of gullies and surface drains to the existing public sewer under the Goatstown road to the west of the site. No flow control devices are currently in place to restrict discharge rates from the site.

The surface water drainage design for the Proposed Development has been carried out in accordance with SuDS requirements under the recommendations of the Greater Dublin Strategic Drainage Study (GSDSDS).

A mix of surfaces will be used at this Site including green roofing, harvested roofing, permeable paving, and soft landscaping to facilitate surface water drainage, located on

specially designed roof terraces which are accessible to residents. Overflow run-off not intercepted by these surfaces will be discharged to a concrete attenuation tank or lined stormtech system to be subsequently discharged to the existing public surface water pipe to the west of the Site.

The combined treatment train (with 2 stages) acts to contain the majority of rainfall events and where extreme events occur the run-off from the Site shall be limited to 1.57l/s with the attenuation volume designed for a 1 in 100-year storm with a 20% allowance for climate change. The rainwater harvesting tank will have the storage capacity of 11m<sup>3</sup> and the attenuation tank storage capacity required for the 100-year event is 150m<sup>3</sup>. The permeable paving to the front of the development will function as interception storage for run-off from this area and the overflow fin drain from the gravel bed will connect to the same outflow Hydrobrake manhole in-line with the proposed attenuation tank.

The proposed discharge rate from the site will be lower than the pre-development run-off levels in line with the SUDS requirement. Provision has also been made for an area of soft landscaping including grass, planting and trees, at ground floor externally to the west of the complex to improve the sustainability of the scheme.

### Foul Water Drainage

There is an existing 225mm diameter sewer running along the western boundary of the site, falling northwards along Goatstown Road. The foul water network will be connected to this existing foul sewer using a 225mm pipe. The foul sewage generated will be discharged via the foul drainage network and discharged to the existing public combined sewer running along the western boundary of the site via a new connection to the public sewers on Goatstown Road.

The wastewater discharge for the development is calculated in accordance with Irish Water's Code of Practice for Wastewater Infrastructure. The pipework will be 225mm diameter. The foul sewer will discharge to the existing system. All foul sewers and manholes will be constructed in accordance with the Irish Water Standard Details and the Irish Water Code of Practice for Wastewater.

The foul sewer will be discharged to the Ringsend Wastewater Treatment Plant (WWTP) where it is treated and ultimately discharges to Dublin Bay.

Irish Water have confirmed that based on the size of the Proposed Development and on the capacity currently available, that subject to a valid connection agreement being put in place, the proposed connection to the Irish Water network can be facilitated. Foul water design calculations will be submitted with planning application.

### **2.3.2 Water Supply**

The water supply to this development will be taken from an existing 6-inch diameter watermain running along the road to the west of the site, following upgrade works carried out by Irish Water. A 100mm watermain is to connect to the existing 6-inch watermain in accordance with the Irish Water Code of Practice for Water Infrastructure and The Irish Water Infrastructure Standards Details. The total peak water demand of the Proposed Development is estimated at 1.73 l/s.

### **2.4 Internal Access/Circulation**

The existing site is a car showroom with limited customer and staff parking and two access points (previously three) from Goatstown Road along the western boundary. Separate Access and Egress are proposed for the site to remove any conflicting vehicle movements and to improve sight distance for exiting traffic. Two disabled parking spaces and four set-down

parking bays will be provided for student arrivals and departures at term time, or for use by service vehicles or taxis.

Once occupied, the traffic to the site will likely be from pedestrians, cyclists, residential tenants as well as occasional delivery and refuse collection. Significant focus will be placed on reducing student reliance on private car travel, and therefore, the level of vehicle trip generation from the proposed accommodation development is expected to be relatively low. As a result of this, there will be little impact on the traffic congestion of the surrounding road network and any change will be minimal.

#### **2.4.1 Pedestrian Access**

It is expected that many of the tenants living in the residence will access the development by foot. Footpath infrastructure surrounding the site and its environs is well developed due to the existing neighbouring retail units and residential areas. Footpaths are considered an acceptable approach to the proposed residential development. On approach into the development, the shared pedestrian and cycle routes are segregated from vehicular traffic.

#### **2.4.2 Cycle Access**

Sheltered resident and visitor bicycle storage spaces will be provided within the development to encourage travel by bicycle. Cycle lanes are located in both directions along Goatstown Road which will allow for safer travel and encourage bicycle use.

### **2.5 Earthworks**

The project excavations will involve excavations of hard standing, site levelling and excavations for roads and services. Ground works will be required to clear the site and to facilitate construction of an additional basement level, building foundations and utilities.

### **2.6 Landscaping**

A Landscape Plan has been developed for the Site and incorporates supplementary plantings of trees, shrubs and planters. The Landscape Plan will be submitted as part of the planning package.

### **2.7 Demolition and Construction Procedures**

During the demolition and construction phases of the Proposed Development potential environmental effects will be short-term and localised. Nonetheless, all works will comply with the relevant legislation, construction industry guidelines and best practice in order to reduce potential environmental impacts associated with the works. Where remaining potential impacts have been identified, additional mitigation measures will be employed to reduce, as far as practicable potential impacts.

All potential demolition phase environmental impacts are addressed through a comprehensive Demolition and Construction Waste Management Plan (D&CWMP) in accordance with current best practice guidelines. This plan will require approval from Dún Laoghaire-Rathdown County Council (DLRCC) and relevant statutory bodies prior to the commencement of the proposed works.

#### **Duration and Timing of Works**

The construction works associated with the proposed development will be undertaken in 1 phase. With the development being completed over an 18-month period, between 2023 -2025. Working hours will generally be restricted to between 08:00 and 18:00 hours Monday to Friday inclusive and between 08:00 and 14:00 hours on Saturdays. Construction work will not be permitted on Sundays, public holidays or at night-time except where safety concerns necessitate it or if agreed in advance with the Planning Authority.

### **2.7.1 Construction Compound**

To ensure the efficient management of the construction works, a Temporary Construction Compound will be set up for the duration of the construction works. Welfare facilities such as canteens and toilets will be available within the construction compound. Main waste storage area will be located in the site compound. Electricity facilities will be supplied via a ring network by the ESB. Water supply will be sourced from the existing public piped supplies running into the site and foul water will discharge into the existing sewer on site.

Access for construction of the development will be via the proposed primary access for the development on the western side of the Site (i.e., directly from Goatstown Road). This will be the only access for vehicles to the Site. There are several potential site construction compound locations laid out in the CEMP.

### 3 STUDY RESULTS

#### 3.1 Desk Based Study

Prior to conducting any site surveys, a desk-based review of information sources was completed. This baseline information provided a valuable insight into the types of flora and fauna that may occur onsite and allowed for the identification of features / habitats located off-site that may require further assessment.

##### 3.1.1 Statutory Nature Conservation Sites

In accordance with the European Commission Methodological Guidance (EC, 2021) a list of European sites that can be potentially affected by the Proposed Development has been compiled. Guidance for Planning Authorities prepared by the Department of Environment Heritage and Local Government (DoEHLG, 2009) states that defining the likely Zone of Influence for the screening and the approach used will depend on the nature, size, location, and the likely effects of the project. The key variables determining whether or not a particular Natura 2000 site is likely to be negatively affected by a project are: the physical distance from the project to the Site; the sensitivities of the ecological receptors; and the potential for in-combination effects. All SPAs and SACs within 15km have been considered to assess their ecological pathways and functional links. As acknowledged in the OPR guidelines (OPR, 2021), few projects have a Zone of Influence this large, however the identification of Natura 2000 sites within 15km has become widely accepted as the starting point for the screening process. For this reason, all SPAs and SACs in 15km have been identified for consideration as part of the screening.

Sixteen (16No.) Natura 2000 designated sites were identified within 15km of the Site (Table 3-1, Figure 3-1).

**Table 3-1: Designated Natura 2000 Sites within 15km of the Site**

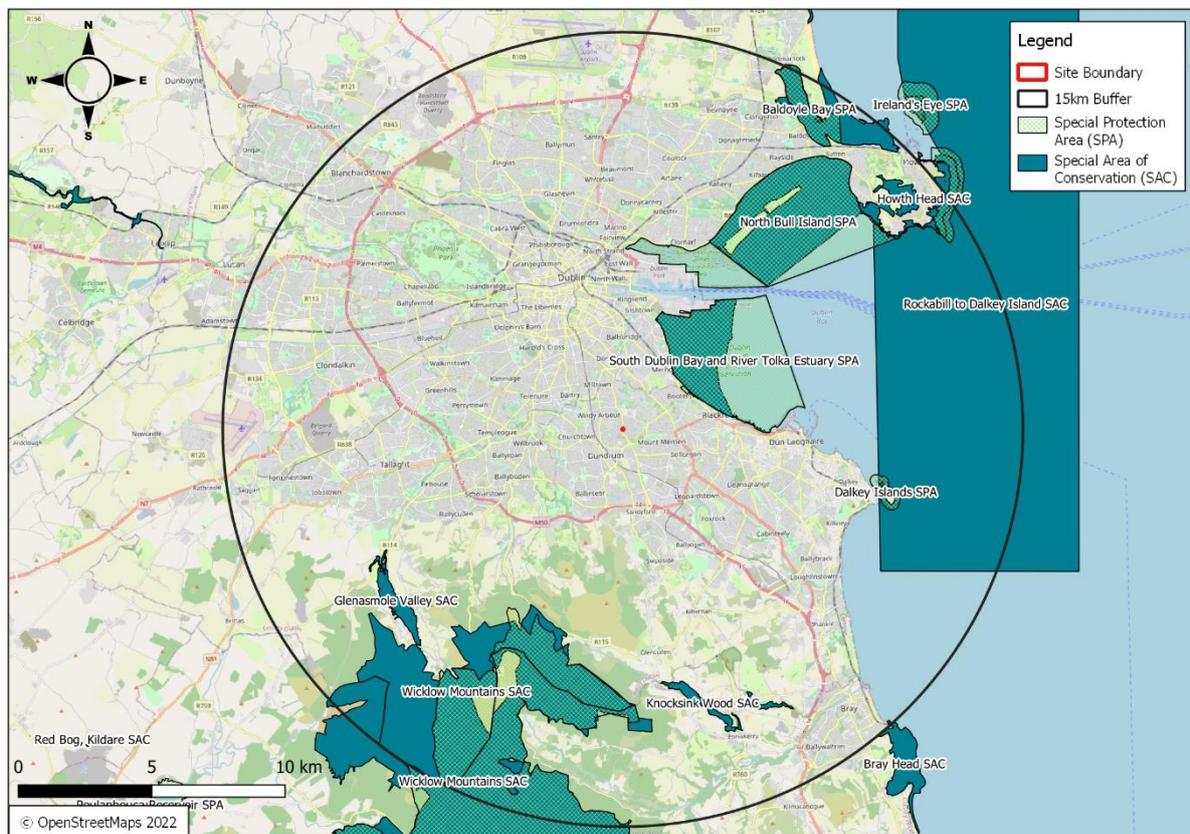
Site Name	Site Code	Distance (km)	Direction from the Site
<b>Special Area of Conservation (SAC)</b>			
South Dublin Bay	000210	2.8km	NE
Wicklow Mountains	002122	7.5km	S
North Dublin Bay	000206	7.7km	NE
Rockabill to Dalkey Island	003000	9.5km	E
Knocksink Wood	000725	9.7km	S
Glenasmole Valley	001209	10km	SW
Ballyman Glen	000713	11km	S
Howth Head	000202	12.4km	NE
Baldoyle Bay	000199	13.1km	NE
Bray Head	000714	14.9km	SE
<b>Special Protection Area (SPA)</b>			

South Dublin Bay and River Tolka Estuary	004024	2.7km	NE
North Bull Island	004006	6.1km	NE
Wicklow Mountains	004040	7.8km	S
Dalkey Island	004172	9.5km	E
Baldoyle Bay	004016	13km	NE
Howth Head Coast	004113	14km	NE

The Site is not located within or directly adjacent to any Natura 2000 sites, however, the boundaries of ten (10No.) SAC and six (6No.) SPA are located within 15km of the Site.

Given the distance, intervening lands and lack of impact pathways between the Site and the Baldoyle Bay SAC, the Howth Head SAC, the North Dublin Bay SAC, the Rockabill to Dalkey Island SAC, the South Dublin Bay SAC, the Glensmole Valley SAC, the Wicklow Mountains SAC, the Bray Head SAC, the Knocksink Wood SAC, and the Ballyman Glen SAC these have been screened out from further consideration. Additionally, the Baldoyle Bay SPA, the Howth Head Coast SPA, the North Bull Island SPA, the Dalkey Island SPA, the South Dublin Bay and River Tolka Estuary SPA and the Wicklow Mountains SPA have also been screened out from further consideration due to the distance, intervening lands and lack of impact pathways between these Natura 2000 sites and the Proposed Development Site.

**Figure 3-1 Natura 2000 Sites within 15km**



### 3.1.2 Nationally Designated Conservation Sites

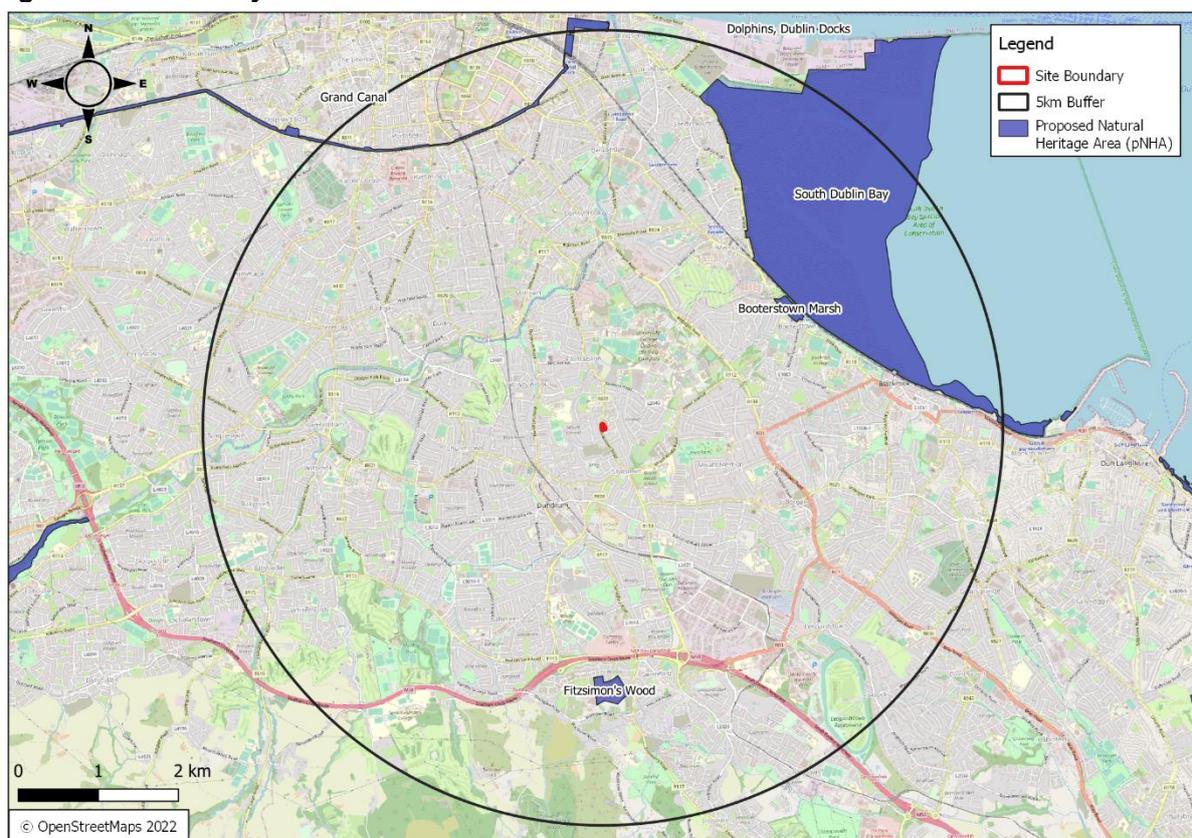
No Natural Heritage Areas (NHA) are located within 5km of the Site. However, four (4No.) proposed Natural Heritage Areas (pNHA) are located within 5km of the Site (refer to Table 3-2 and Figure 3-3).

**Table 3-2: National Protected Sites within 5km**

Site Name	Code	Distance (km) & Direction	Qualifying Interests
<b>Proposed Natural Heritage Areas</b>			
Boosterstown Marsh	001205	2.7 NE	<p>Boosterstown Marsh approximately 5km south of Dublin City is separated from Merrion Strand to the east by an embankment which carries the Dublin to Wexford railway, and to the west it is bounded by the road from Dublin to Blackrock. This is the only saltmarsh in south Dublin and overlies glacial tills which in turn lie on Black Limestone. Two streams run through the site; the culverted Trimelston stream along the north of the site, with some seepage into the marsh helping prevent the marsh drying out. The Nutley stream runs parallel to the railway along the eastern side of the site. Almost the entire marsh may be flooded at irregular intervals and salinity fluctuates throughout the site under the influence of rainfall and tidal cycles. Consequently, the site exhibits an interesting gradient from freshwater plant communities in the northwest to a more saline-tolerant flora in the south-east.</p> <p>Some species of interest occurring here include the protected plant Borrer's Saltmarsh grass (<i>Puccinellia fasciculata</i>), and a variety of waders and gulls such as Oystercatcher, Redshank and Black-headed Gull. Mallard, Teal and Snipe are regularly seen in autumn and winter. Other species which frequent the marsh include EU Birds Directive Annex 1 species Kingfisher, and Grey Heron.</p>
South Dublin Bay	000210	2.8km NE	<p>This site extends from the South Wall to the west pier in Dun Laoghaire and supports an array of habitats and species protected under the E.U. Habitats Directive – particularly waterfowl. The South Dublin Bay pNHA contains the largest stand of eelgrass (<i>Zostera noltii</i>) on the east coast and forms part of an SAC and an SPA.</p>
Fitzsimon's Wood	001753	3.1km S	<p>Fitzsimon's Wood occupies an area of approximately 8ha near Lamb's Cross in Sandyford, Co. Dublin. The woodland consists of mature birch (<i>Betula</i> spp.) with some oak (<i>Quercus</i> spp.), together with a well-developed understorey of Holly (<i>Ilex aquifolium</i>). Natural regeneration is occurring and there is a profuse growth of young birch, Ash (<i>Fraxinus excelsior</i>), oak and other species. Some marshy areas also occur within the woodland. An area of heath, dominated by Gorse (<i>Ulex europaeus</i>) scrub is also included in the site. The underlying rock of the area is granite and where this outcrops it is often covered with ferns and mosses. The basic woodland structure remains intact and as birch woodland is very rare in Co. Dublin, Fitzsimon's Wood continues to be of ecological importance.</p>
Grand Canal	002104	4km N	<p>This pNHA is a man-made canal that links the River Liffey with the River Shannon and the River Barrow.</p>

		<p>There are several different habitats found along the canal boundaries including hedgerows, reef fringe, open water, scrub, calcareous grassland, and woodland. Otter spraints are commonly found along towpaths particularly near rivers and streams. A range of species and habitats are supported both within and along the canal's banks such as otter, smooth newt and most notably the rare opposite-leaved pondweed (<i>Groenlandia densa</i>) which is protected under the Flora Protection Order 1987.</p> <p>The ecological value of the Grand Canal is particularly high due to the diversity of species present along the linear habitats. This pNHA is threatened by agricultural practices as it crosses through farmland.</p>
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**Figure 3-2: Nationally Protected Sites within 5km**



### 3.1.3 Protected Species

Table 3-3 provides a summary of records of legally protected or otherwise notable species that occur within a 2km grid square of the Site boundary (NBDC, 2022).

**Table 3-3: NBDC Species within 2km of the Site**

Common Name	Scientific Name	Date of last record	Designation
<b>Amphibians</b>			
Common Frog	<i>Rana temporaria</i>	08/05/2018	Wildlife Acts 1976 / 2000 EU Habitats Directive Annex V

Common Name	Scientific Name	Date of last record	Designation
Smooth Newt	<i>Lissotriton vulgaris</i>	06/10/2020	Wildlife Acts 1976 / 2000
<b>Bird Species</b>			
Black-headed Gull	<i>Larus ridibundus</i>	28/02/2013	Wildlife Acts 1976 / 2000 Birds of Conservation Concern Red List
Common Kestrel	<i>Falco tinnunculus</i>	17/08/2012	Wildlife Acts 1976 / 2000 Birds of Conservation Concern Amber List
Common Kingfisher	<i>Alcedo atthis</i>	31/12/2014	Wildlife Acts 1976 / 2000 Birds of Conservation Concern Amber List
Common Starling	<i>Sturnus vulgaris</i>	29/09/2016	Wildlife Acts 1976 / 2000 Birds of Conservation Concern Amber List
Common Wood Pigeon	<i>Columba palumbus</i>	29/09/2016	Wildlife Acts 1976 / 2000 EU Birds Directive Annex II Section I and Annex III Section I Bird Species
Eurasian Curlew	<i>Numenius arquata</i>	09/03/2018	Wildlife Acts 1976 / 2000 EU Birds Directive Annex II Section II Bird Species Birds of Conservation Concern Red List
Eurasian Oystercatcher	<i>Haematopus ostralegus</i>	28/02/2013	Wildlife Acts 1976 / 2000 Birds of Conservation Concern Amber List
Great Cormorant	<i>Phalacrocorax carbo</i>	30/09/2016	Wildlife Acts 1976 / 2000 Birds of Conservation Concern Amber List
Lesser Black-backed Gull	<i>Larus fuscus</i>	30/09/2016	Wildlife Acts 1976 / 2000 Birds of Conservation Concern Amber List
Mallard	<i>Anas platyrhynchos</i>	29/09/2016	Wildlife Acts 1976 / 2000 EU Birds Directive Annex II Section I and Annex III and Section I Bird Species

Common Name	Scientific Name	Date of last record	Designation
Peregrine Falcon	<i>Falco columbarius</i>	06/06/2014	Wildlife Acts 1976 / 2000 EU Habitats Directive Annex I Bird Species
Rock Pigeon	<i>Columba livia</i>	29/09/2016	Wildlife Acts 1976 / 2000 EU Habitats Directive Annex II Section I Bird Species
Snowy Owl	<i>Bubo scandiaca</i>	04/08/2016	Wildlife Acts 1976 / 2000 EU Birds Directive Annex I Birds of Conservation Concern Amber List
<b>Invasive species</b>			
Flatworm sp.	<i>Arthurdendyus triangulatus</i>	24/11/2012	Invasive Species: High Impact Invasive Species
Indian Balsam	<i>Impatiens glandulifera</i>	27/08/2016	Invasive Species: High Impact Invasive Species
Japanese Knotweed	<i>Fallopia japonica</i>	14/07/2020	Invasive Species: High Impact Invasive Species
Canadian Waterweed	<i>Elodea canadensis</i>	30/09/2016	Invasive Species: High Impact Invasive Species
<b>Mammals</b>			
Eurasian Badger	<i>Meles meles</i>	29/09/2016	Wildlife Acts 1976 / 2000
European Otter	<i>Lutra lutra</i>	09/07/2017	Wildlife Acts 1976 / 2000 EU Habitats Directive Annex II and Annex IV
Eurasian Red Squirrel	<i>Sciurus vulgaris</i>	23/02/2016	Wildlife Acts 1976 / 2000
Pine Marten	<i>Martes martes</i>	03/12/2018	Wildlife Acts 1976 / 2000 EU Habitats Directive Annex V

Note: Table includes records of protected species recorded within the last 10 years. The parameter of 10 years is chosen on the basis of habitat adaptation and modification.

## 3.2 Field Survey

### 3.2.1 Habitats

The Site is located south of Dublin City and the surrounding areas are heavily built-up with urban and residential development. The Site is bordered to the west by R825 (Goatstown Road) and residential / commercial premises to the north, south and east.

### Buildings and Artificial Surfaces (BL3)

The majority of the Site is made of an existing carpark, hard surfacing, concrete walkways / walls and the existing showroom/garage buildings.

The showroom/garage building is roofed and partially clad with large metal corrugated sheets. The west side (showroom) is partially clad by large glass windows. The south side (garage) is an exterior wall and large metal shutters.

### Ornamental / Non-native Shrub (WS3)

The only vegetation on the Site is comprised of a raised triangular planter with ornamental shrubs is located aside the central entrance. Bordering the Site is a wall along an adjacent footpath, which is lined with linear strips of ornamental shrubs and hedging plants, however these lie outside the boundary of the Site.

### Stonewalls (BL1)

The site is bound by a concrete block wall to the east toward the rears of adjacent residential properties. To the south this wall merges into a rubble stone set on the boundaries to the rear of residential properties in Willowfield Park.

**Figure 3-3 Habitat Map**



## **3.2.2 Fauna**

### Bats

As per the NBDC landscape suitability metric, the Site and surrounding area is considered to be of Low to Moderate suitability for bats (Landscape Suitability Metric Score: 13 - 21) (NBDC, 2022).

Following the initial ground inspection on Site, it was determined that no trees or buildings onsite were suitable for roosting bats. Following the bat surveys undertaken at the Site, no bats were observed emerging from or re-entering the building surveyed. It was also noted during the surveys that lighting from the buildings on-site and the R825 spills onto the Site, making it sub-optimal for roosting bats. There was no evidence of bat activity found during the external inspection of the building and the building itself was deemed sub-optimal for roosting bats due to the high levels of light surrounding the building at night.

Four (4No.) bat species were recorded foraging and commuting with the surveyed area. As bats are typically averse to lighting, no commuting and foraging activity was noted within the heavily illuminated areas. Based on the low levels of activity and movement of the bats recorded during the surveys, it is considered that the Site is of Low Value to bats.

Please see the accompanying Bat Survey Report as part of this planning application for details on the full survey.

### Birds

The Site was assessed for its potential to support important assemblages of birds of rare or notable species, as well as designated bird species. The onsite habitats are considered of extremely limited value for bird species. The neighbouring residential areas feature some trees and scrub that may provide some suitable nesting sites for a range of common garden bird species.

### Invasive Species

No invasive species were recorded during the Site walkover.

### Other Species

#### **Otter**

The NBDC holds records for otter within 2km of the Site (NBDC, 2022). During the Site walkover, no evidence of otter was identified nor were any suitable habitats for otter identified within the Site or the immediate vicinity. Therefore, it is considered that otters do not utilise the site.

#### **Amphibians**

The NBDC holds records for amphibians, the common frog (*Rana temporaria*) and the smooth newt (*Triturus vulgaris*), within 2km of the Site in the last 10 years (NBDC, 2022). However, it was concluded that there was no suitable habitat for breeding amphibians on the Site given its urban location and mainly hard surfaced environment. Furthermore, there are no suitable waterbodies for breeding amphibians located onsite or within the immediate vicinity of the Site.

## 4 CHARACTERISTICS AND POTENTIAL IMPACTS OF THE PROPOSED WORKS AND MITIGATION MEASURES

### 4.1 Identification of Potentially Significant Effects on Identified Receptors

Based on the methodology that is set out in Section 1.4, Table 4-1 sets out the findings of the evaluation of important and legally protected receptors. Each receptor is assessed and a scoping justification for each receptor is provided for the Construction and Operational Phases.

**Table 4-1: Valuation of Potential Ecological Receptors**

Potential Biodiversity Receptor	Relevant Legislation	Valuation	Scoping Justification	Scoping Result
<b>Protected Sites</b>				
Natura 2000 Sites	European Communities (Natural Habitats) Regulations 1997 (as amended)	Internationally designated sites for conservation.	An Appropriate Assessment Screening Report (AA) has been prepared and concluded that the Proposed Development is not likely to significantly impact the conservation objectives of any European designated sites or any of their designated features of interest.  The selection of this Site is in line with policies LHB19, LHB20, LHB22 (DLRCC, 2016) and GIB 18, GIB19 (DLRCC, 2022) which refers to avoidance of impacts on Natura 2000 sites.	Natura 2000 sites have been scoped out from further consideration.
Natural Heritage Areas (NHAs)	Wildlife Act 2000 (as amended)	Nationally designated sites for conservation.	Natural Heritage Areas (NHA) were assessed in compliance with policies LHB19, LHB22 (DLRCC, 2016) and GIB 21 (DLRCC, 2022).  There are no NHAs within 5km of the Site. However, there are four (4No.) proposed Natural Heritage Area (pNHA) within 5km of the Site. Impacts on the pNHAs can be discounted given the lack of impact pathways and intervening road infrastructure separating these sites from the Proposed Development.	Natural Heritage Areas have been scoped out from further consideration.
<b>Habitats</b>				

Potential Biodiversity Receptor	Relevant Legislation	Valuation	Scoping Justification	Scoping Result
Buildings (BL3)	N/A	Low Value Local	The majority of the Site is made of an existing carpark, hard surfacing, concrete walkways / walls and the existing showroom/garage buildings.	Buildings (BL3) have been scoped out from further consideration.
Ornamental Planting	N/A	Low Value Local	The raised planter currently on Site will be removed during the demolition and construction phases of the development. This planter is of very low-ecological value. The proposed landscaping plan will more than compensate for the loss of this feature.	Ornamental Planting has been scoped out from further consideration.
<b>Flora and Fauna</b>				
Amphibians	Wildlife Act 2000 (as amended) EU Habitats Directive Annex V	Low Value Local	No terrestrial habitats or waterbodies suitable for amphibians were identified on or within the immediate vicinity of the Site. The terrestrial habitat are of no value for these species.	Amphibians have been scoped out from further consideration.
Badgers	Wildlife Act 2000 (as amended)	Low Value Local	No suitable habitats were recorded onsite or in the immediate vicinity for sett construction, foraging and commuting, and there is no potential for this Site to be used by badgers for this purpose.	Badgers have been scoped out from further consideration.

Potential Biodiversity Receptor	Relevant Legislation	Valuation	Scoping Justification	Scoping Result
Bats	Wildlife Act 2000 (as amended) EU Habitats Directive Annex IV	High Value Local	<p>Following examination of the onsite buildings and surrounding available habitats, the Site was considered sub-optimal for roosting, and it is considered unlikely that bats will be impacted by the demolition of the buildings and hardstandings on the Site.</p> <p>No trees suitable for roosting were recorded on the Site. Trees and shrubs with potential roosting and foraging opportunities for bats recorded adjacent to the Site will not be involved in demolition works planned for the Site.</p> <p>Appropriate lighting design measures have been incorporated into the design (see Lighting Plan for details) and it is therefore considered that there will not be any impacts on bats from the Proposed Development.</p> <p>The Site is of low-moderate value for bats under the NBDC's habitat suitability index (NBDC, 2022). however only low levels of bat actively were noted during the surveys.</p>	Bats have been scoped out from further consideration.
Birds	<u>Breeding Birds</u> Wildlife Act 2000 (as amended)	High Value Local	<p><u>Disturbance / Habitat loss</u></p> <p>Birds are highly mobile and therefore will move away from disturbances. Therefore, during the Proposed Development, should any birds be disrupted during any of the works it is considered that these birds will move to a suitable area elsewhere given the abundance of similar and suitable habitat within the vicinity of the Site. Furthermore, the habitat loss will not be significant in the local context, and disturbance will be localised and short term.</p> <p><u>Nesting Birds</u></p> <p>The hedgerows and treelines bordering the Site offer foraging and nesting potential for a range of common bird species. The Proposed Development will not require the removal of any potential nesting habitats and foraging habitats of importance for bird species within the area. Additional planting of trees, shrubs and planters will provide supplementary foraging opportunities for common birds on the Site.</p> <p><u>Flight Collision</u></p> <p>This Site is located within a residential built-up urban area. There are no SPAs adjacent to the Site or within the in the immediate vicinity of the Site, the closest SPA is South Dublin Bay and River Tolka Estuary located ca.2.7km. However, birds are highly mobile and have the potential to fly inland from coastal foraging and roosting areas.</p>	Birds have been scoped out from further consideration.

Potential Biodiversity Receptor	Relevant Legislation	Valuation	Scoping Justification	Scoping Result
			<p>The Site itself is not considered to be suitable for foraging and roosting bird species given the fact that the current use for the site is as a car dealership, comprised of a large warehouse and a carpark. The wider area is predominantly built-up, however there are some green areas for recreational activity close by.</p> <p>The Proposed Development will be comprised of a 4-6 storey student accommodation building. Within the vicinity of the Site, specifically to the north-east of the Site, there are several residential buildings of a similar height (i.e. approximately 4-5 storeys tall). The external building style and materials (brick, bay windows, glazed curtain walling, recessed metal cladding and a selected aluminium windows) are in keeping with the architecture and landscape in the neighbourhood.</p> <p>It is considered unlikely that the Proposed Development will result in a significant collision risk to local bird species. This is based on the fact that the birds currently fly over and around the buildings within the vicinity of the Site and these buildings are of a similar height to those proposed as part of the Proposed Development.</p> <p>Although birds are known to sometimes aggregate around and occasionally collide with illuminated objects, the Proposed Development is located within an urban environment and is surrounded by residential properties roads and other infrastructure which are illuminated. Furthermore, a Lighting Plan has been prepared and for the development. The proposed lighting is broadly in keeping to that of the surrounding area and will therefore not create any kind of significant collision hazard. Overall, it is considered that the Proposed Development will not stand out in its landscape and thus should not impact flight patterns of bird flying over the Site.</p>	
Invasive	Species dependant	N/A	No invasive species were noted during the habitat survey. However, due to the prolific nature of invasive species mitigation measures are deemed necessary in line with policy LHB29 (DLRCC, 2016) and policy GIB28 (DLRCC, 2022).	Invasive species have been screened in for further consideration.
Otters	Wildlife Act 2000 (as amended)	N/A	No evidence of otter activity was recorded on the Site or in the surrounding area. It was concluded that the area within the Site does not provide suitable habitat for otter. Given the lack of hydrological connection between the Site and local waterways it can be concluded that there will be no impacts on otter.	Otters have been scoped out from further consideration.

Potential Biodiversity Receptor	Relevant Legislation	Valuation	Scoping Justification	Scoping Result
Other fauna	N/A	N/A	It is considered that the Proposed Development will not give rise to any significant impacts to other fauna, given the low ecological value of the habitats that will be impacted by the works.	Other Fauna has been scoped out from further consideration.

Following a detailed assessment, the following receptor was identified as significant and were brought forward for further consideration, see Section 4.2 below:

- Invasive Species.

## 4.2 Mitigation Measures

The following mitigation measures will be incorporated and adhered to during the construction and operational phases of the Proposed Development to ensure that the works do not result in contravention of wildlife legislation:

1. All activities will comply with all relevant legislation and best practice to reduce any potential environmental impacts. The mitigation measures detailed within this EclA will be fully adhered to;
2. The Site manager shall ensure that all personnel working on-site are trained and aware of the mitigation measures detailed within the EclA; and,
3. If protected or notable species are encountered during operations at the Site the ECoW or NPWS will be contacted for advice

### 4.2.1 Measures for Invasive Species

Although no invasive species were identified onsite, in line with Policy LHB29 (DLRCC, 2016) and GIB 28 (DLRCC, 2022) the following biosecurity considerations will be implemented onsite to ensure that no invasive species are introduced:

- All vehicles, machinery and any other equipment that may be used for the works will be washed and cleaned as required prior to being used on the Site to prevent the import of plant material and seeds;
- Before machinery or equipment is unloaded at the Site, equipment will be visually inspected to ensure that all adherent material and debris has been removed;
- Any vehicles and machinery that are not clean will not be permitted entry to the Site;
- All materials to be imported to the Site including additional planting will be sourced from a reputable supplier and records of all material / supplies to Site will be maintained; and,
- In advance of works, all site personnel will receive an induction regarding invasive species.

## 4.3 Cumulative and In-combination Impact

The Proposed Development works are unlikely to have any significant impacts on valued ecological receptors. In addition, review of the Dun Laoghaire-Rathdown Planning (DLRCC, 2022) Search did not identify any current or previous plans or projects in the immediate vicinity that are considered likely to result in significant cumulative impacts.

## 5 CONCLUSIONS

Based on the findings of a detailed desk-based study, a review of all the ecological information available for the Site and wider area and a field survey by MOR Ecologists, it is considered reasonable to conclude the following:

- The Site itself is currently of Low local ecological value;
- The Proposed Development will include green roofs, hedges, groundcover and shrub planting that will enhance biodiversity on this site, as per the Landscape Plan;
- The existing habitats onsite are not of value to any Annex I or Annex II species or Red listed birds;
- Bat surveys conducted did not identify any bats roosting on the Site and the Site is considered low value for bats; and,
- The Site is located within a predominantly urban and residential area.

Therefore, it can be concluded that the Proposed Development will not result in any significant impacts on ecological receptors identified both onsite and in the surrounding area following the implementation of appropriate mitigation measures<sup>1</sup>.

---

<sup>1</sup> The mitigation measures have not been considered as part of the AA Screening carried out, which is the subject of a separate report.

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# APPENDICES

# APPENDIX A

March 2022

# Bat Survey Report

## Student Residential Development

On behalf of  
Orchid Residential Ltd

Goatstown Road, Goatstown,  
Dublin 14



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Goatstown Road, Goatstown, Dublin 14**

**Job Number: E1887**

**Prepared By: Allison Flaherty**

**Signed:** 

**Checked By: Dyfrig Hubble**

**Signed:** 

**Approved By: Dyfrig Hubble**

**Signed:** 

### Revision Record

Issue No.	Date	Description	Remark	Prepared	Checked	Approved
01	25/03/22	Report	FINAL	AF	DH	DH

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**Bat Survey Report**  
**Student Residential Development**  
**Orchid Residential Ltd**  
**Goatstown Road, Goatstown, Dublin 14**

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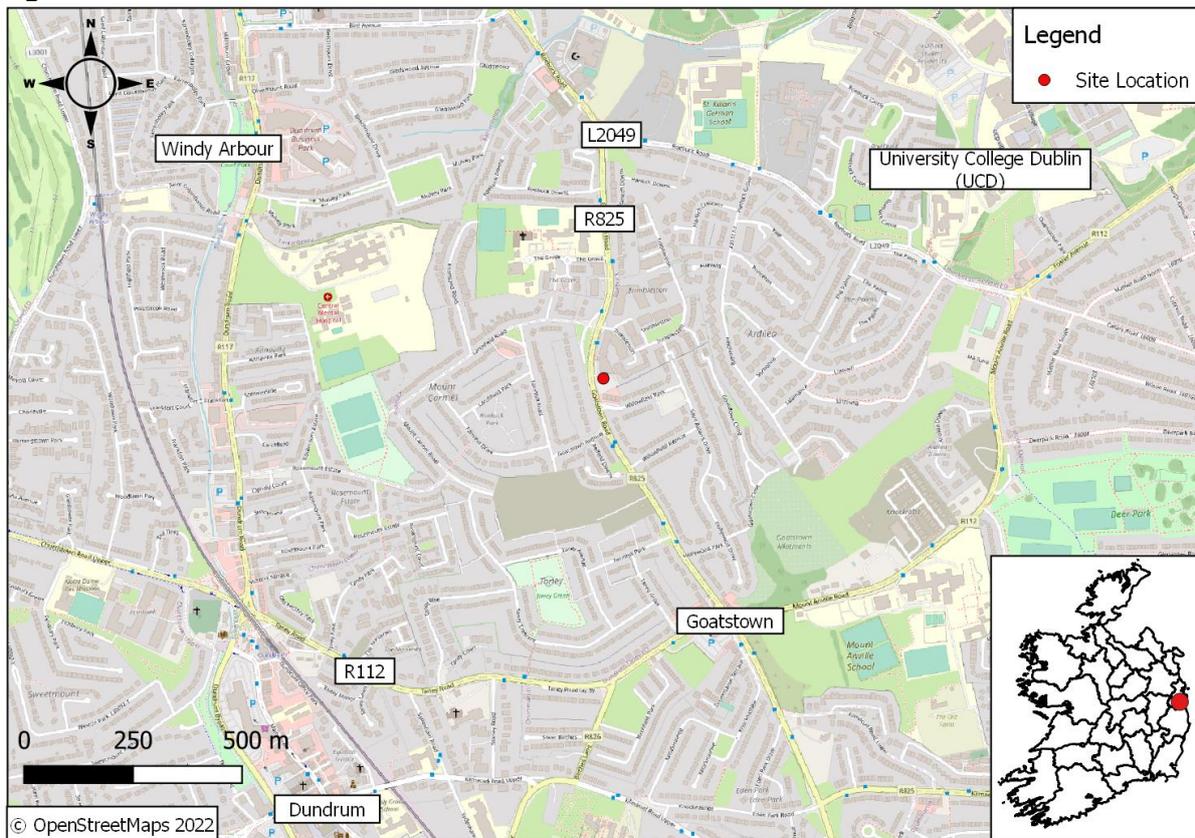
# 1 INTRODUCTION

## 1.1 Background

This Bat Survey Report has been prepared by Malone O'Regan Environmental (MOR) on behalf of Orchid Residential Limited ('the Applicant'), to present the findings of bat surveys undertaken at the Site for the proposed demolition of car showroom building, garage buildings and hardstanding areas, and the construction of a student residential development at Former Vector Motors Site, Goatstown Road, Goatstown, Dublin 14, D14 FD23, Co. Dublin (OS Reference O 17802 28932).

The location of the Proposed Development ('the Site') is shown in Figure 1-1.

Figure 1-1: Site Location



## 1.2 Relevant Legislation

All Irish bat species are protected by law under the Wildlife Act 1976 and its subsequent amendments. They are afforded full protection under this act, which makes it a criminal offence for anyone without a licence to:

- Kill, injure or handle a bat;
- Possess a bat (whether alive or dead);
- Disturb a roosting bat; and,
- Damage, destroy or obstruct access to any place used by bats for shelter, whether they are present or not.

In addition to domestic legislation, bats are also protected under the EU Habitats Directive (92/43/EEC). All Irish bats are listed in Annex IV of the Habitats Directive and the lesser horseshoe bat is further listed under Annex II, which make it an offence to:

- Deliberately capture, injure or kill any bat; or,
- Deliberately disturb a bat, in particular any disturbance which is likely;
  - (a) To impair their ability:
    - (i) To survive, to breed or reproduce, or to rear or nurture their young; or,
    - (ii) To hibernate or migrate.
  - (b) To affect significantly the local distribution or abundance of the bat species
- Damage or destroy a breeding site or resting place of a bat.

Therefore, the destruction, alteration or evacuation of a known bat roost is a notifiable action under current legislation and a derogation license must be obtained from the National Parks and Wildlife Service (NPWS) before works can commence.

Furthermore, it should also be noted that any works interfering with bats and especially their roosts, including for instance, the installation of lighting in the vicinity of the latter, may only be carried out under a license to derogate from Regulation 54 of the Birds and Natural Habitats Regulations 2021.

### **1.3 Statement of Authority**

This report was prepared by Allison Flaherty, Environmental Consultant, has a B.A. Biology, a M.Sc. Biodiversity and Conservation and 3 years' working experience in the ecological consultancy sector. Allison is a member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and has a specialist interest in bats. Allison has gained extensive experience in undertaking bat surveys and assessments within her role at MOR. Allison has also taken part in specialist bat trainings including; *Introduction to Bat Ecology and Bat Surveys*; *Bats: Impact Assessment of Development, Mitigation and Enhancements*; *Patterns of Bat Activity at Upland Windfarms: Implications for Sampling and Mitigation*; and *Designing Biodiversity Net Gain for Bats, Bats for Building Professions* and all provided by certified CIEEM instructors or Bat Conservation Trust Instructors. Allison is qualified to analyse the bat recordings using Kaliedoscope Pro Software and attended the *Wildlife Acoustics Kaleidoscope Pro Training Course*.

This report was checked and approved by Dyfrig Hubble, Principle Ecologist, has a B.Sc. (Hons) in Tropical Environmental Science and an M.Sc. Environmental Forestry. Dyfrig is a full member of the Chartered Institute of Ecology and Environmental Management. Dyfrig has over 15 years' experience working in the ecological consultancy sector including habitat appraisals and specialist species specific surveys. Dyfrig has extensive experience in undertaking surveys for bats and in the preparation of survey reports for various projects within both the UK and Ireland.

### **1.4 Purpose of Survey Work**

The implication of these legislative policies is that the proposed demolition of the car showroom and hardstanding areas and the construction of a student residential development needs to take account of the potential impacts on bats.

The survey work aimed to identify if the area is suitable for roosting bats or if the habitats provide valuable foraging or commuting habitat for bats. Survey work also enables appropriate mitigation measures to be incorporated into the design of the project and ensures that there are no adverse effects on the conservation status of the species.

## 2 METHODOLOGY

The methodologies used to establish the presence / potential presence of bats are summarised below.

### 2.1 Desk-Based Studies

A desk-based study was undertaken to identify records of bats within the survey area. The following sources of information were reviewed:

- The National Parks and Wildlife Service (NPWS) website was consulted to obtain the most up to date detail on conservation objectives for the Natura 2000 sites relevant to this assessment (NPWS, 2022);
- The National Biodiversity Data Centre (NBDC) website was consulted with regard to bat species distributions and bat habitat suitability index (NBDC, 2022); and,
- Bat surveys completed 2020 for this development (Keeley, 2020)

### 2.2 Field Based Studies

All surveys conducted followed methodology outlined in the Bat Mitigation Guidelines for Ireland (DoEHLG, 2006), Best Practice Guidelines for the Conservation of Bats in the Planning of National Road Schemes (National Roads Authority, 2006) and Bat Surveys for Professional Ecologists Good Practice Guidelines (Collins, 2016).

Figure 2-1: Survey Area



#### 2.2.1 External Building Inspection

The outside of the building was assessed for the presence of potential access points into the buildings and features suitable for roosting bats. The inspection was undertaken using a powerful focused-beam light source and binoculars.

The external inspection of the building also looked for any signs of bat activity at these potential access points using the following criteria:

- Evidence of bat droppings / urine splashes below the potential access points;
- Evidence of feeding remains, (insect wings on the ground below potential access point); and,
- Evidence of fur-oil staining on walls leading into potential access points.

## 2.2.2 Dusk Emergence Survey

The dusk emergence survey was undertaken on the 23<sup>rd</sup> September 2021 by two (2No.) MOR Ecologists. This survey commenced 15 minutes before sunset and ended 2 hours after sunset, therefore encompassing the typical emergence times of Irish bat species.

The survey was designed to incorporate the building and areas of hardstanding that will be affected by the proposed works. There were no trees on Site, however trees were identified in the gardens of houses around the boundary of the Site but these did not possess any features suitable for roosting bats.

A combination of visual observation and listening to ultrasonic bat calls using an Echo Meter Touch2 Pro (Apple IOS) were used throughout the emergence survey at both vantage points. Bat calls were recorded digitally using the Echo Meter Tough2 Pro and analysed using appropriate software (KaleidoscopePro) to aid the identification of bat species present.

Figure 2-2: Survey Locations



## 2.3 Survey Conditions

All survey work was conducted at a suitable time of the year and within suitable weather conditions in accordance with current best practice guidelines. All of the surveys were undertaken when there was no rain or wind and the temperature was above 10°C. In these

weather conditions, bats will not have been deterred from flying and no survey limitations were encountered (See Table 2-1).

**Table 2-1: Bat Survey Metadata**

Date	Survey Type	Sunset / Sunrise	Survey Times (Start-End)	Weather	Temperature (°C) Start - End
23/09/2021	Dusk	19:23	19:05 – 21:25	Moderate breeze and no rain	17°C-15°C

## 2.4 Survey Limitations

No survey limitations were encountered.

## 3 RESULTS

### 3.1 Desk-Based Results

Prior to conducting the field surveys and following completion of surveys, a desk-based review of information sources was completed.

None of the nine bats species present in Ireland have been recorded within a 2km radius of the Proposed Development area within the past 10 years (NBDC, 2022).

Table 3-1 provides details of the habitat suitability index for the study area (NBDC, 2022). The habitat suitability index identifies the geographical areas that are suitable for individual species. The index ranges from 0 to 100, with 100 being the most favourable to bats. The index presented is for all species combined, in addition to the individual species indices within the study area.

From the indices, it can be established that the study area has an overall low - moderate habitat suitability index range of 13.00-21.33. Lesser Noctule and Common Pipistrelle have a habitat suitability index of moderate and therefore likely to occur within the area. All other Irish bat species have a low or very low habitat suitability index in the area and are therefore unlikely to occur within the area.

**Table 3-1: Habitat Suitability Index**

Bat Species	Suitability Index Range	Suitability Index Level
All Bat Species	13.00-21.33	Low - Moderate
Soprano Pipistrelle ( <i>Pipistrellus pygmaeus</i> )	18-30	Low
Brown Long-eared Bat ( <i>Plecotus auritus</i> )	17-28	Low
Common Pipistrelle ( <i>Pipistrellus pipistrellus</i> )	31-38	Moderate
Lesser Horseshoe Bat ( <i>Rhinolophus hipposideros</i> )	0 – 4	Very Low
Whiskered Bat ( <i>Myotis mystacinus</i> )	10 -20	Low
Daubenton's Bat ( <i>Myotis daubentonii</i> )	0-12	Very Low
Lesser Noctule ( <i>Nyctalus leisleri</i> )	30-37	Moderate
Nathusius' Pipistrelle ( <i>Pipistrellus nathusii</i> )	6-15	Low
Natterer's Bat ( <i>Myotis nattereri</i> )	0-13	Very Low

### 3.2 Field Based Results

#### 3.2.1 Tree Inspection

There were no trees on the Site. However, the south of the Site is bordered by a stonewall and a mature *Cupressus spp.* treeline, which extends over the southern wall of the Site. Additionally, there is a section of Butterfly Bush (*Buddleja davidii*) which has potential to support foraging bat species.

It was also noted during the survey that lighting from the R825 spills onto the Site, making it sub-optimal for both foraging and roosting bats.

### **3.2.2 External Building Inspection**

The building is a flat-roofed single-storey structure with sheet metal cladding over two different roof heights that is currently operating as car sales garage and mechanic.

The Site is heavily illuminated at night (refer to Plates 3-1 & 3-2) due to the light spillage from the R825 to the west of the Site and existing lighting on nearby buildings and the building within the Site which illuminates both the building and the Site in general.

There was no evidence of bat activity found during the external inspection of the building and the building itself was deemed sub-optimal for roosting bats due to the high levels of light surrounding the building at night. In addition, the building is relatively new and well maintained which further reduces the likely hood bats using the building.

**Plate 3-1: Light spillage on South Side of the Building**



**Plate 3-2: Existing Lighting on the Western Side of the Building**



**3.2.3 Dusk Emergence and Dawn Re-entry Survey Results**

No bats were observed emerging from or re-entering the building surveyed. The surveys did identify bats commuting and foraging within the survey area (see Figure 3-1). Low bat activity was recorded within the survey area during the dusk emergence survey.

The following bats were recorded as a result of the dusk emergence survey:

- Lesser Noctule;
- Soprano Pipistrelle;
- Common Pipistrelle; and,
- Myotis species.

No bats were identified to be roosting within the building in the survey area.

Lesser noctules were first recorded commuting over the Site starting at 19:07, with infrequent passes recorded until 19:20, indicating a lesser noctule roost is present in the local area. The survey also recorded bats commuting / foraging in the open areas to the south of the building.

Four (4No.) bat species were recorded foraging and commuting within the surveyed area. The most frequently encountered species of bat was the Lesser Noctule, this species was recorded twenty-one (21No.) times over the course of the dusk survey. Other species of bat

recorded within the survey area included Soprano Pipistrelle and Myotis<sup>1</sup> species of bat, these species were each recorded three (3No.) times over the course of the dusk survey. Additionally, one (1No.) Common Pipistrelle was recorded during the survey.

Based on the levels of activity of the bats during the survey, it is considered that the overall survey area is of Low Value to bats. Bats appeared to be utilising the survey area to primarily commute overhead with very little foraging activity. During the survey it was noted that the Site is heavily illuminated at night by lighting from the on-site building and the R825 to the west. As bats are typically averse to lighting, low levels of commuting and foraging activity were anticipated and confirmed by the results of the survey.

**Figure 3-1: Bat Activity within the Survey Area**



<sup>1</sup> Species of Myotis bats are indistinguishable from their calls and require additional visual assessment to confirm the species. As a result, these species are only identified to a genus level.

## 4 IMPACT ASSESSMENT AND MITIGATION

The following bat species have been recorded during the bat surveys: Lesser Noctule, Soprano Pipistrelle, Common Pipistrelle and Myotis spp. of bats. All bat species recorded during the bat surveys are Annex IV species under the EU Habitats Directive and all have a favourable status in Ireland.

The impact assessment and mitigation will take into account the four bat species recorded within the survey area and the surrounding area.

### 4.1 Potential Impacts on Bats

Principal impacts of the Proposed Development, in general, on bat fauna may be summarised as follows:

#### 4.1.1 Loss of Habitat

The survey did not identify any bat roosts within the Site. The majority of the Site is made up of buildings and areas of hardstanding and is therefore sub-optimal for commuting and foraging habitats for bats.

It is not considered that the loss of the onsite habitats will have any impact on bat species within the area.

#### 4.1.2 Lighting of the General Area (street lighting, security lighting etc.)

Lighting for the Proposed Development could potentially impact on bat species in relation to commuting and foraging potential within the wider area which based on the survey results is used mainly by lesser noctules and pipistrelles. Pipistrelles and Noctules will tolerate low levels of lighting, while Myotis spp. bats are very sensitive to lighting and require the light levels to be below 1lux.

As Myotis spp. were recorded within the survey area, albeit in very low numbers, it is important to ensure that lighting is directional and that there are buffer zones or screen plantings established to reduce light spillage onto the treelines / vegetated areas bordering the Site.

In the absence of an appropriate lighting scheme, it is considered that the Proposed Development could have a Negative Impact on foraging and commuting bats.

It should be noted that due to the location of the Site within a built-up area, the current illumination levels of the Site may already be inappropriate for some nocturnal species due to street lighting from major roadways and buildings adjacent to the Site and the onsite building.

### 4.2 Mitigation Measures

The following mitigation measures are recommended to reduce the potential impact of the Proposed Development on local bat populations:

#### 4.2.1 Lighting Plan

Bats are averse to excessive lighting, subsequently, impacts could occur as a result of an inappropriate lighting strategy. Therefore, it is important that lighting installed for the Proposed Development will be completed with sensitivity for local wildlife while still providing the necessary lighting for human usage.

The lighting to be installed as part of the Proposed Development will be for safety and security. The lighting strategy has been designed to mitigate against any potential impacts on nocturnal species in line with the Bat Conservation Trust (BCT) Guidelines on 'Bats and Artificial Lighting in the UK' (BCT, 2018). The following measures will be implemented:

- Construction will be limited to daylight hours in order to minimise adverse effects on nocturnal fauna;

- Avoidance of excessive lighting;
- Light Emitting Diodes (LED's) will be used and the brightness will be set as low as possible;
- A warm white spectrum (ideally <2700 Kelvin) will be adopted to reduce blue light component;
- Lighting will be aimed only where it is needed, with no upward lighting;
- Lighting will be directed away from landscaped areas;
- Lighting will be turned down / off when not required; and,
- The height of lighting columns will be reduced as much as possible, as lighting at a low level further reduces ecological impact.

## 5 CONCLUSIONS

The bat survey undertaken for the Proposed Development included a walkover of the lands within the survey area, external building inspection and a dusk emergence survey. The survey area was then subject to a dusk emergence survey; however, no bats were observed to be roosting within the building

Based on the bat activity within the survey area shortly after sunset, it is considered likely that there are bats roosting within the locality of the Proposed Development. The surveys identified low activity of foraging and commuting along the southern side of the building.

No bat roosts are located on the Site and overall, the survey area is considered to be of Low Value for commuting and foraging bats within the local area as the majority of the Site is heavily illuminated at night and the Site is located within an urban environment.

It is not considered that the Proposed Development will have any impacts on bats. Furthermore, the mitigation measures presented within this report will further reduce any potential impacts on bats and the overall impact from the Proposed Development on bats will be Negligible.

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