Preliminary Ecological Appraisal

Social Housing Bundle 5, Development at Ballycurris Road, Ballymun, Dublin 11

29 October 2024

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Executive Summary

This document has been prepared by NM Ecology Ltd on behalf of Dublin City Council regarding a proposed residential development at Ballycurris Road, Ballymun, Dublin 11. The proposed development will involve the construction of 288 apartments and associated works. The aim of this document is to identify any important ecological features at the proposed development site (hereafter referred to as 'the Site'), as part of a broader due-diligence process.

There are no designated sites in the vicinity of the Site, nor surface water (or other) pathways between them, so any risk of impacts on designated sites can be ruled out. A *Screening for Appropriate Assessment* report accompanies the application, in which it was concluded that the proposed development will not be likely to have a significant effect on any European sites.

The only habitats within the Site are amenity grassland and dry meadow; both are of Negligible botanical importance, so they pose no constraint to the proposed development. No rare flora or invasive plant species were recorded. A range of native trees and shrubs will be planted as part of the landscaping scheme, as well as some other biodiversity enhancement measures, which are likely to result in a net gain in the biodiversity value of the Site.

A series of winter bird surveys was carried out between September 2023 and February 2024 to determine whether the Site was of any importance for brent geese or other birds associated with SPAs in Dublin Bay. Twelve surveys were carried out, and the only SPA species recorded was black-headed gull, a generalist species that will be able to adapt to changes at the Site. Therefore, the proposed development will have no impact on any SPA bird species.

Other birds observed at the Site are common and widespread, and there are no trees or shrubs suitable for nesting. Habitats are unsuitable for otters, badgers or other protected terrestrial mammals. A bat survey was not considered necessary due to the absence of preferred foraging habitats (open water and trees) and the prevalence of artificial lighting in the surrounding area. Therefore, the Site is of Negligible importance for any protected fauna.

In summary, we have not identified any important ecological features at the Site, so there is no risk of ecological impacts. Landscaping proposals are expected to result in a net gain in the biodiversity value of the Site. No further ecological surveys or assessments are required. This document should be included in the planning application to demonstrate due diligence on ecological matters.

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1 Introduction

1.1 Assessment brief

NM Ecology Ltd was engaged to carry out a Preliminary Ecological Appraisal (PEA) of a proposed development site at Ballycurris Road, Ballymun, Dublin 11. The proposed development will involve the construction of 288 residential units and associated works.

The aim of this assessment is to identify any ecological features that could potentially be affected by future development, as part of a broader due-diligence process. It has been prepared in accordance with the *Guidelines for Preliminary Ecological Appraisal* (2017) published by the Chartered Institute of Ecology and Environmental Management (CIEEM). The report concludes with a review of ecological features present (or likely to be present) at the site, and if required, recommendations for further survey or assessment. If no ecological impacts are identified and no further surveys are required, the PEA can be submitted as part of a planning application to demonstrate due diligence. Where impacts are identified and / or further survey is required, the PEA can be adapted into an Ecological Impact Assessment.

1.2 Statement of authority

All surveying and reporting was carried out by Nick Marchant, the principal ecologist of NM Ecology Ltd. He has sixteen years of professional experience, including thirteen years as an ecological consultant, one year as a local authority biodiversity officer, and two years managing an NGO in Indonesia. He provides ecological assessments for developments throughout Ireland and Northern Ireland, including wind farms, infrastructural projects (roads, water pipelines, greenways, etc.), and a range of residential and commercial developments.

He has an MSc in Ecosystem Conservation and Landscape Management from NUI Galway and a BSc in Environmental Science from Queens University Belfast. He is a member of the Chartered Institute of Ecology and Environmental Management, and operates in accordance with their code of professional conduct.

2 Methods

2.1 Scoping

The aim of this assessment is to identify any ecological features that may be affected by the proposed development. It involves the following steps:

- Identification of designated sites within an appropriate zone of influence
- A walkover survey incorporating the following elements:
    - Classification and mapping of habitats

  - A search for rare or protected flora, and for any legally-restricted non-native plant species (e.g. Japanese Knotweed)
  - A search for field signs of rare or protected fauna (e.g. badgers, bats), and habitat suitability assessments for species that are shy, nocturnal or seasonal
- Valuation of ecological features and review of legal considerations
- Identification of potential ecological impacts
- Recommendations for mitigation measures or follow-up surveys

2.2 Data collection and walkover survey

A desk-based scoping study was carried out using data from the following sources:

- Plans and specifications for the proposed development
- Bedrock, soil, subsoil, ground water and surface water maps from the Geological Survey of Ireland webmapping service, the National Biodiversity Data Centre, and the Environmental Protection Agency web viewer
- Maps and details of designated sites from www.npws.ie

The following resources were used for the walkover surveys:

- Habitat surveys were carried out in accordance with the *Best Practice Guidance for Habitat Survey and Mapping* (Smith et al 2011), and using the classification system of *A Guide to the Habitats of Ireland* (Fossitt 2000).
- Flora were identified using *New Flora of the British Isles, 3rd Edition* (Stace 2010), and *The Vegetative Key to the British Flora* (Poland & Clement 2009). Nomenclature follows the plant crib of the Botanical Society of the British Isles (BSBI 2007). The abundance and extent of species is described using the DAFOR scale (Dominant, Abundant, Frequent, Occasional, Rare)
- Fauna surveys followed the methods outlined in the *Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes* (NRA 2006), with reference to other species-specific methods as appropriate.

Desktop data from internet resources was accessed in March 2024, a multi-disciplinary survey was carried out on 4 July 2023, and a series of winter bird surveys between September 2023 and February 2024.

<u>Winter bird surveys</u>

Surveys were carried out every two weeks from mid-September to the end of February, comprising a total of 12 surveys. Bibby's 'Look-See' approach was followed, which involved an initial search of the study area with binoculars, followed by a vantage point survey. If any SPA species were observed, a count of individuals was recorded, along with information on their behaviour, time spent on site, etc. Other bird species were also recorded, but not counted or assessed in detail. The number of pedestrians and dog walkers were recorded in

order to assess background disturbance. Detailed methods, results and conclusions are presented in the Winter Bird Survey Report in Appendix 1.

2.3 Valuation of ecological features

Based on the information collected during the desktop and walkover surveys, the ecologist assigns an ecological importance to each feature based on its conservation status at different geographical scales (Table 1). For example, a site may be of national ecological importance for a given species if it supports a significant proportion (e.g., 5%) of the total national population of that species, or if it is designated as a Natural Heritage Area.

It is accepted that any development will have an impact on the receiving environment, but the significance of the impact will depend on the importance of the ecological features that would be affected. The following is outlined in the CIEEM guidelines: "*one of the key challenges in an EcIA is to decide which ecological features (habitats, species, ecosystems and their functions/processes) are important and should be subject to detailed assessment. Such ecological features will be those that are considered to be important and potentially affected by the project. It is not necessary to carry out detailed assessment of features that are sufficiently widespread, unthreatened and resilient to impacts from the development, and that will remain viable and sustainable."*

Table 1: The six-level ecological valuation scheme used in the CIEEM guidelines (2018)

Ecological importance	Geographical scale of importance
International	International or European scale
National	The Republic of Ireland or the island of Ireland
Regional	Leinster, and/or the east midlands of Ireland
County	County Dublin
Local	Urban / suburban areas in Dublin 11
Negligible	None, the feature is common and widespread

For the purposes of this report, we pay greatest attention to ecological features that are of Local importance or higher, or those that receive legal protection. These features are termed 'important ecological features' and are listed in Section 3.6. Features of Negligible ecological importance (e.g., amenity grasslands) do not pose any constraint to development.

3 The Receiving Environment

3.1 Environmental setting

The proposed development site (hereafter referred to as 'the Site') covers several patches of amenity grassland and ornamental planting on either side of Ballycurris Road.

The Site formerly contained a number of apartment buildings, which were demolished in 2008 / 2009 as part of the Ballymun Regeneration Project. Parts of the Site were also used as a compound and car park in 2018 – 2020 during the construction of the Lidl supermarket to the south of the Site.

There are housing estates to the west and south-west of the Site, and apartment buildings and small commercial units to the north. The Lidl supermarket is located to the south, and the R108 Ballymun Road to the east.

Geology and soils

The underlying bedrock is limestone (subcategorised as 'dark limestone and shale' on the GSI database), which is a locally-important aquifer. Subsoils are limestone till, and soils are made ground.

Hydrology

There are no watercourses within or adjacent to the Site. The closest is the River Santry, which is approx. 800 m north of the Site. The Ballymun Stream, a tributary of the River Santry, is shown on the EPA database of Rivers and Streams approx. 350 m east of the Site. However, this tributary has been culverted in its entirety and is now effectively a man-made storm drain rather than a watercourse. There are no connections between the Site and either the River Santry or the Ballymun Stream.

The majority of the Site consists of amenity grassland, and it is expected that rainfall currently soaks to ground.

3.2 Designated sites

The Site is not located within or adjacent to any designated sites. A map of designated sites in the surrounding area is provided in Figure 1, and details are provided in Table 2.

Figure 1	Designated sites
Location	Ballycurris Road, Ballymun
Applicant	Dublin City Council
Date	14 Mar 2024

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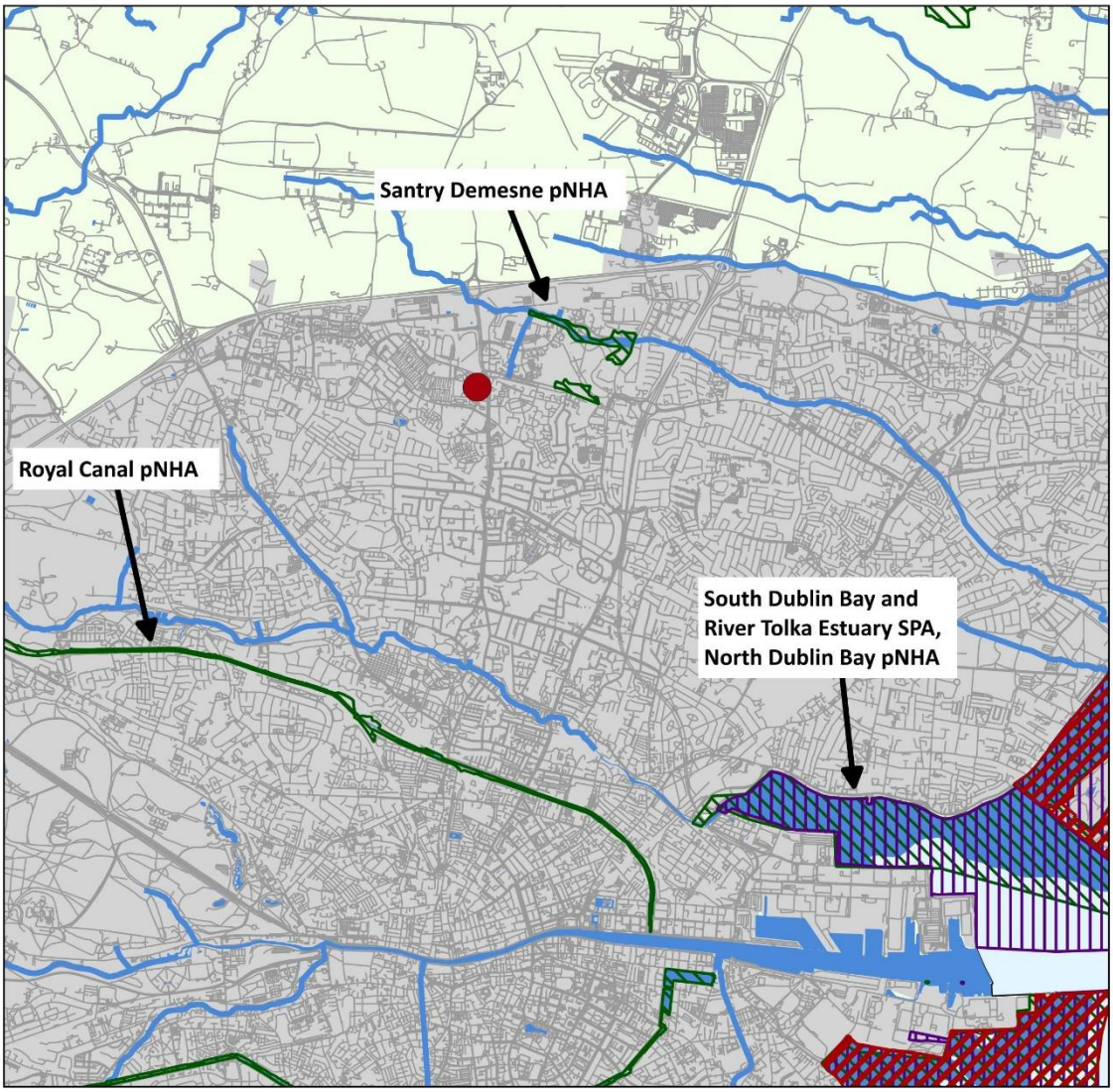
Site location
- Proposed development site
- Roads
- Watercourses

Designated sites
- Special Areas of Conservation
- Special Protection Areas
- Natural Heritage Areas (proposed)



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0 1 2 3 4 5 km

Table 2: Designated sites shown in Figure 1

Site Name	Distance	Reasons for designation
Santry Demesne pNHA (site code 178)	0.9 km north	Former demesne woodland and a protected plant species (Hairy St John's-wort *Hypericum hirsutum*)
Royal Canal pNHA (2103)	3.5 km south	Extensive freshwater feature of value to a range of biodiversity, and with value as an ecological corridor
South Dublin Bay and River Tolka Estuary SPA (4024)	5.0 km south-east	**Habitats:** tidal / coastal wetlands **Special conservation interests:** light-bellied brent goose, oystercatcher, ringed plover, grey plover, knot, sanderling, dunlin, bar-tailed godwit, redshank, black-headed gull (over-wintering populations), arctic tern, roseate tern (passage migrants), and common tern (breeding populations)

The Site is not within any designated sites, so there is no possibility of direct effects. There are no surface water pathways linking the Site to any of the designated sites in Table 2, so there is no possibility of indirect effects. Distances are too great for impacts via groundwater, land or air.

3.3 Habitats and flora

Habitats recorded within the Site are discussed below, using the habitat classification system of *A Guide to Habitats in Ireland* (Fossitt 2000). A habitat map is not provided, because the distribution and extent of habitats can be readily discerned from aerial photography (Figure 2).

3.3.1 Phase 1 habitat survey

The Site covers several patches of amenity grassland (GA2) on either side of Ballycurris Road. These areas are dominated by perennial rye-grass *Lolium perenne*, with abundant white clover *Trifolium repens*. Other species are frequent to occasional, including Yorkshire-fog *Holcus lanatus*, dandelion *Taraxacum officinale* ag., ribwort plantain *Plantago lanceolata*, yarrow *Achillea millefolium*, creeping buttercup *Ranunculus repens*, creeping thistle *Cirsium arvense* and broad-leaved dock *Rumex obtusifolius*. All of these species are common and widespread, so the habitat is of Negligible importance.

Some areas have been planted with ornamental flowers, including oxeye *Leucanthemum* sp., musk-mallow *Malva moschata*, golden marguerite *Cota tinctoria*, perennial flax *Linum perenne*, oregano *Origanum vulgare*, wild carrot *Daucus carota*, viper's-bugloss *Echium vulgare* and dame's-violet *Hesperis matronalis*. These areas are not mowed, and thus have been colonised by a range of coarse grasses and forbs, so the habitat is most accurately

described as a dry meadow (GS2). False oat-grass *Arrhenatherum elatius* is dominant, and abundant species include Yorkshire-fog, common couch *Elytrigia repens*, common hogweed *Heracleum sphondylium*, hedge bedstraw *Galium mollugo* and nettle *Urtica dioica*. Frequent species include cock's-foot *Dactylis glomerata*, common knapweed *Centaurea nigra*, bush vetch *Vicia sepium*, common vetch *Vicia sativa* and hedge woundwort *Stachys sylvatica*. These species are also common and widespread in the surrounding area, and the habitats are of Negligible importance.

3.3.2 Rare or protected flora

No rare or protected plants were encountered.

3.3.3 Invasive plant species

No Japanese Knotweed *Fallopia japonica* or any other invasive plant species listed on the third schedule of the *European Communities (Birds and Natural Habitats) Regulations 2011*) were recorded within the Site.

3.4 Protected species

3.4.1 Over-wintering birds associated with SPAs

A series of 14 winter bird surveys was carried out at the site between September 2023 and April 2024. Detailed methods, results and conclusions are presented in the Winter Bird Survey Report in Appendix 1, but the results are summarised below.

No brent geese or any waders / waterfowl (e.g. oystercatchers, godwit) were recorded at the Site during any of the surveys.

The only SPA species recorded was black-headed gull, which was only present in low numbers. It is a generalist species that will be able to adapt to changes at the Site. Therefore, Site is of Negligible importance for any of the SPA species associated with Dublin Bay.

3.4.2 Other birds

Suburban grasslands are rarely of importance for any birds of conservation importance (aside from SPA species, which are discussed above). A range of common suburban birds were observed during the surveys, including magpie, rook, jackdaw, feral pigeon, starling, herring gull, pied wagtail and stonechat. It is likely that other common species such as tits and finches may use the site at other times. All of the species above are common and widespread in Ireland, so the Site is of Negligible importance for them.

There are no trees or shrubs within the Site that would be suitable for nesting birds.

3.4.3 Terrestrial mammals

No field signs of any mammals were observed during the site inspection. As the Site consists almost entirely of grassland and has no significant ground vegetation, it is unsuitable for any protected mammal species, e.g. otter, badger, hedgehog.

3.4.4 Bats

Bats are common and widespread in Ireland. During the day they roost in buildings, bridges and mature trees. At night they forage around wetlands (lakes, rivers, swamps), woodland and hedgerows. They typically avoid urban areas (particularly areas with artificial lighting) and open habitats such as grasslands.

Potential roost features

There are no buildings or mature trees within the Site. The buildings adjoining the Site are modern structures with no potential roosting features. Therefore, the Site and its immediate surroundings are of Negligible importance for roosting bats.

Foraging / commuting habitat

As the Site consists only of grassland habitats and is surrounded on all sides by streetlights, it is considered to be of Negligible importance for foraging bats.

3.4.5 Fish and aquatic fauna

There are no waterbodies within the Site, so it is of no importance for fish or other aquatic fauna.

3.4.6 Reptiles and amphibians

No reptiles or amphibians were observed during the survey, nor any ponds or other permanent wetland features suitable for breeding. Therefore, the Site is of no importance for these taxa.

3.4.7 Terrestrial invertebrates

The habitats within the Site are common in suburban landscapes in Ireland, so the site is considered to be of Negligible importance for invertebrates.

3.5 Potential limitations and information gaps

The site inspection and bat survey were carried out in June and August 2023, and the winter bird surveys between September 2023 and April 2024. These are ideal survey periods for all relevant ecological features, so the assessment is not considered to have any limitations or information gaps.

3.6 Identification of important ecological features

Table 3 provides a summary of all ecological features identified within the Site, including their importance and legal / conservation status. For the purposes of this impact assessment, any features that are of Local (or higher) ecological importance are considered to be 'Important Ecological Features'.

Table 3: Important ecological features within the Site

Ecological feature	Importance	Legal status	Important feature?
Designated sites	International	HR	No
Amenity grassland (GS2)	Negligible	-	No
Dry meadow (GS2)	Negligible	-	No
Rare / protected flora	N.A.	-	No
Invasive plant species	N.A.	-	No
SPA birds	Negligible	-	No
Other birds	Negligible	-	No
Terrestrial mammals	Negligible	-	No
Bats	Negligible	-	No
Fish and aquatic fauna	N.A.	-	No
Reptiles and amphibians	Negligible	-	No
Invertebrates	Negligible	-	No

** HR – European Communities (Birds and Natural Habitats) Regulations 2011 (as amended); WA - protected under Section 19 or 20 of the Wildlife Act 1976 (as amended)*

4 Evaluation and Recommendations

No Important Ecological Features were identified in Table 3, so the proposed development will have no significant ecological impacts.

Policy GI 16 of the Dublin City Development Plan requires that "*opportunities should be taken as part of new development to provide a net gain in biodiversity and provide links to the wider Green Infrastructure network".* Ecological enhancement measures for the scheme are reviewed in Section 4.1, and potential net gain in biodiversity is considered.

4.1 Biodiversity Enhancement and Net Gain

As discussed in Section 3.6, all habitats within the Site are currently of Negligible importance. The landscaping proposals for the scheme will substantially increase natural coverage of the Site. The following measures are shown in the landscape plan:

- New trees will be planted in areas of communal and public open space. The majority of new trees and shrubs will be native species, including some that produce berries (hawthorn, rowan) suitable for over-wintering birds
- Detention basins and swales / bioretention areas will temporarily hold water during periods of high rainfall. Some wetland species are expected to colonise these areas
- Small sections of wildflower meadow will be included in the public open space
- Bird boxes will be provided, including designs suitable for common garden birds (e.g. finches, tits, blackbirds) and swift nesting boxes on buildings of > 5 m height

Overall, the proposed landscaping scheme is expected to result in a net gain in the biodiversity value of the Site compared to the baseline habitats.

5 Conclusion

As the Site is of low baseline value and no ecological impacts are currently envisaged, it is not necessary to carry out an Ecological Impact Assessment. This Preliminary Ecological Appraisal may be included in the Part 8 application to demonstrate that ecological features have been considered. Screening for Appropriate Assessment is provided in a separate document.

As noted above, the proposed development is likely to provide a net gain in biodiversity (subject to the landscape proposals), and thus complies with Policy GI 16 of the Dublin City Development Plan.

6 References

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