Screening for Appropriate Assessment

Proposed residential development at Whitestown Way, Tallaght, Dublin 24

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Executive Summary

This *Screening for Appropriate Assessment* report has been prepared by NM Ecology Ltd on behalf of Cluid Housing Association Ltd as part of a planning application for a residential development at Whitestown Way, Tallaght, Dublin 24. The proposed development will consist of four apartment buildings, with associated internal roads, underground parking, open space and services.

The proposed development site is within the catchment of the River Dodder (a tributary of the River Liffey), which provides a potential hydrological connection to a number of Natura 2000 sites in Dublin Bay. In accordance with their obligations under the *European Communities (Birds and Natural Habitats) Regulations 2011* (SI 477/2011), South Dublin County Council must assess whether the proposed development could have 'likely significant effects' on these or any other Natura sites.

This document provides supporting information to assist the local authority with an Appropriate Assessment screening exercise, including: a description of the proposed development, details of its environmental setting, a map and list of Natura 2000 sites within the potential zone of impact, and an assessment of potential impacts. It is concluded that the proposed development will not cause direct or indirect impacts on any Natura 2000 sites, and that Appropriate Assessment is not required.

1 Introduction

1.1 Background to Appropriate Assessment

Approximately 10% of the land area of Ireland is included in the European Network of Natura 2000 sites, which includes Special Protection Areas (SPAs) to protect important areas for birds, and Special Areas of Conservation (SACs) to protect a range of habitats and species. Legislative protection for these sites is provided by the *European Council Birds Directive* (79/409/EEC) and *E.C. Habitats Directive* (92/43/EEC, as amended), which are jointly transposed into Irish law by the *European Communities (Birds and Natural Habitats) Regulations 2011* (SI 477/2011, as amended).

Regulation 42 (1) states that: "*Screening for Appropriate Assessment of a plan or project for which an application for consent is received* […] *shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on* [any Natura 2000 sites]." To ensure compliance with this regulation, planning authorities must screen all planning applications for potential impacts on Natura 2000 sites. Supporting information may be requested from the applicant to assist with this process.

This document provides background information to assist the local authority with a *Screening for Appropriate Assessment* exercise for the proposed development. It includes an outline of the proposed works, details of the environmental setting of the site, an appraisal of future development proposals in the area (potential for 'in-combination effects'), a map and list of Natura 2000 sites within the potential zone of impact, and an assessment of potential impacts.

1.2 Statement of authority

All surveying and reporting was carried out by Nick Marchant, the principal ecologist of NM Ecology Ltd. 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.

He has eleven years of professional experience, including eight years as an ecological consultant, one year as a local authority biodiversity officer, and two years managing an NGO in Indonesia. He has provided ecological assessments for over two hundred developments throughout Ireland and Northern Ireland, including wind farms, infrastructural projects (roads, water pipelines, greenways, etc.), and a range of residential and commercial developments.

1.3 Methods

This report has been prepared with reference to the following guidelines:

- *Appropriate Assessment of Plans and Projects in Ireland* (Department of the Environment, Heritage and Local Government, 2009)
- *Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4)*, E.C., 2002.
- *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal* (Chartered Institute of Ecology and Environmental Management, 2016)

In accordance with Section 3.2 of *Appropriate Assessment of Plans and Projects in Ireland*, the screening exercise was conducted using the following steps:

1. Description of the project and local site characteristics
2. Identification of relevant Natura 2000 sites, and compilation of information on their qualifying interests and conservation objectives
3. Assessment of potential impacts upon Natura 2000 sites, including:
    - Direct impacts (e.g. loss of habitat area, fragmentation)
    - Indirect impacts (e.g. disturbance of fauna, pollution of surface water)
    - Cumulative / 'in-combination' effects associated with other concurrent projects
4. Screening Statement with conclusions

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

- Plans and specifications for the proposed development
- Qualifying interests / conservation objectives of Natura 2000 sites from www.npws.ie
- Bedrock, soil, subsoil, surface water and ground water maps from the Geological Survey of Ireland webmapping service (www.gsi.ie/mapping.htm), the National Biodiversity Data Centre (http://maps.biodiversityireland.ie/), and the Environmental Protection Agency web viewer (http://gis.epa.ie/Envision/)
- The South Dublin County Development Plan 2016-2022, and details of permitted or proposed developments from the local authority's online planning records

All web-based resources were accessed in August 2018.

2 Description of the Project

2.1 Environmental setting

The proposed development site is located in a suburban setting near the Centre of Tallaght. The northern boundary is formed by a car park (which serves Tallaght Stadium), the western boundary by the Whitestown Way road, and the southern and eastern boundaries by the Sean Walsh Memorial Park.

The western half of the proposed development site contains an occupied single-storey residence, a number of wooden livestock sheds, and an area of amenity grassland; the latter is used as a 'petting zoo' for domestic fowl and small livestock. The eastern half of the site is surfaced in concrete and used as a storage yard for lawnmowers and other vehicles. There is also a small allotment and polytunnel in the south-eastern corner of the site.

Geology and soils

The underlying bedrock is dark limestone and shale of the Calp formation, which is a locally-important aquifer (moderately productive in local zones). Subsoils are limestone till, and soils are deep, well-drained brown earths, with some gravels and alluvium in the vicinity of the stream. On this basis, the site is considered to have relatively good drainage, so most rainfall would percolate to ground rather than flowing overland into surface water drainage features.

Hydrology

The closest watercourse is the Tallaght Stream (also referred to as the Whitestown Stream and River Poddle), which is located 20 m to the south of the proposed development site. The stream has been re-aligned through the Sean Walsh Memorial Park, and has been widened to form a series of ponds. It flows east and merges with the River Dodder approx. 2.5 km downstream, which then flows north-east through Dublin City to join the River Liffey in Dublin Port a further 13 km downstream. Water quality in the Tallaght Stream, as well as the rest of the Dodder catchment, is of moderate status (Water Framework Directive Status Assessments 2010-2015). The transitional / estuarine waters of the River Liffey are also of moderate status.

2.2 Description of the proposed development

The proposed development will consist of four apartment buildings, each of between two and four storeys. The main access point will be in the south-west of the site, and will lead to paved internal roads and on-street parking spaces. Public open space will be provided between the buildings, hedgerows will be planted to provide screening, and trees will be planted along roadsides and side boundaries. Foul water and surface water will be discharged to local authority foul and storm sewers on the Whitestown Way road.

2.3 Other nearby developments (potential in-combination effects)

The proposed development site is located in a suburban setting in Tallaght. It is included in zone OS of the South Dublin County Development Plan 2016 – 2022, for which the planning objective is "*to preserve and provide for open space and recreational amenities*". Much of the surrounding areas has been developed in the last 20 years, so it is unlikely to be under significant development pressure in the short to medium term.

Live and recently-approved planning applications in the vicinity of the site were reviewed on the online planning register of South Dublin County Council (DLRCC). A Part VII Application was made in 2016 for the construction of a new stand at the neighbouring Tallaght stadium, which is assumed to have been approved. The stand had not been constructed at the time of writing, so it is possible that it will be constructed in the coming years. A separate Part VII Application was made in 2016 for a series of landscaping works and traffic control measures along the N81 road to the north of the proposed development site; it is also assumed that the application was approved. It is not clear whether these works have taken place at the time of writing, so it is possible that it will be implemented in the coming years.

All other planning applications in the surrounding area were for small-scale works such as residential extensions. There is no risk that any of these minor developments would cause in-combination compacts with the proposed development.

In conclusion, the area surrounding the proposed development site does not appear to be subject to significant development pressure. Nonetheless, two developments were identified that could potentially act in-combination with the proposed development to increase the scale of potential ecological impacts. The risk of in-combination impacts is discussed in the impact assessment.

3 Description of Natura 2000 sites

3.1 Identification of Natura 2000 sites within the zone of influence

The proposed development site is not located within or adjacent to any Natura 2000 sites, so there is no risk of direct impacts (e.g. habitat loss or fragmentation) on any sites. Potential indirect impacts on distant sites were considered within a zone of influence of 2km, and along associated watercourses. There is a distant hydrological connection to four Natura 2000 sites in Dublin Bay, and an additional SAC within the river catchment. The relative locations of Natura 2000 sites is shown in Figure 1, and details of each site are provided in Table 1.

Figure 1	Natura 2000 sites
Location	Whitestown Way, Tallaght
Applicant	Cluid Housing Association
Date	23-08-2018

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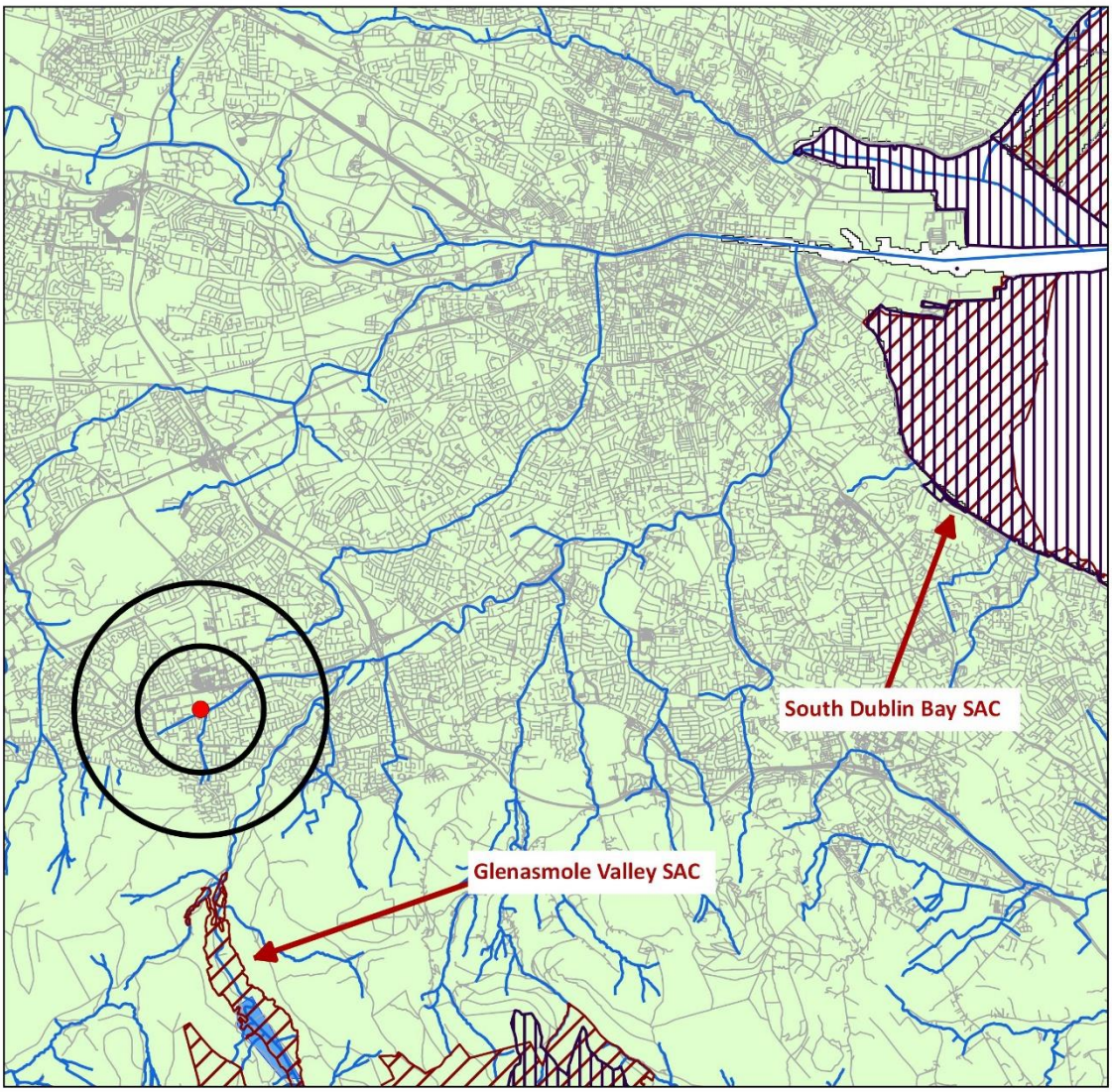
Site location
- Proposed development site
- Buffer zones (1km, 2km)
- Roads
- Watercourses

Designated sites
- Special Areas of Conservation
- Special Protection Areas



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0 1 2 3 4 5 km

Table 1: Natura 2000 sites of relevance to the proposed development site

Site Name	Distance [1]	Qualifying Interests
Glenasmole Valley SAC (1209)	2.6 km south	**Annex I habitats:** semi-natural dry grasslands and scrubland facies on calcareous substrates, *Molinia* meadows, petrifying springs with tufa formation (Cratoneurion) **Annex II species:** none
South Dublin Bay and River Tolka Estuary SPA (site code 4024)	18km downstream	**Habitats:** coastal wetlands **Special conservation interests:** light-bellied brent goose, oystercatcher, ringed plover, grey plover, knot, sanderling, dunlin, bar-tailed godwit, redshank, black-headed gull (wintering populations), arctic tern, roseate tern (passage), and common tern (breeding and passage)
South Dublin Bay SAC (210)	> 20 km downstream	**Annex I habitats:** inter-tidal mudflats / sandflats **Annex II species:** none
North Dublin Bay SAC (206)	> 20 km downstream	**Annex I habitats:** inter-tidal mudflats / sandflats (including patches of *Salicornia* and other annuals), *Spartina* swards, salt marshes, annual vegetation of drift lines, embryonic shifting dunes, white dunes, grey dunes, dune slacks **Annex II species:** petalwort *Petalophyllum ralfsii*
North Bull Island SPA (4006)	> 20 km downstream	**Habitats:** coastal wetlands **Special conservation interests:** wintering populations of light-bellied brent goose, Shelduck, teal, pintail, shoveler, oystercatcher, golden plover, knot, sanderling, dunlin, black-tailed godwit, bar-tailed godwit, curlew, redshank, turnstone, black-headed gull

3.2 Identification of potential impact pathways

Indirect impacts can only occur if there is a viable pathway between the source (the proposed development site) and the receptor (the habitats and species for which a site has been designated). The most common pathway for impacts is surface water, for example if a pollutant is washed into a river and carried downstream into a designated site. Other potential pathways are groundwater, air (e.g. sound waves or airborne dust), or land (e.g. flow of liquids, vibration). The zone of effect for hydrological impacts can be several kilometres, but for air and land it is rarely more than one hundred metres. The magnitude of impacts (e.g. the concentration of pollutants) usually decreases as the distance between source and receptor increases. An appraisal of potential pathways for impacts on the Natura 2000 sites listed in Table 1 is provided below.

[1] Some of the potential pathways for impacts on Natura 2000 sites are via intervening watercourses, so distances are measured along the length of connecting waterways rather than a linear measurement to the closest boundary of the Natura 2000 site.

The Glenasmole Valley SAC is located within the River Dodder catchment, but is upstream of the point of confluence of the Tallaght Stream, so there is no viable pathway for indirect impacts. There is a distant hydrological connection to four Natura 2000 sites in Dublin Bay via the River Dodder and River Liffey, but considering that there is at least 18 km of intervening watercourse, any pollutants would be diluted to negligible concentrations before they could reach these sites. Therefore, there is no viable surface water pathway to any of the Natura 2000 sites listed in Table 1. The distances involved are also too great for impacts via groundwater, air or land pathways. On this basis, all of these potential pathways can be screened out.

3.3 Conservation objectives

The standard conservation objective for all SACs and SPAs in Ireland is "*to maintain or restore the favourable conservation condition of the qualifying interests for which the SAC / SPA has been selected*". In addition, the Department of Arts, Heritage and the Gaeltacht have produced detailed conservation objectives for the Natura 2000 sites in Dublin Bay. They can be viewed on the website of the National Parks and Wildlife Service (http://www.npws.ie/protected-sites), but are not reproduced here in the interests of brevity.

4 Assessment of potential impacts

4.1 Direct impacts

The proposed development site is not located within any Natura 2000 sites, so there is no risk of habitat loss, fragmentation or any other direct impacts.

4.2 Indirect impacts

Potential changes in water quality (construction phase)

Construction works typically generate fine sediments, and may occasionally cause accidental spills of oil or other toxic chemicals, which can be harmful to aquatic / marine habitats and species. However, there is more than 18 km of watercourse between the proposed development site and the Natura 2000 sites in Dublin Bay, so any pollutants would be diluted to negligible concentrations before they could reach these sites. Consequently, the risk that pollutants from the construction site could cause significant negative impacts upon the Natura 2000 sites in Dublin Bay is negligible, even in a worst-case scenario and in the absence of standard site-management measures.

Potential changes in water quality (operational phase)

All foul water from the proposed development will be discharged to a local authority sewer and treated in the Ringsend waste water treatment plant. The plant is currently within capacity and

providing a high level of treatment before discharge to Dublin Bay. It is the responsibility of the local authority to provide adequate treatment of foul water, and to assess any potential impacts that it may have on the Natura 2000 network.

All surface-water runoff from hard surfaces will be discharged to a local authority storm sewer on Whitestown Way. The subsequent management of surface water is not clear, but it is likely to pass through oil and/or silt interceptors and subsequently be discharged to a local watercourse. It is the responsibility of the local authority to provide adequate treatment of surface water prior to discharge, and to assess any potential impacts that it may have on the Natura 2000 network.

Consequently, it can be concluded that foul water and surface water during the operation of the development would not cause any significant impacts upon water quality in any Natura 2000 sites.

4.3 Potential in-combination effects

As the proposed development will not have any impacts on nearby waterbodies or Natura 2000 sites, there is no risk of in-combination effects with other developments.

5 Screening Statement

Article 42 (7) of the *European Communities (Birds and Natural Habitats) Regulations 2011* states that: "*The public authority shall determine that an Appropriate Assessment of a plan or project is not required* […] *if it can be excluded on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site."*

To assist the planning authorities with the screening exercise, we have provided supporting information including: a description of the proposed development; an outline of its environmental setting; details of Natura 2000 sites within the potential zone of impact; and an assessment of potential impacts. Based on this information, we have demonstrated that there will be no risk of direct or indirect impacts on any Natura 2000 sites, so we conclude that Appropriate Assessment is not required.

References

Chartered Institute of Ecology and Environmental Management, 2016. *Guidelines for Ecological Impact Assessment in the U.K and Ireland: Terrestrial, Freshwater and Coastal* (2nd Edition). C.I.E.E.M., Hampshire, England.

Department of the Environment, Heritage and Local Government, 2009. *Appropriate Assessment of Plans and Projects in Ireland.* National Parks and Wildlife Service, DAHG, Dublin, Ireland.

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