

# Natura Impact Statement of a mixed-use development at Newtown, Drogheda, Co. Louth

Compiled by OPENFIELD Ecological Services

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For Ravala Ltd.



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## The Purpose of this document

This document provides information to facilitate the planning authority (An Bord Pleanála) to carry out an Appropriate Assessment of the proposed project. This document will assess whether significant effects to the integrity of the Natura 2000 network are likely to occur as a result of granting planning permission in accordance with Article 6(3) of the Habitats Directive and the Planning and Development (Amendment) Acts. It will determine whether mitigation measures are required to ensure that negative effects can be avoided to the Natura 2000 network.

**This report is based on a separate Screening Report for AA which has been prepared by Openfield Ecological Services and which concluded that significant effect to the Boyne Coast and Estuary SAC could not be ruled out.**

Under the European Communities (Birds and Natural Habitats Regulations) 2011 an NIS:

*...means a report comprising the scientific examination of a plan or project and the relevant European Site or European Sites, to identify and characterise any possible implications of the plan or project individually or in combination with other plans or projects in view of the conservation objectives of the site or sites, and any further information including, but not limited to, any plans, maps or drawings, scientific information or data required to enable the carrying out of an Appropriate Assessment.*

It should be noted that under Article 42(1) of the aforementioned legislation it is the relevant competent authority, in this case An Bord Pleanála, which carries out any AA or screening for AA, stating:

A screening for Appropriate Assessment of a plan or project for which an application for consent is received, or which a public authority wishes to undertake or adopt, and which is not directly connected with or necessary to the management of the site as a European Site, 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 the European site.

This NIS therefore aids in the decision-making process.

**It should be noted that there is no prescribed format for an NIS. This report therefore follows the generally accepted format for AA provided by the European Commission.**

## Methodology

The methodology used for this assessment is set out in a document prepared for the Environment DG of the European Commission entitled 'Assessment of plans and projects significantly affecting Natura 2000 sites 'Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC' (Oxford Brookes University, 2001). Chapter 3, part 1, of this document deals specifically with screening while Annex 2 provides the template for an AA report to be used.

In accordance with this guidance, the following methodology has been used to produce this Natura Impact Statement:

### **Step 1: Information Required**

This assesses whether adequate information is available in order to complete the AA or if, taking the Precautionary Principle into account, additional data is required.

### **Step 2: Impact Prediction**

This identifies the likely impacts that may arise as a result of the project.

### **Step 3: Conservation Objectives**

An assessment of whether or not there will be adverse effects on the integrity of the Natura 2000 site as defined by the conservation objectives and status of the site.

### **Step 4: Mitigation Measures**

Mitigation through avoidance of adverse effects must be proposed. Where it is likely that significant effects will remain despite mitigation then a full assessment of alternative options must be undertaken and an application for the project to proceed made under Article 6(4) of the Habitats Directive: Imperative Reasons of Overriding Public Interest.

The steps are compiled into an AA report, a template of which is provided in Appendix II of the EU methodology.

Reference is also made to guidelines for Local Authorities from the Department of the Environment, Heritage and Local Government (DoEHLG, 2009).

A full list of literature sources that have been consulted for this study is given in the References section to this report while individual references are cited within the text where relevant.

AA Report (Natura Impact Statement) as per Annex 2 of EU methodology:

### **Step 1 – Information Required**

**Describe the elements of the project (alone or in combination with other projects or plans) that are likely to give rise to significant effects on the Natura 2000 site (from the screening report prepared by Openfield provided under separate cover)**

It is planned to construct 450 residential units along with supporting neighbourhood and employment uses on the site at Newtown, Drogheda. The site is currently agricultural land. Recent aerial photography shows the area to be approximately 330m from the Boyne Estuary. The site location is shown in figures 1 and 2.

The AA screening report provided follows accepted methodologies. It highlights the fact that the site is within the catchment of the estuary of the River Boyne and that significant effects could not be ruled out to the Boyne Coast and Estuary SAC.

The site is not located within or directly adjacent to any Natura 2000 area (SAC or SPA). The site is located on zoned and serviceable lands close to the town centre of Drogheda which is characterised by roads and other built development. The site itself lies within agricultural/open land. The Boyne Estuary lies approximately 300m to the north and the site lies within the hydrological catchment of this SAC. The site survey and AA screening report identified a small drainage ditch which runs from the south of the development area in a northerly direction before terminating in the eastern field (c.160m long.) Due to the site's location within the catchment of the Stagrennan Stream there is a possibility that a pathway exists between the drainage ditch and the Stagrennan Stream leading to the Boyne Estuary .

The construction phase will involve site preparation and soil clearance. This will result in the loss of most habitats including the infill of the drainage ditch. Any inert construction and demolition waste will be removed by a licenced contractor and disposed of in accordance with the Waste Management Act. An outline Construction Waste Management Plan by AWN Consulting is submitted as part of the application documentation.

Wastewater from the development will pass to the Drogheda wastewater treatment plant. This plant discharges treated wastewater to the Boyne Estuary. Surface water drainage will conform to SUDS principles.

A new surface water drainage system is to be installed in accordance with the SUDS principles. This will ultimately connect to an existing surface water sewer, discharging to the River Boyne. Volumes entering the sewer are minimised in the first instance through the use of water butts, swales and filter drains. Excess run off will be divided into three catchment areas, each with their own underground attenuation storage, flow control device and petrol interceptor. In this way the quality and quantity of surface run-off will remain at the 'greenfield'

rate. No negative effects to water quality in the River Boyne are expected to arise from this source.

Some dust and noise can be expected during the construction phase. The operation phase will see the development occupied and this will bring with it human disturbance as well as noise and artificial light.

## **Step 2 - Impact Prediction**

The AA screening report describes the elements of the project which “have the potential to cause environmental impact”. These are:

### **Habitat loss**

This development will not result in the loss of any habitat within or adjacent to any SAC or SPA.

### **Habitat disturbance**

No habitats will be directly disturbed within or directly connecting to Natura 2000 areas.

Indirect disturbance is unlikely to occur through amenity pressures on coastal areas.

### **Pollution during construction**

There is a small drainage ditch on the lands (c. 160m) and this is likely to lead ultimately to the Stagrennan Stream and thereon to the Boyne Estuary. This ditch is not of salmonid status due to its small size, limited extent and lack of connectivity to wider water courses. This project will infill the ditch while wide construction activities will result in disturbance to soil. Therefore, any potential adverse impacts would occur at the construction phase. Though temporary, it is considered that the loss of construction pollutants to the estuary could result in impacts to invertebrate communities within estuary and mudflat habitats. Significant effects to the Boyne Coast and Estuary SAC therefore cannot be ruled out.

### **Pollution during normal operation**

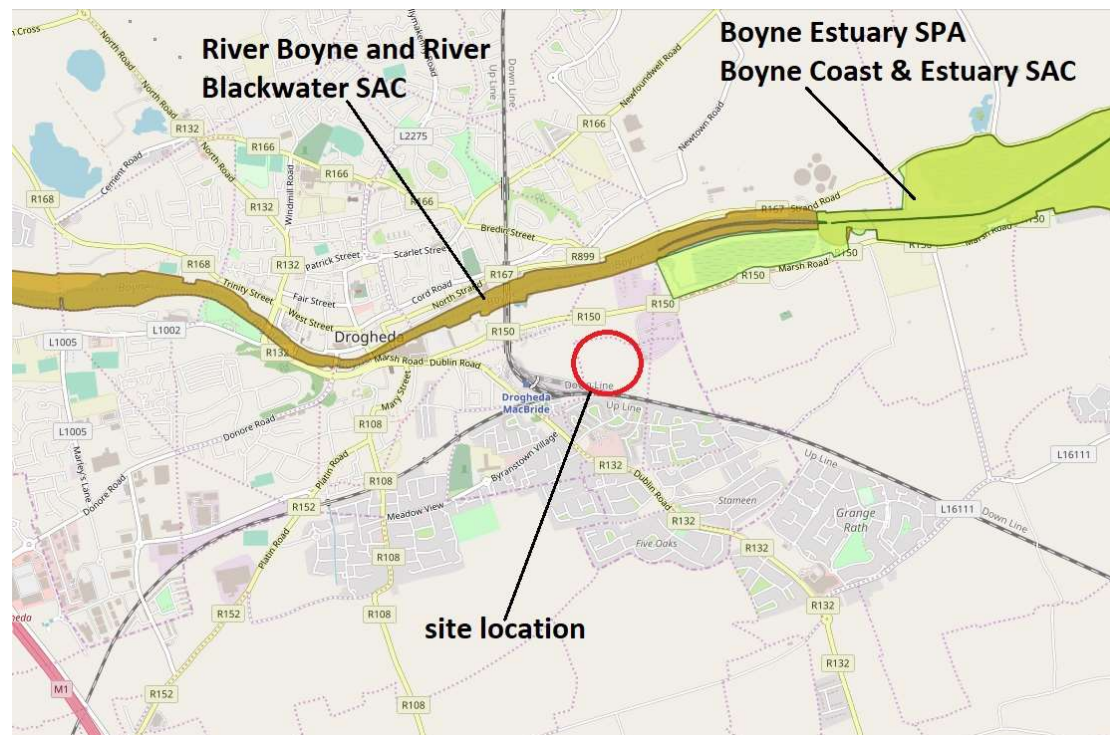
The use of accepted SUDS techniques in the design of the project will ensure that negative effects to water quality do not arise from surface water run-off when the project is established.

Ample capacity exists at the Drogheda wastewater treatment plant to accept the likely additional loading from this development. No significant effects to Natura areas is likely to arise from these sources.

### **Abstraction**

There is no evidence that abstraction from the River Boyne as part of the general water supply system for the Drogheda Area is resulting in ecological pressures. This aspect of the project is not considered to be significant.

The water supply to the development will be provided by way of the existing system with some local additional works as detailed in the Engineering Assessment Report by Waterman Moylan Consulting Engineers under separate cover.



**Figure 1 – Site location (red circle). The SAC is shown in tan while the SPA is shown in lime green (from [www.epa.ie](http://www.epa.ie)).**

An assessment of the effects of the project ‘in combination’ with other potential sources is presented.

Individual impacts from one-off developments or plans may not in themselves be significant. However, these may become significant when combined with similar, multiple impacts elsewhere. These are sometimes known as cumulative impacts but in AA terminology are referred to as ‘in combination’ effects.

In terms of the conservation objectives of the SACs and SPAs identified in section 2.2, maintaining the extent and condition of important habitats and species populations is vital.

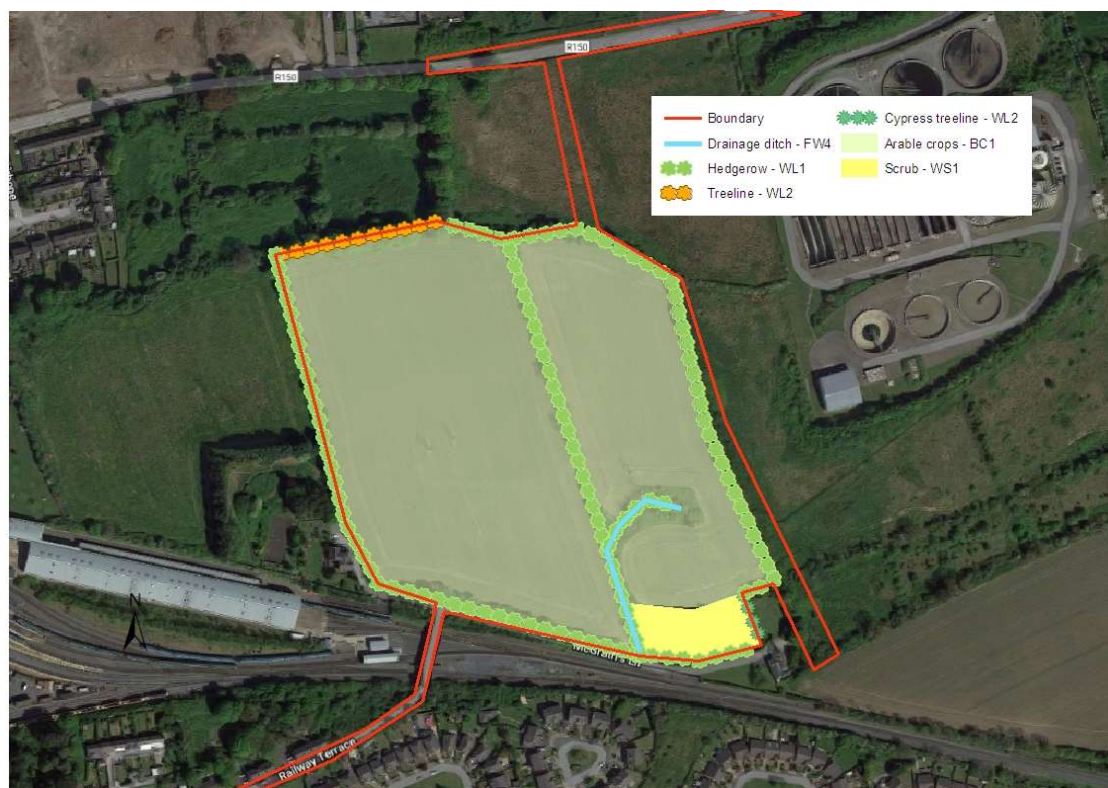
This part of County Louth is currently a combination of transport links, agricultural land, and built development. Increasing urbanisation is a characteristic of this region as demand for housing and other built development increases. This development can be seen in conjunction with the permitted development of a new access road and 133 houses (PA Ref 17-387) directly to the east of the subject lands.

The cumulative effects of this type of urban growth can arise from replacing permeable ground with hard surfaces. This can result in increased risk of flooding and deterioration of water quality, primarily from the run-off of

particulate matter and hydrocarbon residues (Mason, 1996). To combat this effect new developments, integrate sustainable drainage systems (SUDS) to maintain natural, or 'green field' rates of surface water run-off while also improving water quality in rivers. This development is fully compliant with these principles.

The Second RBMP has been published under the EU's Water Framework Directive. This sets out to improve ecological status of water bodies in 190 'action areas' by 2021.

The increasing expansion of Drogheda will also place pressure on wastewater infrastructure, which currently discharges to the Boyne Estuary. However, sufficient capacity exists at the municipal wastewater treatment plant to accommodate the predicted additional loading arising from this expansion.



**Figure 2 – Site boundary**





**Describe how the project will affect key species and key habitats. Acknowledge uncertainties and any gaps in information.**

Hydrological pathways exist to the Boyne Estuary. The conservation objective set for mudflats and estuaries in this SAC is to maintain the invertebrate communities in their “natural condition”. Given the potential effects to water quality during construction (particularly sediment and other construction pollution), significant effects to this qualifying interest cannot be ruled out. This may affect the integrity of the SAC.

**Describe how the integrity of the site (determined by structure and function and conservation objectives) is likely to be affected by the project**

Sediment is acknowledged as among the most important pollutants in river ecosystems while toxic substances can directly affect aquatic life.

Because sediment and construction pollution can impact upon the invertebrate communities in tidal sediments, the integrity of the SAC could be compromised.

**Step 4 - Mitigation**

**Describe what mitigation measures are to be introduced to avoid, reduce or remedy the adverse effects on the integrity of the site. Acknowledge uncertainties and any gaps in information.**

Pollution prevention during construction

Construction will follow guidance from Inland Fisheries Ireland (IFI, 2016) for the protection of fish habitat. Surface run off from the site will only be discharged to local drains via a settlement pond so that only silt-free water will enter the environment.

Dangerous substances, such as oils, fuels etc., will be stored in a bunded zone. Emergency contact numbers for the Local Authority Environment Section, Inland Fisheries Ireland, the Environmental Protection Agency and the National Parks and Wildlife Service will be displayed in a prominent position within the site compound. These agencies will be notified immediately in the event of a pollution incident.

Site personnel will be trained in the importance of preventing pollution and the mitigation measures described here to ensure same.

The site manager will be responsible for the implementation of these measures. They will be inspected on at least a daily basis for the duration of works, and a record of these inspections will be maintained. See section 10 of the CWMP. Preliminary Construction Management Plan by Waterman Moylan Consulting Engineers under separate cover.

## **The Assessment of Significance of Effects – Conclusion of Stage 2**

This report contains an analysis of the proposed project and its relationship with areas designated under the Habitats and Birds Directives. Pathways exist between the development site and a number of such areas and these have been described in detail. Following this analysis, it is concluded that significant effects cannot be ruled out to the Boyne Coast and Estuary SAC. Specifically, this may arise from the impact to mudflat and estuary habitat from pollution during the construction and operation phases. Arising from this assessment, mitigation has been proposed. With the implementation of these measures no adverse effects to the integrity of the SAC will occur. This conclusion is based on best scientific knowledge.

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