

# Natura Impact Statement of a Strategic Housing Development at Colp West, Drogheda, Co. Meath

Compiled by OPENFIELD Ecological Services

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## The Purpose of this document

This document provides information to facilitate the competent 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 Part XAB of the Planning and Development (Amendment) Acts. It will determine whether mitigation measures are required to ensure that negative effects do not occur 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.*

The screening submitted under separate cover concluded that significant effects could not be ruled out – therefore this NIS is submitted.

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 (Oxford Brooks University, 2011).**

## 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 357 residential units along with supporting neighbourhood facilities and transport links on the site at Colpe West, Drogheda. The development site is located to the south-east of Drogheda, and south of the estuary of the River Boyne. It is in an area characterised by a combination of agricultural and built (most residential) land uses. 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 1km to the north and the site lies within the hydrological catchment of this SAC. The site survey and AA screening report identified no water courses directly linking the site to the Boyne Estuary. Nevertheless, drainage pathways lead to this area. Due to the site's location within the catchment of the Stagrennan Stream there is a possibility that a pathway exists between the site 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 and extensive soil disturbance. Any inert construction and demolition waste will be removed by a licenced contractor and disposed of in accordance with the Waste Management Act.

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 be divided into three catchment areas, two of which will discharge to open ditches and one to an existing surface water sewer. Each catchment will include open attenuation detention basins which is a form of SUDS. No negative effect arising to the quantity or quality of surface run-off will occur.

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.

A site visit was carried on October 11<sup>th</sup> 2018 and May 24<sup>th</sup> 2019 and the lands were surveyed in accordance with best practice standards (Smith et al., 2010). The subject site comprises a series of large fields which are in agricultural production and at the time of survey were **tilled land – BC3. Hedgerow – WL1** field boundaries are found along the route of the railway line as well as internal field boundaries and the boundary to the north-west. They are composed of Hawthorn *Crataegus monogyna*, Ash *Fraxinus excelsior* with Ivy *Hedera helix* and Brambles *Rubus fruticosus agg.* Within the hedgerows there are occasional very tall/veteran specimens of Ash. A taller **treeline – WL2** can be found along a relatively short stretch to the south-west. This is composed of tall Ash, Copper Beech *Fagus sylvatica*, Sycamore *Acer pseudoplatanus* and Lime *Tilia sp.* Following guidance from the Heritage Council (Foulkes et al., 2013) these features are of ‘higher significance’ due to their age and structure. There are no water courses on the site although ditches, which were dry at the time of survey, accompany hedgerows and are likely to lead to the Stagrennan Stream, which itself discharges to the Boyne Estuary.

There are no habitats which are examples of those listed in Annex II of the Habitats Directive. There are no plant species which are listed as alien invasive on Schedule 3 of SI No. 477 of 2011. Habitats are mostly of low ecological value while boundary hedgerows and treelines can be considered to be of high local value.

## 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 are no water courses on the lands although surface drainage pathways are likely to lead ultimately to the Stagrennan Stream and thereon to the Boyne Estuary. Although 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.

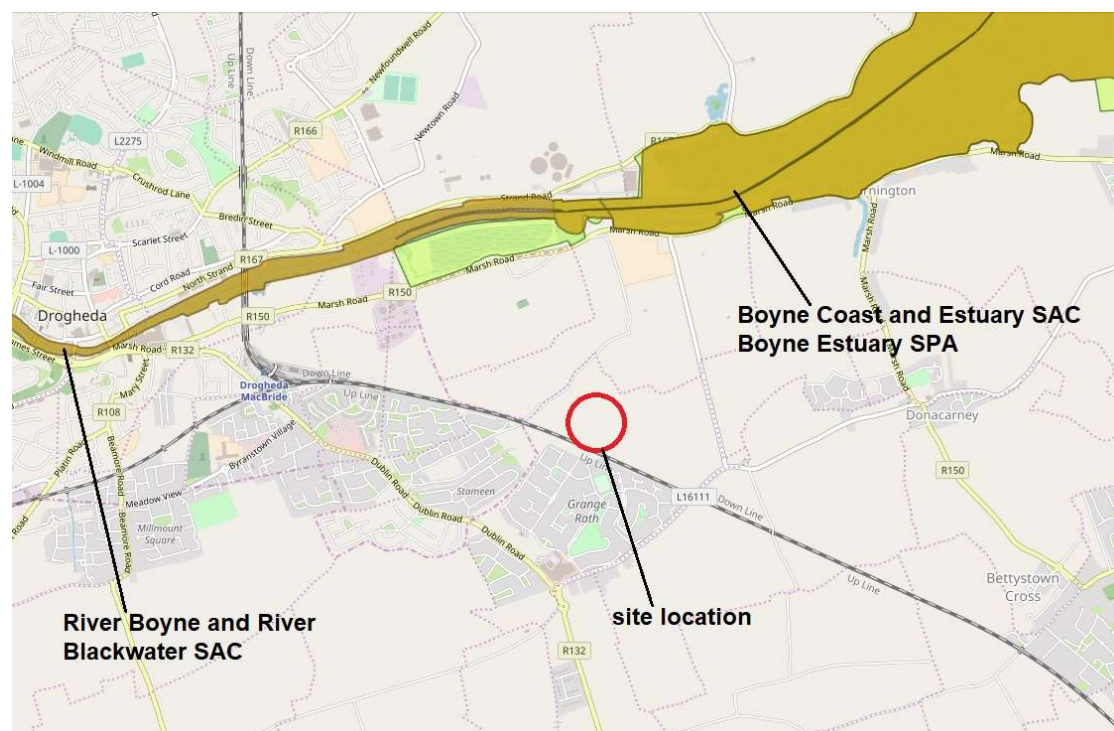
### **Pollution during normal operation**

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. These measures are standard features, required for all development projects as part of the Greater Dublin Strategic Drainage Study and are not introduced here to avoid or reduce an effect to a Natura 2000 area. Therefore the use of SUDS is not considered to be mitigation in an AA context.

The Drogheda wastewater treatment plant is not in compliance with prescribed treatment standards and however ample capacity exists to accept the likely additional loading from this development. No significant effects to Natura areas are likely to arise from these sources.

### **Abstraction**

There is no evidence that abstraction from the River Boyne is resulting in ecological pressures. This aspect of the project is not considered to be significant.



**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)).**



Figure 2 – Site boundary

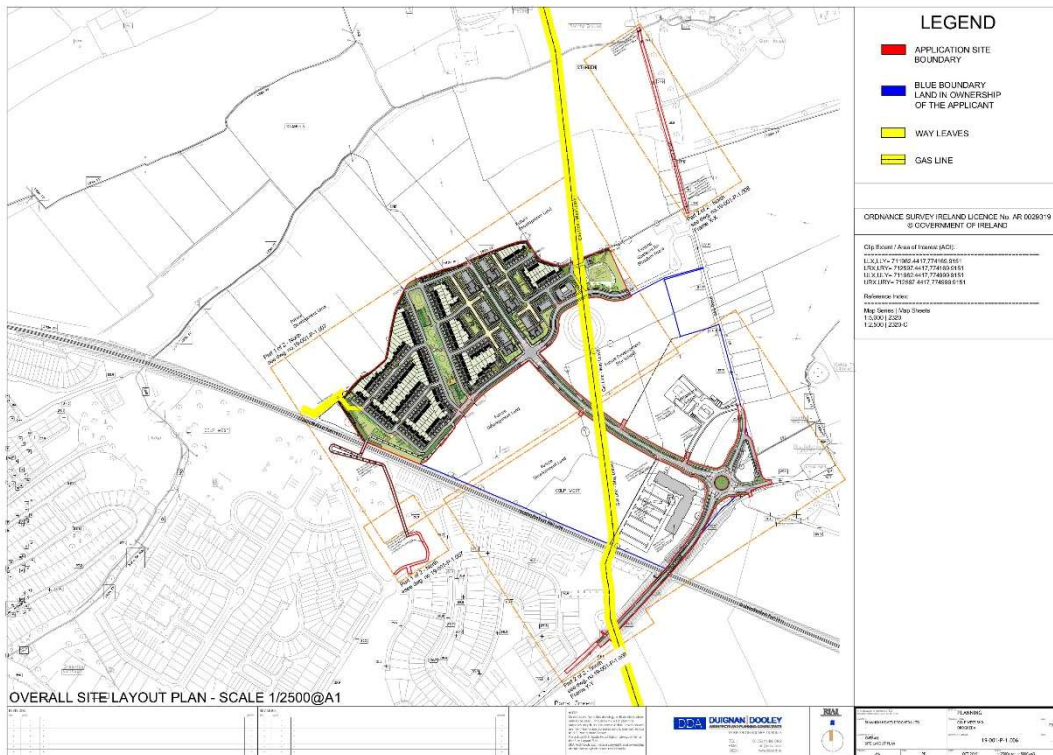


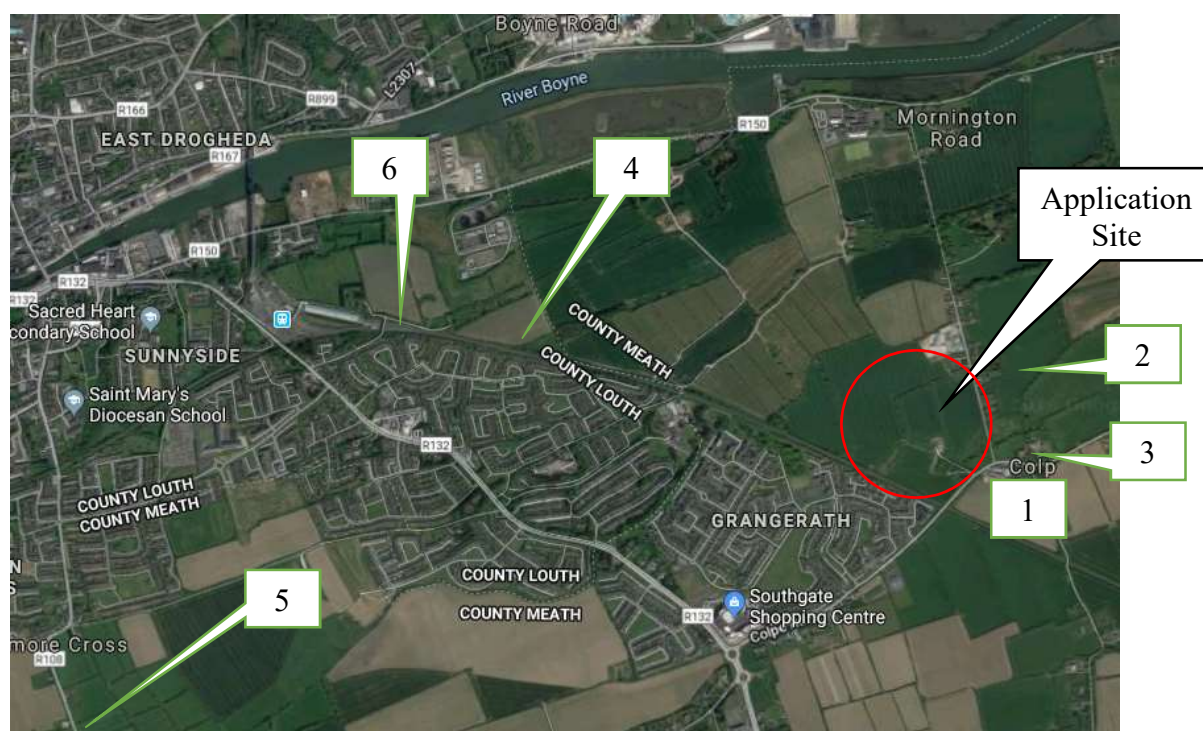
Figure 3 – Site layout

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

This part of County Meath 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 development of lands directly to the north and south of a permitted access road. These lands are to be developed for residential homes, educational uses and other essential development.

This application can be viewed in the context of wider development of this area, as provided for under the Southern Environs of Drogheda Local Area Plan 2009-2015. This plan was subjected to AA by the Local Authority and which found that its implementation would not result in significant negative effect to Natura 2000 areas. This includes a new distributor road, a school (already constructed) and additional residential areas to the north and south.

Figure 4 shows nearby developments which have been approved or which are currently in the planning system.



**Figure 4 – Indicative Location of Nearby Developments**

1. Meath County Council Reg. Ref.: LB/180620 – Commercial Development

A ten year permission for a commercial development at Colpe Road, Colpe West, Drogheda, Co. Meath was granted on the 4/9/2018. The site is located north of Colpe Road and to the west of Mill Road and is bordered to the south west by the Dublin-Belfast railway.

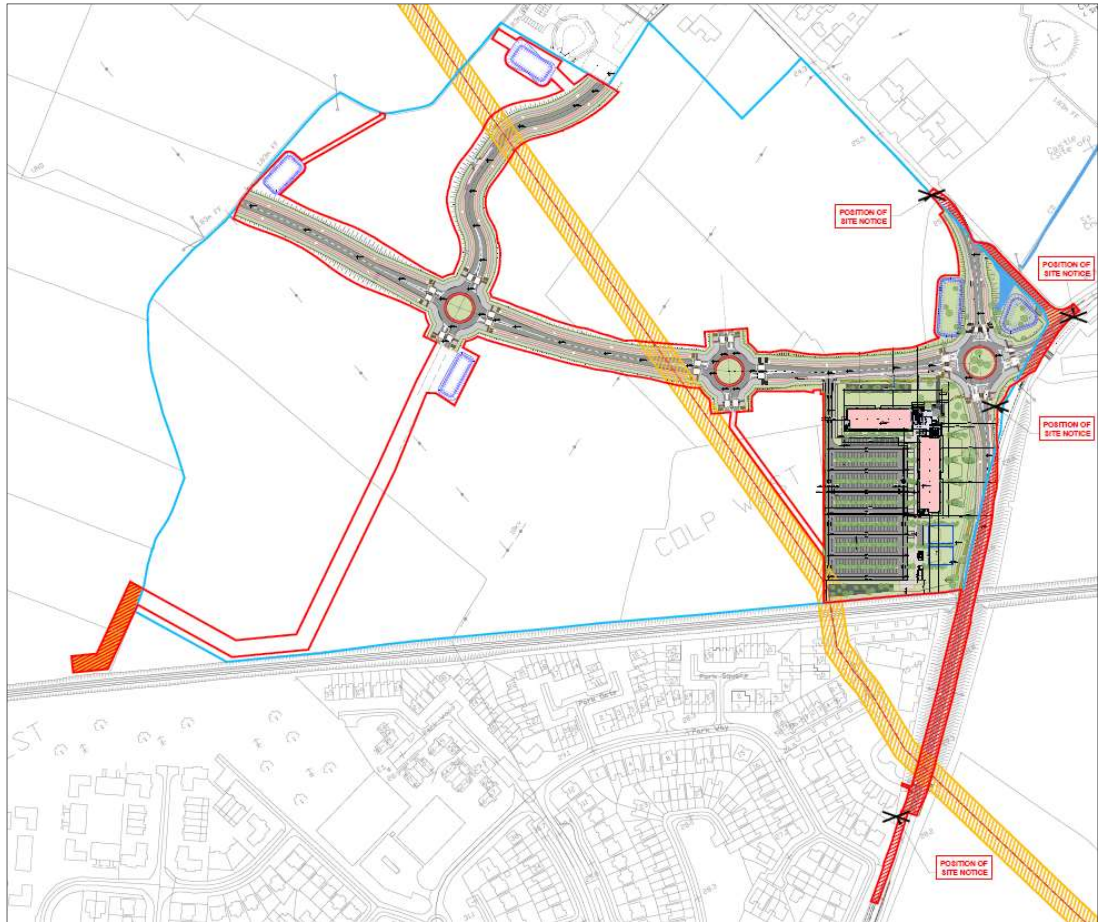


The development consisted of the demolition of the existing habitable house and construction of 1 no. 4 storey office building consisting of 2 no. blocks with a shared corner entrance/reception area and a screened plant area, solar panels and equipment at roof level, providing a total GFA of 11,205 sq.m. The road infrastructure permitted includes a link street approximately 720m in length, including 3 no. roundabout junctions, and 230m long connection of the link street to the east to facilitate a connection to the existing school on Mill Road (Gaelscoil an Bhradáin Feasa). The area of the permitted road infrastructure has been included within the current SHD application, and the alternate road design now proposed will supersede that which is permitted and partially implemented.

2. Meath County Council Reg. Ref.: SA130927 & ABP Reference: PL17.243331.  
– New Primary School

Planning permission was granted with modifications on the 18/08/2014 by An Bord Pleanála following a third party appeal for the following;

*'Removal of all existing temporary school buildings, construction of a new two storey primary school comprising of 16 classrooms, 4 resource rooms, 1 general purpose hall, 1 base classroom special needs unit and ancillary accommodation, all associated external works including provision of vehicular entrance from the Mill Road and provision for future access from the proposed new Mill Road/Marsh Road link road the west, internal bus set-down and all footpaths, staff car parking, cycle parking, 2 no. ball courts, 1 junior play area, 1 soft play area, proprietary wastewater system, storm drainage system, landscaping and boundary treatments'.*



**Figure 5: Reg Ref: LB/180620 - Permitted commercial development and associated road infrastructure**

It is noted that the development as permitted allows for future access from the proposed new Mill Road/Marsh Road link road to the west, which the proposed development now seeks to realise. It is also noted that Condition No.3 of ABP Reference: PL17.243331 states;

*'3. (a) The route of the potential future access road within the site, shown on drawing C-005 revision PL1, submitted to the planning authority on the 2nd day of December 2013, shall be kept free from development and shall be reserved for this road.*

*(b) When the Mill Road/Marsh Road Link Road has been constructed, vehicular access to such Road shall be provided to the south-western boundary of the site by such future access road, together with revised set down area, to details to be agreed with the planning authority at that time. When the school is connected to the Link Road, the existing vehicular access to Mill Road shall be permanently closed.*

*Reason: In the interests of orderly development and to ensure that access from the proposed Mill Road/Marsh Road Link Road can be effected in the future, in accordance with the provisions of the Local Area Plan'*

3. Meath County Council Reg. Ref.: LB190739 – Temporary Secondary School

On the 31<sup>st</sup> of July 2019, a decision to grant permission was issued by the Planning Authority for the following development on a site to the southeast of the main SHD site. The development was described as follows:

*“The provision of a temporary post primary school by way of construction of 3no. prefabricated buildings (c 190 Sq. Mtrs 239 Sq. Mtrs & 469 Sq.Mtrs) on a defined site area (c. 0.643Ha) to be enclosed within a 2mtrs high welded mesh fencing and access gates with associated site works including provision of new site entrance onto new road as granted planning permission under Planning Ref LB 180620, short term temporary entrance onto Mill Road, car parking, drop off area and hard surface play area, wastewater treatment system and associated percolation area. Temporary permission for a period no longer than 5 years is being sought.”*

This temporary secondary school provides for a new access onto the link road as permitted under Planning Ref. LB 180620, which is partially implemented at present. As set out in further detail herein, the area of the permitted roadway is included in the current SHD application, and the revised road proposal will supersede the partially implemented permitted roadway.

4. Louth County Council Reg. Ref.: 17387 – Residential Development

On the 7<sup>th</sup> of August 2017, a final grant of permission was issued by Louth County Council on lands at Marsh Road , Newtown , Lagavooren, Drogheda, for a residential development comprising of the following:

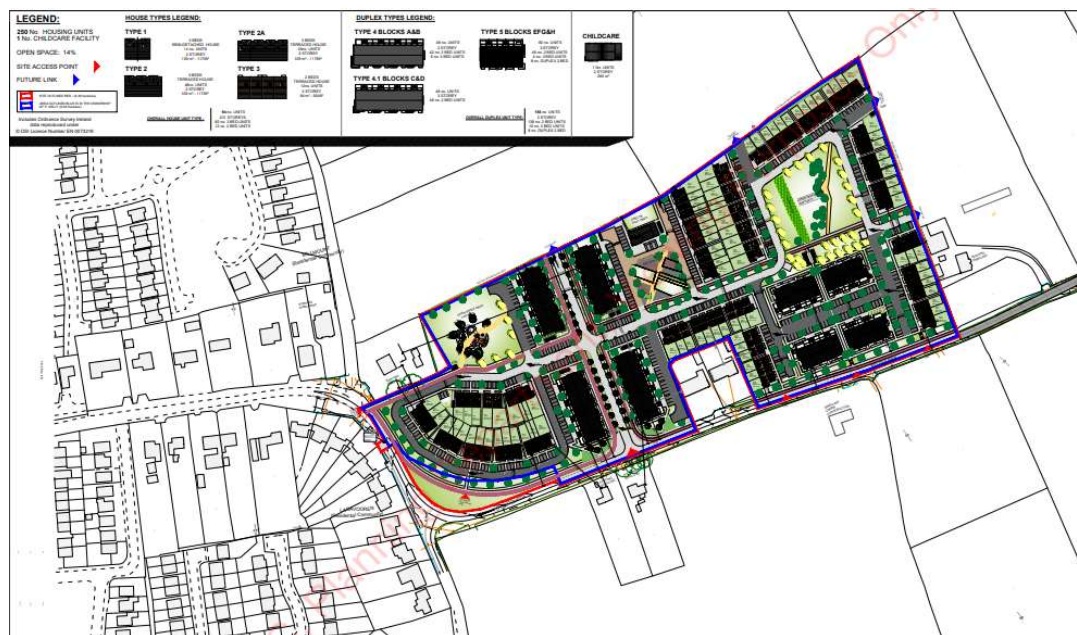
*“Permission for development to consist of the construction of a total of 133 no. two storey residential dwellings in a mix of detached, semi-detached and terraced form. Vehicular access is from the Marsh Road (R150). The development also provides for all associated site development works including alterations to ground levels, internal roads, car-parking, footpaths, open space, public lighting, landscaping and boundary treatments. The application site was previously granted planning permission under ref. no. 06/52 for 260 no. residential units.”*



**Figure 6: Extract from site layout plan of Reg. Ref.: 17387**

**5. An Bord Pleanála Reg. Ref.: ABP-3037899-19- Approved SHD at Bryanstown**

On the 10<sup>th</sup> of June 2019, permission was granted for a Strategic Housing Development at Bryanstown, within the southern environs of Drogheda. The approved development comprises 250 no. dwelling units (94 no. houses, 156 no. duplex/apartments), creche and associated site works.



**Figure 7 - An Bord Pleanála Reg. Ref.: 305110 – Current SHD Application at Marsh Road**



sufficient capacity exists at the municipal wastewater treatment plant to accommodate the predicted additional loading arising from this expansion. This is shown in the AER for the plant which states that capacity is not likely to be exceeded within the next three years.

There are no plans or projects which could act in combination with the subject proposal to result in significant effects to Natura 2000 areas.

### **Step 3 – Conservation Objectives**

#### **Set out the conservation objectives of the site**

The Conservation Objectives document for the Boyne Coast and Estuary SAC shows that a number of habitats are present along in the Boyne Estuary downstream of the subject site, specifically mudflats and estuaries. The following conservation objectives are therefore considered to be relevant:

#### **Mudflats (code 1140)**

Permanent habitat area stable or increasing (estimated at 1,027 hectares); estuarine muds dominated by polychaetes and crustaceans community complex maintained in a natural condition.

#### **Estuaries (code: 1130)**

Permanent habitat area stable or increasing (estimated at 1,905 hectares); estuarine muds dominated by polychaetes and crustaceans community complex maintained in a natural condition

#### **Atlantic/Mediterranean Salt Meadows (1330/1410)**

Maintain habitat area and distribution including physical structure (sediment supply, creeks and pans, flooding regime). Maintain vegetation structure as measured by vegetation height, vegetation cover, typical species and sub-communities. Absences of the invasive *Spartina anglica*.

#### **Fixed Coastal Dunes (2130)**

Maintain habitat area and distribution including physical structure (functionality and sediment supply, percentage of bare ground, sward height). Maintain vegetation structure as measured by zonation, vegetation cover, typical species and sub-communities. Absences of the invasive *Hippophae rhamnoides*.

#### **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. In reality this pathway is very weak. There are no water courses on the subject site and so for surface water to reach the estuary would require overland flow to the nearest open water course, the Stagrennan Stream. Surface water is highly likely to percolate to

ground long before it enters this water course and so this risk is present only in the event of extreme rainfall events. 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 in the absence of mitigation.

**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 freshwater river ecosystems while toxic substances can directly affect aquatic life.

There is no direct evidence that sediment and construction pollution can impact upon the invertebrate communities in tidal sediments. Concrete and other toxic substances can affect all invertebrate communities although the chance of such pollutants reaching the Boyne Estuary are negligible. Nevertheless, following the AA Screening, and taking a highly precautionary approach, it was concluded that significant effects to the SAC could not be ruled out.

**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 to prevent any adverse effects on Natura 2000 sites.

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.

Additional mitigation measures include:

- A Site-Specific Construction and Environment Management Plan will be developed and implemented during the construction phase. Site inductions will include reference to the procedures and best practice as outlined in the Construction and Environment Management Plan.
- Surface water runoff from areas stripped of topsoil and surface water collected in excavations will be directed to on-site settlement ponds where measures will be implemented to capture and treat sediment laden runoff prior to discharge of surface water at a controlled rate.
- Weather conditions and seasonal weather variations will also be taken account of when planning stripping of topsoil and excavations, with an objective of minimizing soil erosion.
- The extent of sub-soil and topsoil stripping to be minimised to reduce the rate and volume of the run-off during construction until the topsoil and vegetation are replaced.
- Concrete batching will take place off site or in a designated area with an impermeable surface.
- Concrete wash down and wash out of concrete trucks will take place off site or in an appropriate facility.
- Discharge from any vehicle wheel wash areas is to be directed to on-site settlement ponds.
- Oil and fuel stored on site for construction should be stored in designated areas. These areas shall be bunded and should be located away from surface water drainage and features.
- Refuelling of construction machinery shall be undertaken in designated areas away from surface water drainage in order to minimise potential contamination of the water environment. Spill kits shall be kept in these areas in the event of spillages.
- Hazardous construction materials shall be stored appropriately to prevent contamination of watercourses or groundwater.
- Spill kits should be kept in designated areas for re-fuelling of construction machinery.
- Dewatering measures should only be employed where necessary.

### **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 pathways have been described in detail. Following this analysis, it has been 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 phase. 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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