



**Appropriate Assessment Screening Report
for Proposed Strategic Infrastructure Development
(Proposed Electricity Transmission Development)
at Grange Castle West, Milltown, Co. Dublin**

prepared for Marston Planning Consultancy

on behalf of Data and Power Hub Services Ltd.

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Appendix I

The Qualifying Interests (QIs) and Special Conservation Interests (SCIs) of the European sites in the vicinity of the Proposed Development site (see Figure 2)

Appendix II

Land use plan polices/objectives relating to the protection of European sites and water quality

1 Introduction

- 1 This report, which contains information required for the competent authority (in this instance An Bord Pleanála) to undertake a screening for Appropriate Assessment (AA), has been prepared by Scott Cawley Ltd. on behalf of the applicant. It provides information on, and assesses the potential for, the Proposed Development to impact on the Natura 2000 network (hereafter referred to as European sites)¹. The Proposed Development primarily comprises the provision of two no. 110kV transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation compound and Transformers/ MV switch room compound along with associated and ancillary works on an overall site of c. 4.6 hectares at Milltown, Newcastle, Co. Dublin, Central Grid Reference: O 02240, 30915.
- 2 An AA is required if significant effects on European sites arising from a Proposed Development cannot be ruled out at the screening stage, either alone or in combination with other plans or projects. It is the responsibility of the competent authority to make a decision as to whether or not the Proposed Development is likely to have significant effects on European sites, either individually or in combination with other plans or projects.

For the reasons set out in detail in this AA Screening Report, an **Appropriate Assessment of the Proposed Development is not required in this instance** as it can be concluded, on the basis of objective information, that the Proposed Development, either individually or in combination with other plans or projects, will not have a significant effect on any European sites.

2 Methodology

2.1 Guidance

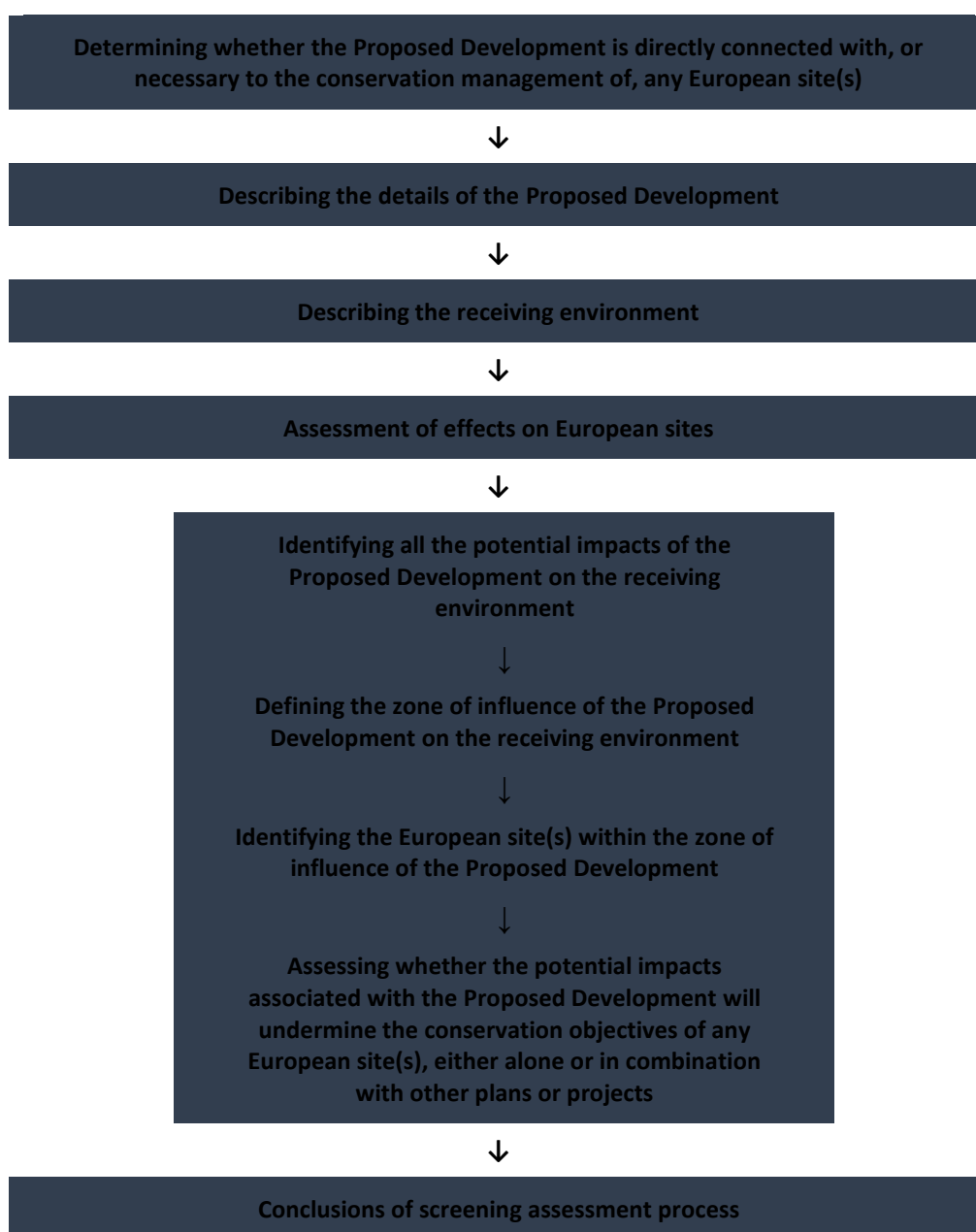
- 3 This Appropriate Assessment Screening Report has been prepared with regard to the following guidance documents, as relevant:
 - *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities*. (Department of Environment, Heritage and Local Government, 2010 revision)
 - *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities*. Circular NPW 1/10 & PSSP 2/10
 - *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* (European Commission, 2001)
 - *Communication from the Commission on the precautionary principle* (European Commission, 2000), and
 - *Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC* (European Commission, 2019)

¹ The Natura 2000 network is a European network of important ecological sites, as defined under Article 3 of the Habitats Directive 92/43/EEC, which comprises both special areas of conservation and special protection areas. Special conservation areas are sites hosting the natural habitat types listed in Annex I, and habitats of the species listed in Annex II, of the Habitats Directive, and are established under the Habitats Directive itself. Special protection areas are established under Article 4 of the Birds Directive 2009/147/EC for the protection of endangered species of wild birds. The aim of the network is to aid the long-term survival of Europe's most valuable and threatened species and habitats.

In Ireland these sites are designed as European sites - defined under the Planning Acts and/or the Birds and Habitats Regulations as (a) a candidate site of Community importance, (b) a site of Community importance, (c) a candidate special area of conservation, (d) a special area of conservation, (e) a candidate special protection area, or (f) a special protection area. They are commonly referred to in Ireland as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

2.2 Assessment Methodology

- 4 The above referenced guidance sets out a staged process for carrying out Appropriate Assessment. To determine if an Appropriate Assessment is required, documented screening is required. Screening identifies the potential for effects on the conservation objectives of European sites, if any, which would arise from a proposed plan or project, either alone or in combination with other plans and projects (i.e. likely significant effects).
- 5 Significant effects on a European site are those that would undermine the conservation objectives supporting the favourable conservation condition of the Qualifying Interest (QI) habitats and/or the QI/Special Conservation Interest (SCI) species of a European site(s).
- 6 Screening for Appropriate Assessment involves the following steps:



- 7 If the conclusions at the end of screening are that there is no likelihood of significant effects occurring on any European sites as a result of the proposed plan or project, either alone or in combination with other plans and projects, then there is no requirement to undertake an Appropriate Assessment.
- 8 In establishing which European sites are potentially at risk (in the absence of mitigation) from the Proposed Development, a source-pathway-receptor approach was applied. In order for an impact to occur, there must be a risk enabled by having a source (e.g. water abstraction or construction works), a receptor (e.g. a European site or its QI(s) or SCI(s)²), and a pathway between the source and the receptor (e.g. pathway by air for airborne pollution, or a pathway by a watercourse for mobilisation of pollution). For an impact to occur, all three elements must exist; the absence or removal of one of the elements means there is no possibility for the impact to occur.
- 9 The identification of source-pathway-receptor connection(s) between the Proposed Development and European sites essentially is the process of identifying which European sites are within the Zone of Influence (Zoi) of the Proposed Development, and therefore potentially at risk of significant effects. The Zoi is the area over which the Proposed Development could affect the receiving environment such that it could potentially have significant effects on the QI habitats or QI/SCI species of a European site, or on the achievement of their conservation objectives³.
- 10 The identification of a source-pathway-receptor link does not automatically mean that significant effects will arise. The likelihood for significant effects will depend upon the characteristics of the source (e.g. extent and duration of construction works), the characteristics of the pathway (e.g. direction and strength of prevailing winds for airborne pollution) and the characteristics of the receptor (e.g. the sensitivities of the European site and its QIs/SCIs). Where uncertainty exists, the precautionary principle⁴ is applied.

2.3 Desktop Data Review

- 11 The desktop data sources used to inform the assessment presented in this report are as follows (accessed on the 15 February 2021):
 - Online data available on European sites and protected habitats/species as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie⁵, including conservation objectives documents

² The term qualifying interest is used when referring to the habitats or species for which an SAC is designated; the term special conservation interest is used when referring to the bird species (or wetland habitats) for which an SPA is designated.

³ As defined in the *Guidelines for Ecological Impact Assessment in the UK and Ireland* (CIEEM, 2018)

⁴ The precautionary principle is a guiding principle that derives from Article 191 of the Treaty on the Functioning of the European Union and has been developed in the case law of the European Court of Justice (e.g. ECJ case C-127/02 – Waddenzee, Netherlands).

The guidance document *Communication from the Commission on the Precautionary Principle* (European Commission, 2000) notes that the precautionary principle “covers those specific circumstances where scientific evidence is insufficient, inconclusive or uncertain and there are indications through preliminary objective scientific evaluation that there are reasonable grounds for concern that the potentially dangerous effects on the environment, human, animal or plant health may be inconsistent with the chosen level of protection”.

Applying the precautionary principle in the context of screening for appropriate assessment requires that where there is uncertainty or doubt about the risk of significant effects on a European site(s), it should be assumed that significant effects are possible and AA must be carried out.

⁵ The following SAC and SPA GIS boundary datasets are the most recently available at the time of writing: SAC_ITM_2019_12 and SPA_ITM_2019_12.

- Online data available on protected species as held by the National Biodiversity Data Centre (NBDC) from www.biodiversityireland.ie
- Information on the surface water network and surface water quality in the area available from www.epa.ie
- Information on groundwater resources and groundwater quality in the area available from www.epa.ie and www.gsi.ie
- Ordnance Survey of Ireland mapping and aerial photography available from www.osi.ie
- Information on the location, nature and design of the Proposed Development supplied by the applicant's design team
- The Appropriate Assessment Screening Report and the Biodiversity Chapter of the Environmental Impact Assessment Report (EIAR) submitted for the proposed information communication technology facilities, under SDCC Planning Reg. Ref. SD20A/0324, for which a request for additional information was issued by the Planning Authority on the 11 February 2021
 - Scott Cawley Ltd. (2020). Appropriate Assessment Screening Report for Proposed Information Communication Technology Facilities at Grange Castle West, Milltown, Co. Dublin
 - Marston Planning Consultancy (2020). Environmental Impact Assessment: Information Communication Technology Development, Grange Castle West. December 2020 – Chapter 6. Biodiversity

2.4 Baseline Surveys

- 12 This section describes the ecological surveys carried out to inform the assessment of likely significant effects on European sites.

2.4.1 Habitats and Flora Survey

- 13 A habitat survey was undertaken of the Proposed Development site on the 10 February 2021 by Alexis Fitzgerald of Scott Cawley Ltd. following the methodology described in *Best Practice Guidance for Habitat Survey and Mapping*⁶. All habitat types were classified using the *Guide to Habitats in Ireland*⁷, recording the indicator species and abundance using the DAFOR scale⁸ and recording any species of conservation interest. Vascular and bryophyte plant nomenclature generally follow that of *The National Vegetation Database*⁹, having regard to more recent taxonomic changes to species names after the *New Flora of the British Isles*¹⁰ and the British Bryological Society's *Mosses and Liverworts of Britain and Ireland: A Field Guide*¹¹. Annex I habitat types were classified after the *Interpretation manual of European Union Habitats*

⁶ Smith, G.F., O'Donoghue, P., O'Hora, K. & Delaney, E. (2011) *Best Practice Guidance for Habitat Survey and Mapping*. The Heritage Council Church Lane, Kilkenny, Ireland.

⁷ Fossitt, J.A. (2000) *A Guide to Habitats in Ireland*. Heritage Council, Kilkenny.

⁸ The DAFOR scale is an ordinal or semi-quantitative scale for recording the relative abundance of plant species. The name DAFOR is an acronym for the abundance levels recorded: Dominant, Abundant, Frequent, Occasional and Rare.

⁹ Weekes, L.C. & FitzPatrick, Ú. (2010) *The National Vegetation Database: Guidelines and Standards for the Collection and Storage of Vegetation Data in Ireland*. Version 1.0. Irish Wildlife Manuals, No. 49. National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin, Ireland.

¹⁰ Stace, C. (2019) *New Flora of the British Isles. 4th Edition*. C&M Floristics.

¹¹ Atherton, I., Bosanquet, S. & Lawley, M. (2010) *Mosses and Liverworts of Britain and Ireland: A Field Guide*. Latimer Trend & Co., Plymouth.

EUR28¹² with reference to the corresponding national habitat survey reports and NPWS wildlife manuals, as applicable. The nomenclature for Annex I habitats follows that of the *Interpretation manual of European Union Habitats EUR28* with abbreviated names after those used in *The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview*¹³. Following a slight change in the red line boundary provided, a second habitat survey was carried out by Kristie Watkin-Bourne of Scott Cawley Ltd. on 24 February 2021, to cover an additional small area not previously surveyed.

2.4.2 Fauna Surveys

2.4.2.1 Terrestrial Mammals (excl. Bats)

- 14 A terrestrial fauna survey (excluding bats) was undertaken on the 10 February 2021 by Alexis Fitzgerald of Scott Cawley Ltd. The presence/absence of terrestrial fauna species were surveyed through the detection of field signs such as tracks, markings, feeding signs, and droppings, as well as by direct observation and identification of breeding/ resting places such as badger setts and otter holts, if present. The habitats on site were assessed for signs of usage by protected/red-listed fauna species, and their potential to support these species. Following a slight change in the red line boundary provided, a second terrestrial fauna survey was carried out by Kristie Watkin-Bourne of Scott Cawley Ltd. on 24 February 2021, to cover an additional small area around the Griffeen River not previously surveyed.

2.4.2.2 Breeding Birds

- 15 No dedicated breeding bird surveys were undertaken for this application. However, during the habitat survey conducted on the 10 February 2021, ad-hoc observations of birds on, or in close proximity to, the site were made.

2.4.2.3 Wintering Birds

- 16 No dedicated wintering bird surveys were undertaken for this application. However, wintering bird surveys were carried out on the 8 October and 9 November 2019 to inform the ecological impact assessment for the now permitted Power Generation Facility, which is located in the immediate vicinity of the Proposed Development site. The results of these 2019 surveys have been used to inform this ecological impact assessment with respect to potential impacts on local populations of wintering birds. In addition, any wintering birds which occurred within the subject lands during habitat surveys undertaken on 10 and 24 February were recorded.

3 Provision of Information for Screening for Appropriate Assessment

- 17 The following sections provide information to facilitate the Appropriate Assessment screening of the Proposed Development to be undertaken by the competent authority.
- 18 A description of the Proposed Development and the receiving environment is provided to identify the potential ecological impacts. The environmental baseline conditions are discussed, as relevant to the assessment of ecological impacts where they may highlight potential pathways for impacts associated with the Proposed Development to affect the receiving ecological environment (e.g. geological, hydrogeological and hydrological data).
- 19 The potential impacts are examined in order to define the potential zone of influence of the Proposed Development on the receiving environment. This then informs the assessment of whether the Proposed

¹² CEC. (Commission of the European Communities) (2013) *Interpretation manual of European Union Habitats EUR28*. European Commission, DG Environment.

¹³ NPWS (2019). *The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview*. Unpublished NPWS report.

Development will result in significant effects on any European sites; i.e. affect the conservation objectives supporting the favourable conservation condition of the European site's QIs or SCIs.

3.1 Description of the Proposed Development

Proposed Development

- 20 In brief, Data and Power Hub Services Ltd. are applying for permission for the provision of two no. 110kV transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation compound and Transformers / MV switch room compound, along with associated and ancillary works, on lands to the south of the Power Generation Facility that was permitted under SDCC Reg. Ref. SD20A/0058 and to the north of the concurrent application for 2 no. two storey Information Communication Technology (ICT) facilities under SDCC Reg. Ref. SD20A/0324, and within an overall landholding bound to the south by the Peamount Road (R120); and on lands that contain the 2 no. residential properties of Little Acre and Bulmer as well as agricultural lands and buildings within the townland of Milltown, Newcastle, Co. Dublin.
- 21 The Proposed Development also includes for the demolition of the existing two storey dwelling of Bulmer and associated outbuildings and stable building. The existing Little Acre dwelling and associated buildings are permitted to be demolished under SDCC Reg. Ref. SD20A/0058.
- 22 The proposed 110kV Gas Insulated Switchgear (GIS) Substation Compound includes the provision of a two storey GIS Substation building (with a gross floor area of 1,430sqm) (known as the Peamount Substation), car parking, lighting, associated underground services and roads within a 3.0m high fenced compound, and all associated construction and ancillary works. The Transformers / MV switch room compound includes three transformers plus MV switch room (200sqm), lighting and lightning masts, car parking, associated underground services and roads within a 3.0m high fenced and separate compound, and all associated construction and ancillary works.
- 23 Two proposed underground single circuit 110kV transmission lines will connect the proposed Peamount 110kV GIS Substation to the existing 2 no. single 110kV underground circuits within the Castlebaggot-Kilmahud circuit to the east. The proposed transmission lines cover a distance of approximately 940m within the townlands of Milltown and Clutterland. They will pass outside of the site underneath the R120, the former Nangor Road, Griffeen River and the newly realigned Baldonnel Road. The installation of these underground cables will require horizontal directional drilling of approximately 150m beneath the Baldonnel Road – former Nangor Road and Griffeen Road (please refer to report by Geo Drilling Solutions (2021)¹⁴ for further details).
- 24 The development includes the connections to the proposed Peamount substation as well as to the Castlebaggot-Kilmahud circuit, as well as changes to the attenuation pond and landscaping permitted under SDCC Reg. Ref. SD20A/0058 and all associated construction and ancillary works.
- 25 The duration of the construction activities is expected to last 20 months.

Proposed Drainage

Surface Water

- 26 Proposed Sustainable Urban Drainage Systems (SuDS) for the Proposed Development include
 - Swales running parallel to road carriageways/ footpaths;
 - Attenuation/ Detention pond, with effective storage volume of 2,903m³; and;
 - Silt and Hydrocarbon interceptors for road carriageways/ carpark areas.

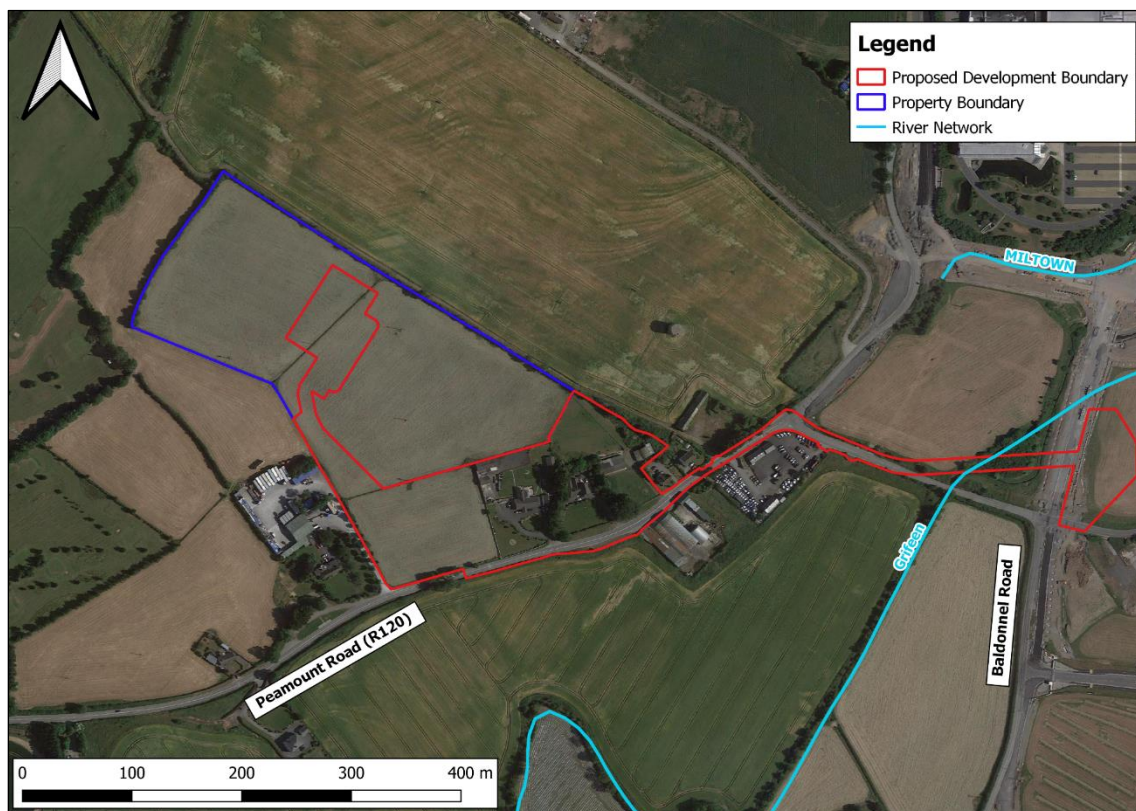
¹⁴ Geo Drilling Solutions (2021). *Grange Castle 110kV ESB Trenchless Crossing: Feasibility assessment for the undergrounding of a 110kV cables using Horizontal Directional Drilling beneath the Baldonnel Road & Griffeen River, Clutterland, Lucan, County Dublin*. 9 February 2021.

-
- 27 Controlled surface water flow at circa 56.3 Litres/sec will drain to the public surface water network via SuDS devices described above. Surface water will drain off site to the existing public surface water network to the east of the site, approximately 550m away. This will necessitate laying a 225mm outfall pipe through the public roads, the R120 and the R134. The surface water will drain to the surface water system within Grange Castle Business Park.

Foul Water

- 28 Foul drainage will discharge via a 225mm sewer to the existing 375mm public sewer to the east of the site, approximately 550m away. During operation, foul water generated by the Proposed Development comprising 0.5m³ a day will ultimately be discharged to the Grange Castle Waste Water Treatment Plant and then Ringsend Wastewater Treatment Plant (WWTP).

Figure 1: Proposed Development site outlined in red in the context of its surroundings

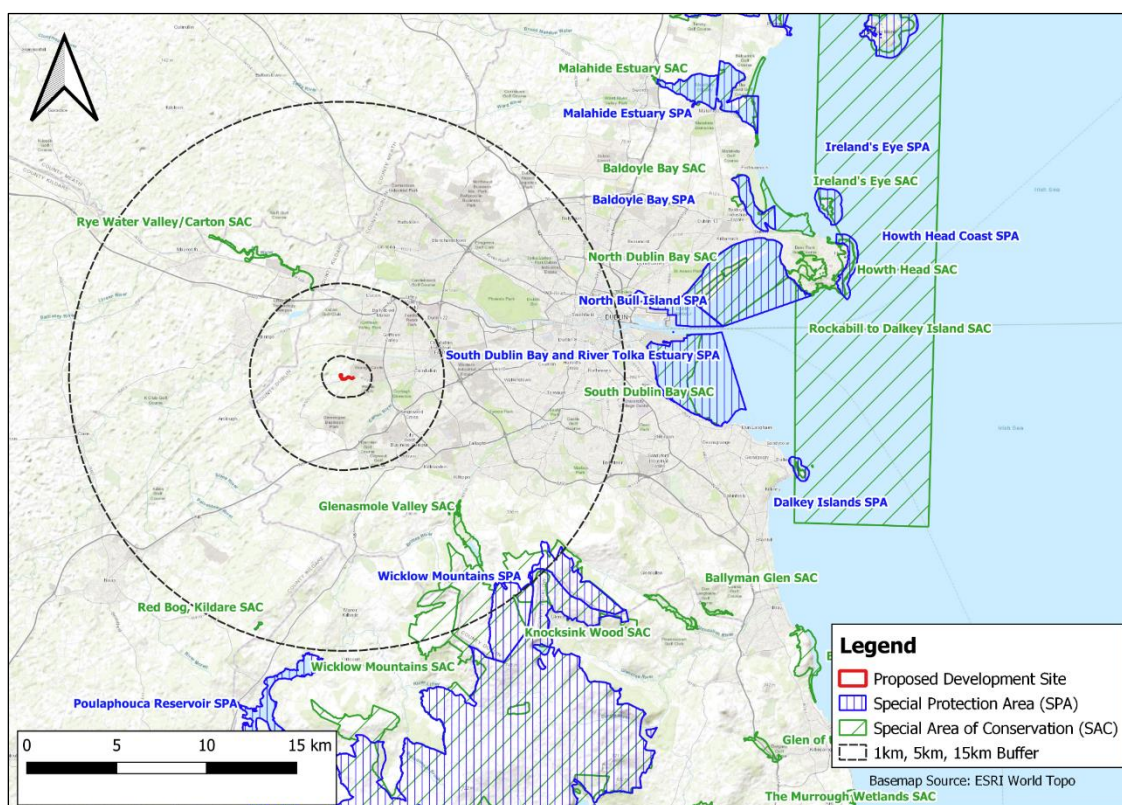


3.2 Overview of the Receiving Environment

3.2.1 European sites

- 29 The Proposed Development site is not located within or immediately adjacent to any European site. The nearest European site to the Proposed Development is the Rye Valley/Carton SAC; c. 4.9km to the north-west. The Proposed Development site is within the Liffey and Dublin Bay catchment, and Liffey sub-catchment. The Griffeen River is partially located within the proposed site boundary, flowing under the former Nangor Road. This river outfalls to the River Liffey c. 5.2km north of the Proposed Development site, which in turn discharges to the Liffey Estuary c. 17km east and to Dublin Bay and c. 27km downstream of the Proposed Development site. Therefore the Proposed Development is hydrologically connected to the following European sites in Dublin Bay: North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA.
- 30 All of the European sites present in the vicinity of the Proposed Development are shown on Figure 2 below. The QIs/SCIs of the European sites in the vicinity of the Proposed Development are provided in Appendix I.

Figure 2: European sites in the vicinity of the Proposed Development



3.2.2 Habitats

- 31 The following habitat types (following Fossitt 2000) were identified within the Proposed Development site (see Figure 3 below for habitat map).
- Buildings and artificial surfaces (BL3);
 - Improved agricultural grassland (GA1);
 - Amenity grassland (GA2);
 - Dry meadows and grassy verges (GS2);
 - Exposed sand, gravel or till (ED1);
 - Spoil and bare ground (ED2);
 - Recolonising bare ground (ED3);
 - Hedgerows (WL1);
 - Treelines (WL2);
 - Depositing/ lowland rivers (FW2);
 - Drainage ditches (FW4);
 - Immature woodland (WS2); and;
 - Scrub (WS1).
- 32 No Annex I habitats, for which European sites listed in Appendix 1 have been designated, were recorded within the Proposed Development site.

Figure 3: Map showing the habitat types identified within the Proposed Development site



3.2.3 Flora and Fauna Species

- 33 The National Biodiversity Data Centre (NBDC) database search did not return any records of protected and/or rare plant species, within c. 2km of the Proposed Development site.
- 34 In addition, the NBDC database search did not return any records of any non-native invasive species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended).
- 35 No non-native invasive species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 as amended, were recorded during the habitat surveys carried out by Alexis Fitzgerald of Scott Cawley Ltd. on 10 February 2021, within the Proposed Development site.
- 36 The National Biodiversity Data Centre (NBDC) database search returned the following records of Annex II/Annex IV fauna species listed below with year of record, within the 2km grid square (O03F) in which the Proposed Development site is located:
- Brown long-eared bat *Plecotus auratus* in 2002
 - Daubenton's bat *Myotis daubentonii* in 2013
 - Leisler's bat *Nyctalus leisleri* in 2002
 - Pipistrelle species *Pipistrellus pipistrellus sensu lato* in 2002
 - Soprano pipistrelle *Pipistrellus pygmaeus* in 2013
- 37 None of these bat species are listed as a QI of any European site in Ireland.
- 38 The Griffeen River, which flows under the former Nangor Road, would provide suitable habitat for otter. No signs of otter were detected during the field survey conducted by Alexis Fitzgerald of Scott Cawley Ltd. on 10 February 2021.

- 39 No records of Annex I bird species were returned following a review of records held by the NBDC within 2km of the Proposed Development site.
- 40 No winter birds of interest, e.g. Amber or Red-listed species such as gulls, snipe, lapwing, other waders or waterbirds that are known to use inland wintering grounds were recorded using the grassland habitat within the Proposed Development site, and *ad-hoc* observations of birds recorded on site during the habitat surveys conducted on the 10 and 24 February 2021 are common sub-urban species which are likely to be present throughout the year. Species recorded included magpie *Pica pica*, woodpigeon *Columba palumbus*, starling *Sturnus vulgaris*, tree sparrow *Passer montanus*, wren *Troglodytes troglodytes*, blackbird *Turdus merula*, hooded crow *Corvus cornix*, pheasant *Phasianus colchicus*, buzzard *Buteo buteo* and blue tit *Parus caeruleus*.

3.2.4 Hydrology

- 41 The Proposed Development site is located within the Liffey and Dublin Bay catchment and Liffey sub-catchment. The Griffeen River is partially located within the proposed site boundary, flowing under the former Nangor Road. This river outfalls to the River Liffey c. 5.2km north of the Proposed Development site, which in turn discharges to the Liffey Estuary c. 17km east and to Dublin Bay c. 27km downstream of the Proposed Development site. The Lucan stream is located c. 370m north-west of the Proposed Development site. This stream outfalls to the River Liffey c. 5km north of the Proposed Development site, which in turn discharges to the Liffey Estuary and to Dublin Bay.
- 42 According to EPA online Envision Maps, the water quality of the surface, transitional and coastal water is as follows:
- River Griffeen is classified as of “Poor” water quality status (i.e. Q3) at the EPA’s nearest monitoring station on the former Nangor Road;
 - The Water Framework Directive (WFD) water quality status for the Lucan stream is “Good”
 - The River Liffey is classified as of “Moderate” water quality status (i.e. Q3-4) c. 405m downstream of the Griffeen River confluence and c. 1.15km downstream of the Lucan stream confluence
 - The Upper Liffey Estuary is classified as “Eutrophic” transitional water;
 - The Lower Liffey Estuary is classified as “Unpolluted” transitional water; and,
 - Dublin Bay is classified as “Unpolluted” coastal water.
- 43 The WFD surface water ecological status of the Liffey Estuary is “Good” and the WFD risk status of this waterbody is as “at risk of not achieving good status”. Surface waters ultimately discharge into Dublin Bay. The most recent surface water quality information for Dublin Bay coastal waterbody indicates that it is “Unpolluted”. The water quality of Dublin Bay is considered to be ‘Good’ and “Not at risk” of not achieving good status under the Water Framework Directive.

3.2.5 Hydrogeology

- 44 Geological Survey of Ireland (GSI) data indicates that the site is underlain by a “locally important aquifer – bedrock which is moderately productive only in local zones”. The Groundwater Body (GWB) underlying the proposed site is the Dublin GWB which is a “poorly productive bedrock”. The site is located in an area of “Extreme Vulnerability” with regards to the ease with which groundwater may be contaminated by human activities.
- 45 Dublin GWB WFD is currently classified as having “Good” status. The only European sites designated for groundwater dependent habitats/species, and which occur within the same GWB as the proposed site is the Rye Water Valley/Carton SAC [001398].

3.2.6 Soils & Geology

- 46 According to the GSI's online bedrock map viewer¹⁵, the Proposed Development site is underlain by bedrock derived from the Lucan Formation, which is described as "dark limestone and shale (calp)". Site-specific ground investigations were undertaken by Site Investigations Ltd. between July and September 2019. The investigations included 2 no. exploratory holes at the proposed entry and exist locations of the proposed horizontal directional drill. The report prepared by Geo Drilling Ireland (2021), comprises a feasibility assessment of using horizontal directional drilling (HDD) to lay the underground cables beneath the Baldonnel Road, former Nangor Road and Griffeen River. This report states that "*based on our current knowledge of operations at the site, it is not expected that there would be an unusual or exceptional risk of contaminated ground*". Furthermore, the report concludes that "*based on a review of the local information and historical and present-day knowledge on the ground conditions near the site, it is not anticipated that any exceptional or unusual risks are posed by the ground conditions or land usages which would cause difficulties during HDD operations at the site*".

3.2.7 Air Quality

- 47 The Air and Climate chapter of the EIAR accompanying this report found the existing baseline levels of nitrogen dioxide (NO₂), and particulate matter (PM₁₀ / PM_{2.5}) in the region of the Proposed Development (as defined in Chapter 2 of the EIAR accompanying this report) by an assessment of EPA monitoring data.

NO₂

- 48 Current levels of NO₂ are below both the annual and 1-hour limit values, with annual average levels ranging from 13 – 22 µg/m³ over the period 2015 – 2019.

PM₁₀

Annual mean concentrations for PM₁₀ range from 9 to 16 µg/m³. Based on this EPA data, an estimate of the background PM₁₀ concentration in the region of the development is 14 µg/m³.

PM_{2.5}

- 49 Continuous PM_{2.5} monitoring indicated an average PM_{2.5}/PM₁₀ ratio ranging from 0.53 – 0.68. Based on this information, a conservative ratio of 0.70 was used to generate a background PM_{2.5} concentration of 9.8 µg/m³.

3.3 Assessment of Effects on European Sites

- 50 This section identifies all the potential impacts associated with the Proposed Development, examines whether there are any European sites within the ZoI of effects from the Proposed Development, and assesses whether there is any risk of the Proposed Development resulting in a significant effect on any European site, either alone or in combination with other plans or projects.
- 51 In assessing the potential for the Proposed Development to result in a significant effect on any European sites, any measures intended to avoid or reduce the harmful effects of the project on European sites are not taken into account.

3.3.1 Habitat loss and fragmentation

- 52 The Proposed Development does not overlap with the boundary of any European site. Therefore, there are no European sites at risk of direct habitat loss impacts.

¹⁵ GSI Bedrock Map Viewer. Available online at: <https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748ea9106e7ee1b6ab8d5&scale=0> [Accessed 17/02/2021]

- 53 As the Proposed Development does not traverse any European sites there is no potential for habitat fragmentation to occur.
- 54 Habitats within the Proposed Development site, namely agricultural grassland are suitable to support wader and gull species for which European sites are designated. The closest SPA for which these species are designated are located is South Dublin Bay SAC, located c. 16.4km east of the Proposed Development site. No sightings of SCI bird species were recorded during dedicated winter bird surveys conducted by Scott Cawley Ltd. in October and November 2019 as part of the power plant application, under SDCC Planning Reg. Ref. SD20A/0058, which has since received a Final Grant of Permission on the 17th December 2020. No signs of usage by SCI bird species such as droppings were noted either. Furthermore, during habitat surveys conducted to inform this application in February 2021, no signs of wintering birds were recorded within the Proposed Development site. Considering the above and the significant distance between the Proposed Development site and European sites, it can be concluded that the Proposed Development site does not support populations of any fauna species linked with the QI/SCI populations of any European site(s).
- 55 As detailed above, the Proposed Development will not result in habitat loss or habitat fragmentation within any European site. Therefore, there is no potential for any in combination effects to occur in that regard.

3.3.2 *Habitat degradation as a result of hydrological impacts*

- 56 Surface water run-off and discharges from the Proposed Development will drain to the existing local surface water drainage network on Peamount Road (R120) and the former Nangor Road (R134). Foul waters from the Proposed Development will be discharged to Ringsend WWTP for treatment, via the existing foul water drainage network, prior to discharge into the Liffey Estuary/Dublin Bay. Therefore, the Zone of Influence (Zoi) of potential effects on water quality from the Proposed Development could extend to habitats that occur below the high tide line and fauna that use intertidal and marine habitats within Dublin Bay.

Surface Water

- 57 Surface water run-off and discharges from the Proposed Development will enter the downstream receiving environment via the existing surface water drainage network and will ultimately drain to Dublin Bay.
- 58 Considering the following, the Proposed Development will not have any measurable effects on water quality in Dublin Bay or the Irish Sea:
- The scale and location of the Proposed Development relative to the receiving surface water network
 - The substantial distance between the Proposed Development site and downstream European sites and potential for pollution to be dissipated in the drainage network
 - The relatively low volume of any surface water run-off or discharge events from the Proposed Development site relative to the receiving surface water and marine environments, and
 - The level of mixing, dilution and dispersion of any surface water run-off/discharges from the Proposed Development site in the receiving watercourses, Dublin Bay and the Irish Sea
- 59 It is an objective of the Greater Dublin Strategic Drainage Study, and the South Dublin County Council Development Plan 2016-2022, to incorporate Sustainable Urban Drainage Systems (SUDS) within new developments. The SUDS features associated with the Proposed Development are not included within the design to avoid or reduce any potential harmful effects to any European sites.
- 60 Therefore, there is no possibility of the Proposed Development undermining the conservation objectives of any of the qualifying interests or special conservation interests of the European sites in, or associated with, Dublin Bay as a result of surface water run-off or discharges.

Foul Water

- 61 The Proposed Development is expected to result in minimal foul water discharges (P.E. approximately <1), considering the predicted low usage. Foul water, comprising sewage and industrial effluent (and some surface water run-off), from the Dublin area has historically been, and will continue to be, treated at Ringsend WWTP prior to discharge to Dublin Bay. The most recent information from Irish Water indicates that the plant is operating above its capacity of 1.64 million P.E. (Irish Water, 2017), with a current operational loading of c.2.2 million P.E. Ringsend WWTP operates under a discharge licence from the EPA (D0034-01) and must comply with the licence conditions.
- 62 Despite the capacity issues associated with the Ringsend WWTP, the Liffey Estuary Lower and Dublin Bay are currently classified by the EPA as being of “Unpolluted” water quality status¹⁶. The Tolka Estuary is currently classified by the EPA as being “Potentially Eutrophic”. The pollutant content of future foul water discharges to Dublin Bay is considered likely to decrease in the long-term for the following reasons:
- An Bord Pleanála granted planning permission for an upgrade to the Ringsend WWTP in April 2019¹⁷, which will increase capacity at the plant, and
 - There is a commitment in the National Development Plan 2018-2027¹⁸ to invest in and progress the Greater Dublin Drainage Project which will involve the provision of a new regional wastewater treatment plant at a site in the northern part of the Greater Dublin Area and the provision of a new Orbital Drainage Sewer linking the new plant to the existing regional sewer network, which will enable future connections for identified areas of development within the catchment area. The provision of the Greater Dublin Drainage Project will augment the waste water treatment capacity currently provided by Ringsend WWTP across the Greater Dublin Area.
- 63 It is also an objective of the Greater Dublin Strategic Drainage Study, and all development plans within the catchment of Ringsend WWTP, to include Sustainable Urban Drainage Systems (SUDS) within new developments. The relevant development plans also have protective policies/objectives in place to protect water quality in the receiving freshwater and marine environments, and to implement the Water Framework Directive in achieving good water quality status for Dublin Bay.
- 64 Considering the above, particularly the current unpolluted status of Dublin Bay, and that the predicted very minimal foul water discharges (P.E. approximately <1, considering predicted low usage), arising from the Proposed Development, would equate to a very small percentage of the overall discharge volumes sent to Ringsend WWTP for treatment, it is concluded that the Proposed Development will not impact on the overall water quality status of Dublin Bay.
- 65 Therefore, there is no possibility of the Proposed Development undermining the conservation objectives of any of the qualifying interests or special conservation interests of the European sites in, or associated with, Dublin Bay as a result of foul water discharges.

In Combination

- 66 There is potential for “*in-combination*” effects on water quality in Dublin Bay from any other projects carried out within the functional areas of the *Dublin City Development Plan 2016-2022* (Dublin City Council, 2016), the *Dún Laoghaire-Rathdown County Development Plan 2016-2022* (Dún Laoghaire-Rathdown County Council, 2016), the *Fingal Development Plan 2017-2023* (Fingal County Council, 2017), *South Dublin*

¹⁶ Transitional and Coastal Surface Water Quality data (2010-2012) accessed from the EPA Envision Mapviewer www.gis.epa.ie/Envision (accessed May 2019)

¹⁷ An Bord Pleanála Case Reference PL29S.301798 – *10-year permission for development of the Ringsend wastewater treatment plant upgrade project including a regional bio solids storage facility*, Available online at www.pleanala.ie/casenum/301798.htm.

¹⁸ Government of Ireland (2018) *Project Ireland 2040, National Development Plan 2018-2027*.

County Council Development Plan 2016-2022 (South Dublin County Council, 2016), or any other land use plans which could influence conditions in Dublin Bay via rivers and other surface water features.

- 67 The Eastern & Midland Regional Assembly, *Regional Spatial & Economic Strategy 2019-2031*¹⁹ (Eastern & Midland Regional Assembly, 2019) includes a range of policy objectives relevant to the protection of European sites and the protection of water quality in Dublin Bay, to which the relevant planning authorities must have regard to in the preparation and adoption of their development plans (included in Appendix II).
- 68 The competent authority for the Proposed Development is An Bord Pleanála. The Proposed Development site lies within the administrative area of South Dublin County Council (SDCC). Plans and developments within the South Dublin area must comply with the following policy objectives of the *South Dublin County Council Development Plan 2016-2022* relevant to the protection of European sites and the protection of water quality in Dublin Bay:

HCL12 Objective 1- To prevent development that would adversely affect the integrity of any Natura 2000 site located within and immediately adjacent to the County and promote favourable conservation status of habitats and protected species including those listed under the Birds Directive, the Wildlife Acts and the Habitats Directive.

HCL12 Objective 2-To ensure that projects that give rise to significant direct, indirect or secondary impacts on Natura 2000 sites, either individually or in combination with other plans or projects, will not be permitted unless the following is robustly demonstrated in accordance with Article 6(4) of the Habitats Directive and S.177AA of the Planning and Development Act (2000 – 2010) or any superseding legislation:

1. There are no less damaging alternative solutions available; and
2. There are imperative reasons of overriding public interest (as defined in the Habitats Directive) requiring the project to proceed; and
3. Adequate compensatory measures have been identified that can be put in place.

IE Policy 1 Water & Wastewater - It is the policy of the Council to work in conjunction with Irish Water to protect existing water and drainage infrastructure and to promote investment in the water and drainage network to support environmental protection and facilitate the sustainable growth of the County.

IE1 Objective 1-To work in conjunction with Irish Water to protect, manage and optimise water supply and foul drainage networks in the County.

IE1 Objective 2-To work in conjunction with Irish Water to facilitate the timely delivery of ongoing upgrades and the expansion of water supply and wastewater services to meet the future needs of the County and the Region.

IE Policy 2 Surface Water & Groundwater -It is the policy of the Council to manage surface water and to protect and enhance ground and surface water quality to meet the requirements of the EU Water Framework Directive.

IE2 Objective 1-To maintain, improve and enhance the environmental and ecological quality of our surface waters and groundwater by implementing the programme of measures set out in the Eastern River Basin District River Basin Management Plan.

IE2 Objective 3-To maintain and enhance existing surface water drainage systems in the County and promote and facilitate the development of Sustainable Urban Drainage Systems (SUDS), including integrated constructed wetlands, at a local, district and County level, to control surface water outfall and protect water quality.

¹⁹ Eastern & Midland Regional Assembly (2019) *Regional Spatial & Economic Strategy 2019-2031*

IE2 Objective 4-To incorporate Sustainable Urban Drainage Systems (SUDS) as part of Local Area Plans, Planning Schemes, Framework Plans and Design Statements to address the potential for Sustainable Urban Drainage at a site and/or district scale, including the potential for wetland facilities.

IE2 Objective 5-To limit surface water run-off from new developments through the use of Sustainable Urban Drainage Systems (SUDS) and avoid the use of underground attenuation and storage tanks.

IE2 Objective 6-To promote and support the retrofitting of Sustainable Urban Drainage Systems (SUDS) in established urban areas, including integrated constructed wetlands.

- 69 Plans and developments within the other local authority areas which could influence conditions in Dublin Bay via rivers and other surface water features, also must comply with the policies and objectives relevant to the protection of European sites and water quality. These include the *Dún Laoghaire-Rathdown County Development Plan 2016-2022*, the *Fingal Development Plan 2017-2023*, the *Dublin City Development Plan 2016 – 2022*, the *Kildare County Development Plan 2017-2023* (Kildare County Council, 2017) and the *Wicklow County Development Plan 2016-2022* (Wicklow County Council, 2016). The relevant policies and objectives in those plans for the protection of European sites and water quality are included in Appendix II.
- 70 In conclusion, there are a number of projects referred to above which will upgrade the capacity of Ringsend WWTP which will, over time, address the capacity issues at Ringsend WWTP referred to above.
- 71 As noted under the surface water and foul water sections above, Dublin Bay is currently unpolluted and the Proposed Development will not result in any measurable effect on water quality in Dublin Bay. There are also protective policies and objectives in place at a strategic planning level to protect water quality in Dublin Bay.
- 72 Therefore, and having regard to the policies and objectives referred to under the relevant development plans, it is concluded that the possibility of any other plans or projects acting in combination with the Proposed Development to give rise to significant effects on any European site in, or associated with, Dublin Bay can be excluded.

3.3.3 *Habitat degradation as a result of hydrogeological impacts*

- 73 The Proposed Development lies within the Dublin Groundwater Body (Dublin GWB). The only European site within the Dublin GWB that is designated for groundwater dependant habitats and/or species is the Rye Water Valley/Carton SAC. All of the qualifying interests of the Rye Water Valley/Carton SAC, the priority Annex I habitat Petrifying springs and the two whorl snail species, are dependent upon the existing condition and functioning of the groundwater regime. Based on information published by Geological Survey Ireland (GSI) on the Dublin GWB²⁰, “The general groundwater flow direction in this aquifer is towards the coast and also towards the River Liffey and Dublin City”. As the Proposed Development will not interact directly with the underlying groundwater body, and lies down gradient of the Rye Water Valley/Carton SAC, it cannot influence groundwater conditions in the European site.
- 74 Therefore, there is no possibility of the Proposed Development undermining the conservation objectives of any of the qualifying interests or special conservation interests of any European sites, either alone or in combination with any other plans or projects, as a result of hydrogeological effects.

3.3.4 *Habitat degradation as a result of introducing/spreading non-native invasive species*

- 75 The Proposed Development site does not support any non-native invasive species which could be accidentally spread or introduced to habitats within European sites. No invasive plant species which are

²⁰ https://secure.dccae.gov.ie/GSI_DOWNLOAD/Groundwater/Reports/GWB/DublinGWB.pdf

listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011, and therefore subject to restrictions in Irish Law, were recorded within the Proposed Development site.

3.3.5 Disturbance and displacement impacts

- 76 Construction-related disturbance and displacement of fauna species could potentially occur within the vicinity of the Proposed Development. For mammal species such as otter, disturbance effects would not be expected to extend beyond 150m²¹. For birds, disturbance effects would not be expected to extend beyond a distance of c.300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance. There are no European sites within the disturbance Zol; the next nearest European site to the Proposed Development is c. 4.9km away. The Proposed Development site was not found to support populations of any QI/SCI species associated with European sites. Therefore, the Proposed Development will not result in the disturbance/ displacement of the QI/SCI species of any European site.
- 77 As the Proposed Development will not result in the disturbance/displacement during the construction phase of the qualifying/special conservation interest species of any European site, there is no potential for any in combination effects to occur in that regard.
- 78 During the operational phase of the Proposed Development (see from paragraph 9.90 of the Noise & Vibration Chapter of the EIAR), the Noise Vibration chapter of the accompanying Environmental Impact Assessment Report found there is no source of vibration associated with the day to day operation of the development that will give rise to impacts at nearby sensitive locations.
- 79 The chapter found the existing soundscapes that are encountered at the nearest noise sensitive locations are predicted to remain unchanged in terms of ambient noise levels with the development of the Proposed Development introducing a low level of plant noise from the transformers which will increase the background noise environment. Operational phases of both daytime, evening periods and night time periods associated impacts were stated as '*Imperceptible*'.

3.3.6 Habitat degradation as a result of contaminated land

- 80 As there is no contamination across the site and the site is suitable for this development, there is no potential for contaminated soil to be accidentally spread or introduced to habitats within European sites.

3.3.7 Habitat degradation as a result of air pollution impacts

- 81 The greatest potential impact on air quality during the construction phase of the Proposed Development is from construction dust emissions and the potential for nuisance dust. While construction dust tends to be deposited within 350m of a construction site, the majority of the deposition occurs within the first 50m. The closest European site is the Rye Water Valley/ Carton SAC which is 4.9km north of the site at its closest point. This site is outside of the screening distance. Therefore, there are no ecological receptors which require consideration in this assessment
- 82 As per the findings of the Air Quality & Climate Chapter of the EIAR (please refer to paragraph 10.53 of the Air Quality & Climate Chapter), during operation, there is no potential for impacts on air quality which could in turn lead to habitat degradation effects in nearby European sites.

²¹ This is consistent with Transport Infrastructure Ireland (TII) guidance (Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes and Guidelines for the Treatment of Badgers prior to the Construction of National Road Schemes) documents. This is a precautionary distance, and likely to be moderated by the screening effect provided by surrounding vegetation and buildings, with the actual Zol of construction related disturbance likely to be much less in reality.

3.3.8 Summary

- 83 The potential impacts associated with the Proposed Development do not have the potential to affect the receiving environment and, consequently, do not have the potential to affect the conservation objectives supporting the qualifying interest/special conservation interests of any European sites. Therefore, the Proposed Development is not likely to have significant effects on any European sites.
- 84 As the Proposed Development itself will not have any effects on the QIs/SCIs or conservation objectives of any European sites, and taking into account the policies and objectives of the statutory plans referred to above, it is concluded that there is no potential for any other plan or project to act in combination with it to result in significant effects on any European sites.
- 85 The potential impacts of the Proposed Development on the receiving environment, their ZOI, and the European sites at risk of significant effects are summarised in Table 1 below. In assessing the potential for the Proposed Development to result in a significant effect on any European sites, any measures intended to avoid or reduce the harmful effects of the project on European sites are not taken into account.

Table 1 Summary of Analysis of Likely Significant Effects on European sites

Potential Direct, Indirect In Combination Effects and the Zol of the Potential Effects	Are there any European sites within the Zol of the Proposed Development?
Habitat loss Habitat loss will be confined to the lands within the Proposed Development boundary.	No There are no European sites within the Proposed Development boundary
Habitat degradation as a result of hydrological impacts Habitats and species downstream of the Proposed Development site and the associated surface water drainage discharge points, and downstream of offsite wastewater treatment plants.	No There are no European sites at risk of hydrological effects associated with the Proposed Development
Habitat degradation as a result of hydrogeological impacts Groundwater-dependant habitats, and the species those habitats support, in the local area that lie downgradient of the Proposed Development site.	No There are no European sites at risk of hydrogeological effects associated with the Proposed Development
Habitat degradation as a result of introducing/spreading non-native invasive species Habitat areas within, adjacent to, and potentially downstream of the Proposed Development site.	No There are no non-native invasive species present on the Proposed Development site and, therefore, no risk associated with the Proposed Development to any European sites from the spread/introduction of non-native invasive species
Disturbance and displacement impacts Potentially up to several hundred metres from the Proposed Development boundary, dependent upon the predicted levels of noise, vibration and visual disturbance associated with the Proposed Development, taking into account the sensitivity of the qualifying interest species to disturbance effects	No There are no European sites within the potential zone of influence of disturbance effects associated with the construction or operation of the Proposed Development and the Proposed Development site does not have a supporting role as an ex-situ habitat for SCI birds.
Habitat degradation as a result of contaminated land Habitat areas within, adjacent to, and potentially downstream of the Proposed Development site.	No Site investigations concluded that there is no evidence of contamination across the site and that the site is suitable for this development
Habitat degradation as a result of air pollution impacts. The effects of air borne emissions/pollutants derived from anthropogenic activities can have negative impacts on the environment, for example by causing vegetation die-back, or indirectly by affecting the acidity and nutrient status of soils and waters.	No The Proposed Development does not have the potential to impact upon European sites through air borne emissions/pollutants for the reason described above under Section 3.3.7.

4 Conclusions of Screening Assessment Process

- 86 Following an examination, analysis and evaluation of the best available information, and applying the precautionary principle, it can be concluded that the possibility of any significant effects on any European sites, whether arising from the project alone or in combination with other plans and projects, can be excluded, for the reasons set out in Section 3.3 above. In reaching this conclusion, the nature of the project and its potential relationship with all European sites within the zone of influence, and their conservation objectives, have been fully considered.

- 87 Therefore, it is the professional opinion of the authors of this report that the application for consent for the Proposed Development does not require an Appropriate Assessment or the preparation of a Natura Impact Statement (NIS).

Appendix I

The Qualifying Interests (QIs) and Special Conservation Interests (SCIs) of the European sites in the vicinity of the Proposed Development site (see Figure 2)

European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Development Site
Special Area of Conservation (SAC)	
<p>Rye Water Valley/ Carton SAC [001398] [7220] Petrifying springs with tufa formation (<i>Cratoneurion</i>)* [1014] Narrow-mouthed Whorl Snail <i>Vertigo angustior</i> [1016] Desmoulin's Whorl Snail <i>Vertigo moulinsiana</i></p> <p>NPWS (2020) <i>Conservation objectives for Rye Water Valley/Carton SAC [001398]</i>. Generic Version 7.0. Department of Culture, Heritage and the Gaeltacht</p>	<p>Located c. 4.9km north-east of the Proposed Development site</p>
<p>Glenasmole Valley SAC [001209] [6210] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6410] <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [7220] Petrifying springs with tufa formation (<i>Cratoneurion</i>)</p> <p>NPWS (2020) <i>Conservation objectives for Glenasmole Valley SAC [001209]</i>. Generic Version 7.0. Department of Culture, Heritage and the Gaeltacht.</p>	<p>Located c. 8.9km south-east of the Proposed Development site</p>
<p>Wicklow Mountains SAC [002122] [3110] Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3160] Natural dystrophic lakes and ponds [4010] Northern Atlantic wet heaths with <i>Erica tetralix</i> [4030] European dry heaths [4060] Alpine and Boreal heaths [6130] <i>Calaminarian</i> grasslands of the <i>Violetalia calaminariae</i> [6230] Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [7130] Blanket bogs (* if active bog) [8110] Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) [8210] Calcareous rocky slopes with chasmophytic vegetation [8220] Siliceous rocky slopes with chasmophytic vegetation [91A0] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [1355] <i>Lutra lutra</i> (Otter)</p> <p>NPWS (2017) <i>Conservation Objectives: Wicklow Mountains SAC 002122. Version 1</i>. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.</p>	<p>Located c. 10.5km south-east of the Proposed Development site</p>
<p>Red Bog, Kildare SAC [000397] [7140] Transition mires and quaking bogs</p>	<p>Located c. 14.2km south-west of the Proposed Development site</p>

<p>NPWS (2019) <i>Conservation Objectives: Red Bog, Kildare SAC 000397</i>. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.</p>	
<p>South Dublin Bay SAC [000210] [1140] Mudflats and sandflats not covered by seawater at low tide [1210] Annual vegetation of drift lines [1310] <i>Salicornia</i> and other annuals colonising mud and sand [2110] Embryonic shifting dunes</p> <p>NPWS (2013) <i>Conservation Objectives: South Dublin Bay SAC 000210</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	<p>Located c. 16.3km east of the Proposed Development site</p>
<p>North Dublin Bay SAC [000206] [1140] Mudflats and sandflats not covered by seawater at low tide [1210] Annual vegetation of drift lines [1310] <i>Salicornia</i> and other annuals colonising mud and sand [1330] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1395] Petalwort <i>Petalophyllum ralfsii</i> [1410] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [2110] Embryonic shifting dunes [2120] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2130] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2190] Humid dune slacks</p> <p>NPWS (2013) <i>Conservation Objectives: North Dublin Bay SAC 000206</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	<p>Located c. 19km north-east of the Proposed Development site</p>
Special Protection Area (SPA)	
<p>Wicklow Mountains SPA [004040] [A098] Merlin <i>Falco columbarius</i> [A103] Peregrine <i>Falco peregrinus</i></p> <p>NPWS (2020) <i>Conservation objectives for Wicklow Mountains SPA [004040]</i>. Generic Version 7.0. Department of Culture, Heritage and the Gaeltacht</p>	<p>Located c. 13.8km south-east of the Proposed Development site</p>
<p>Poulaphouca Reservoir SPA [004063] [A043] Greylag Goose <i>Anser anser</i> [A183] Lesser Black-backed Gull <i>Larus fuscus</i></p> <p>NPWS (2020) <i>Conservation objectives for Poulaphouca Reservoir SPA [004063]</i>. Generic Version 7.0. Department of Culture, Heritage and the Gaeltacht.</p>	<p>Located c. 15.3km south of the Proposed Development site</p>
<p>South Dublin Bay and River Tolka Estuary SPA [004024] [A046] Light-bellied Brent Goose <i>Branta bernicla hrota</i> [A130] Oystercatcher <i>Haematopus ostralegus</i> [A137] Ringed Plover <i>Charadrius hiaticula</i> [A141] Grey Plover <i>Pluvialis squatarola</i> [A143] Knot <i>Calidris canutus</i> [A144] Sanderling <i>Calidris alba</i> [A149] Dunlin <i>Calidris alpina</i></p>	<p>Located c. 15.8km north-east of the Proposed Development site</p>

<p>[A157] Bar-tailed Godwit <i>Limosa lapponica</i> [A162] Redshank <i>Tringa totanus</i> [A179] Black-headed Gull <i>Croicocephalus ridibundus</i> [A192] Roseate Tern <i>Sterna dougallii</i> [A193] Common Tern <i>Sterna hirundo</i> [A194] Arctic Tern <i>Sterna paradisaea</i> [A999] Wetland and Waterbirds</p> <p>NPWS (2015) <i>Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	
<p>North Bull Island SPA [004006]</p> <p>[A046] Light-bellied Brent Goose <i>Branta bernicla hrota</i> [A048] Shelduck <i>Tadorna tadorna</i> [A052] Teal <i>Anas crecca</i> [A054] Pintail <i>Anas acuta</i> [A056] Shoveler <i>Anas clypeata</i> [A130] Oystercatcher <i>Haematopus ostralegus</i> [A140] Golden Plover <i>Pluvialis apricaria</i> [A141] Grey Plover <i>Pluvialis squatarola</i> [A143] Knot <i>Calidris canutus</i> [A144] Sanderling <i>Calidris alba</i> [A149] Dunlin <i>Calidris alpina</i> [A156] Black-tailed Godwit <i>Limosa limosa</i> [A157] Bar-tailed Godwit <i>Limosa lapponica</i> [A160] Curlew <i>Numenius arquata</i> [A162] Redshank <i>Tringa totanus</i> [A169] Turnstone <i>Arenaria interpres</i> [A179] Black-headed Gull <i>Croicocephalus ridibundus</i> [A999] Wetlands & Waterbirds</p> <p>NPWS (2015) <i>Conservation Objectives: North Bull Island SPA 004006</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	<p>Located c. 19km north-east of the Proposed Development site</p>

Appendix II

Planning polices/objectives relating to the protection of European sites and water quality

Eastern & Midland Regional Assembly, Regional Spatial & Economic Strategy 2019-2031

Regional Policy Objective 3.4

Ensure that all plans, projects and activities requiring consent arising from the Regional Spatial and Economic Strategy are subject to the relevant environmental assessment requirements including SEA, EIA and AA as appropriate. In addition the future strategic development of settlements throughout the Region will have full cognisance of the legal requirements pertaining to sites of International Nature Conservation Interest.

Regional Policy Objective 7.2

To achieve and maintain 'Good Environmental Status' for marine waters and to ensure the sustainable use of shared marine resources in the Region, and to promote the development of a cross-boundary and cross-border strategic management and stakeholder engagement framework to protect the marine environment.

Regional Policy Objective 7.10

Support the implementation of the Water Framework Directive in achieving and maintaining at least good environmental status for all water bodies in the Region and to ensure alignment between the core objectives of the Water Framework Directive and other relevant Directives, River Basin Management plans and local authority land use plans.

Regional Policy Objective 7.11

For water bodies with 'high ecological status' objectives in the Region, local authorities shall incorporate measures for both their continued protection and to restore those water bodies that have fallen below high ecological status and areas 'At Risk' into the development of local planning policy and decision making any measures for the continued protection of areas with high ecological status in the Region and for mitigation of threats to waterbodies identified as 'At Risk' as part of a catchment based approach in consultation with the relevant agencies. This shall include recognition of the need to deliver efficient wastewater facilities with sufficient capacity and thus contribute to improved water quality in the Region.

Regional Policy Objective 7.12

Future statutory land use plans shall include Strategic Flood Risk Assessment (SFRA) and seek to avoid inappropriate land use zonings and development in areas at risk of flooding and to integrate sustainable water management solutions (such as SuDS, nonporous surfacing and green roofs) to create safe places in accordance with the Planning System and Flood Risk Assessment Guidelines for Local Authorities.

Regional Policy Objective 7.15

Local authorities shall take opportunities to enhance biodiversity and amenities and to ensure the protection of environmentally sensitive sites and habitats, including where flood risk management measures are planned.

Regional Policy Objective 7.16

Support the implementation of the Habitats Directives in achieving an improvement in the conservation status of protected species and habitats in the Region and to ensure alignment between the core objectives of the EU Birds and Habitats Directives and local authority development plans.

Regional Policy Objective 7.22

Local authority development plan and local area plans, shall identify, protect, enhance, provide and manage Green Infrastructure in an integrated and coherent manner and should also have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks and protected species.

Regional Policy Objective 10.6

Delivery and phasing of services shall be subject to the required appraisal, planning and environmental assessment processes and shall avoid adverse impacts on the integrity of the Natura 2000 network.

Regional Policy Objective 10.7

Local authority core strategies shall demonstrate compliance with DHPLG Water Services Guidelines for local authorities and demonstrate phased infrastructure – led growth that is commensurate with the carrying

capacity of water services and prevent adverse impacts on the integrity of water dependent habitats and species within the Natura 2000 network.

Regional Policy Objective 10.10

Support Irish Water and the relevant local authorities in the Region to eliminate untreated discharges from settlements in the short term, while planning strategically for long term growth in tandem with Project Ireland 2040 and in increasing compliance with the requirements of the Urban Waste Water Treatment Directive from 39% today to 90% by the end of 2021, to 99% by 2027 and to 100% by 2040.

Regional Policy Objective 10.11

EMRA supports the delivery of the waste water infrastructure set out in Table 10.2, subject to appropriate environmental assessment and the planning process.²²

Regional Policy Objective 10.12

Development plans shall support strategic wastewater treatment infrastructure investment and provide for the separation of foul and surface water networks to accommodate the future growth of the Region.

Regional Policy Objective 10.15

Support the relevant local authorities (and Irish Water where relevant) in the Region to improve storm water infrastructure to improve sustainable drainage and reduce the risk of flooding in the urban environment and in the development and provision at a local level of Sustainable Urban Drainage solutions.

Regional Policy Objective 10.16

Implement policies contained in the Greater Dublin Strategic Drainage Study (GSDSDS), including SuDS.

Regional Policy Objective 10.18

Local authorities shall ensure adequate surface water drainage systems are in place which meet the requirements of the Water Framework Directive and the associated River Basin Management Plans.

Dún Laoghaire-Rathdown County Development Plan 2016-2022

Policy LHB19: Protection of Natural Heritage and the Environment

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: Habitats Directive

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: Designated Sites

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.

Policy EI2: Wastewater Treatment and Appropriate Assessment

It is Council policy to provide adequate wastewater treatment facilities to serve the existing and future population of the County, subject to complying with the Water Framework Directive and the associated River Basin Management Plan or any updated version of this document, 'Water Quality in Ireland 2007-2009' (EPA 2011) or any updated version of the document, Pollution Reduction Programmes for Designated Shellfish Areas, the Urban Waste Water Treatment Directive and the Habitats Directive.

Policy EI3: Surface Water Drainage and Appropriate Assessment

²² The Greater Dublin Drainage Project, the Ringsend Wastewater Treatment Plant Project, the Athlone Main Drainage Project and the Upper Liffey Valley Sewerage Scheme

It is Council policy to require that a Sustainable Drainage System (SuDS) is applied to any development and that site specific solutions to surface water drainage systems are developed, which meet the requirements of the Water Framework Directive and the associated River Basin Management Plans and 'Water Quality in Ireland 2007-2009' (EPA 2011) or any updated version of the document.

Fingal Development Plan 2017-2023

Objective NH10

Ensure that the Council takes full account of the requirements of the Habitats and Birds Directives, as they apply both within and without European Sites in the performance of its functions.

Objective NH11

Ensure that the Council, in the performance of its functions, takes full account of the objectives and management practices proposed in any management or related plans for European Sites in and adjacent to Fingal published by the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

Objective NH15

Strictly protect areas designated or proposed to be designated as Natura 2000 sites (i.e. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs); also known as European sites) including any areas that may be proposed for designation or designated during the period of this Plan.

Objective SW04

Require the use of sustainable drainage systems (SuDS) to minimise and limit the extent of hard surfacing and paving and require the use of sustainable drainage techniques where appropriate, for new development or for extensions to existing developments, in order to reduce the potential impact of existing and predicted flooding risks.

Objective WQ01

Strive to achieve 'good status' in all waterbodies in compliance with the Water Framework Directive, the Eastern River Basin District Management Plan 2009-2015 and the associated Programme of Measures (first cycle) and to cooperate with the development and implementation of the second cycle national River Basin Management Plan 2017-2021.

Objective WQ04

Protect existing riverine wetland and coastal habitats and where possible create new habitats to maintain naturally functioning ecosystems whilst ensuring they do not impact negatively on the conservation objectives of any European Sites.

Objective WT01

Liaise with and work in conjunction with Irish Water during the lifetime of the plan for the provision, extension and upgrading of waste water collection and treatment systems in all towns and villages of the County to serve existing populations and facilitate sustainable development of the County, in accordance with the requirements of the Settlement Strategy and associated Core Strategy.

Objective WT02

Liaise with Irish Water to ensure the provision of wastewater treatment systems in order to ensure compliance with existing licences, EU Water Framework Directive, River Basin Management Plans, the Urban Waste Water Directive and the EU Habitats Directive.

Dublin City Development Plan 2016 – 2022

GI23: To protect flora, fauna and habitats, which have been identified by Articles 10 and 12 of Habitats Directive, Birds Directive, Wildlife Acts 1976–2012, the Flora (Protection) Order 2015 S.I No. 356 of 2015, European Communities (Birds and Natural Habitats) Regulations 2011 to 2015.

GI24: To conserve and manage all Natural Heritage Areas, Special Areas of Conservation and Special Protection Areas designated, or proposed to be designated, by the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

GIO17: To seek the continued improvement of water quality, bathing facilities and other recreational opportunities in the coastal, estuarine and surface waters in the city and to protect the ecology and wildlife of Dublin Bay.

GI20: To seek continued improvement in water quality, bathing facilities and other recreational opportunities in the coastal, estuarine and surface waters in the city, having regard to the sensitivities of Dublin Bay and to protect the ecology and wildlife of Dublin Bay.

SI18: To require the use of Sustainable Urban Drainage Systems in all new developments, where appropriate, as set out in the Greater Dublin Regional Code of Practice for Drainage Works. The following measures will apply:

- The infiltration into the ground through the development of porous pavement such as permeable paving, swales, and detention basins
- The holding of water in storage areas through the construction of green roofs, rainwater harvesting, detention basins, ponds, and wetlands
- The slow-down of the movement of water.

Kildare County Development Plan 2017-2023

NH 4

Support the conservation and enhancement of Natura 2000 Sites including any additional sites that may be proposed for designation during the period of this Plan and to protect the Natura 2000 network from any plans and projects that are likely to have a significant effect on the coherence or integrity of a Natura 2000 Site.

NH 5

Prevent development that would adversely affect the integrity of any Natura 2000 site located within and immediately adjacent to the county and promote favourable conservation status of habitats and protected species including those listed under the Birds Directive, the Wildlife Acts and the Habitats Directive.

NH 6

Ensure an Appropriate Assessment, in accordance with Article 6(3) and Article 6(4) of the Habitats Directive and with DEHLG guidance (2009), is carried out in respect of any plan or project not directly connected with or necessary to the management of a Natura 2000 site to determine the likelihood of the plan or project having a significant effect on a Natura 2000 site, either individually or in combination with other plans or projects and to ensure that projects which may give rise to significant cumulative, direct, indirect or secondary impacts on Natura 2000 sites will not be permitted (either individually or in combination with other plans or projects) unless for reasons of overriding public interest.

WQ 1

Co-operate with the EPA and other authorities in the continued implementation of the EU Water Framework Directive and assist and co-operate with the lead authority for the River Basin Management Plan(s).

WQ 2

Ensure, through the implementation of the River Basin Management Plan(s) and the associated Programmes of Measures and any other associated legislation, the protection and improvement of all drinking water, surface water and ground waters throughout the county.

WQ 6

Protect recognised salmonid water courses in conjunction with Inland Fisheries Ireland such as the Liffey catchment, which are recognised to be exceptional in supporting salmonid fish species.

WW 4

Ensure that adequate wastewater services will be available to service development prior to the granting of planning permission. Applicants who are proposing to connect to the public wastewater network should consult with Irish Water regarding available capacity prior to applying for planning permission.

WW 12

Ensure that existing and permitted private wastewater treatment plants are operated in compliance with their wastewater discharge license, in order to protect water quality.

Wicklow County Development Plan 2016-2022

NH2

No projects giving rise to significant cumulative, direct, indirect or secondary impacts on Natura 2000 sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this plan (either individually or in combination with other plans or projects).

Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be: a) no alternative solution available, b) imperative reasons of overriding public interest for the project to proceed; and c) Adequate compensatory measures in place.

NH3

To contribute, as appropriate, towards the protection of designated ecological sites including candidate Special Areas of Conservation (cSACs) and Special Protection Areas (SPAs); Wildlife Sites (including proposed Natural Heritage Areas); Salmonid Waters; Flora Protection Order sites; Wildfowl Sanctuaries (see S.I. 192 of 1979); Freshwater Pearl Mussel catchments; and Tree Preservation Orders (TPOs). To contribute towards compliance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and Guidelines, including the following and any updated/superseding documents:

- EU Directives, including the Habitats Directive (92/43/EEC, as amended)⁷, the Birds Directive (2009/147/EC)⁸, the Environmental Liability Directive (2004/35/EC)⁹, the Environmental Impact Assessment Directive (85/337/EEC, as amended), the Water Framework Directive (2000/60/EC) and the Strategic Environmental Assessment Directive (2001/42/EC).
- National legislation, including the Wildlife Act 1976¹⁰, the European Communities (Environmental Impact Assessment) Regulations 1989 (SI No. 349 of 1989) (as amended), the Wildlife (Amendment) Act 2000, the European Union (Water Policy) Regulations 2003 (as amended), the Planning and Development Act 2000 (as amended), the European Communities (Birds and Natural Habitats) Regulations 2011 (SI No. 477 of 2011) and the European Communities (Environmental Liability) Regulations 2008¹¹.
- National policy guidelines (including any clarifying Circulars or superseding versions of same), including the Landscape and Landscape Assessment Draft Guidelines 2000, the Environmental Impact Assessment Sub-Threshold Development Guidelines 2003, Strategic Environmental Assessment Guidelines 2004 and the Appropriate Assessment Guidance 2010.
- Catchment and water resource management Plans, including Eastern and South Eastern River Basin Management Plan 2009-2015 (including any superseding versions of same).
- Biodiversity Plans and guidelines, including Actions for Biodiversity 2011-2016: Ireland's 2nd National Biodiversity Plan (including any superseding version of same).
- Ireland's Environment 2014 (EPA, 2014, including any superseding versions of same), and to make provision where appropriate to address the report's goals and challenges.

NH4

All projects and plans arising from this plan¹² (including any associated improvement works or associated infrastructure) will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. A plan or project will only be authorised after the competent authority has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and a Stage 2 Appropriate Assessment where necessary, that:

- 1) The Plan or project will not give rise to significant adverse direct, indirect or secondary effects on the integrity of any European site (either individually or in combination with other plans or projects); or
- 2) The Plan or project will have significant adverse effects on the integrity of any European site (that does not host a priority natural habitat type and / or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000; or
- 3) The Plan or project will have a significant adverse effect on the integrity of any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and the plan

or project must nevertheless be carried out for imperative reasons for overriding public interest, restricted to reasons of human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000.

NH5

To maintain the conservation value of all proposed and future Natural Heritage Areas (NHAs) and to protect other designated ecological sites in Wicklow.

Along with cSACs, SPAs and pNHA these include Salmonid Waters; Flora Protection Order sites; Wildfowl Sanctuaries (see S.I. 192 of 1979); Freshwater Pearl Mussel catchments; and Tree Preservation Orders (TPOs).

WI2

To protect existing and potential water resources of the County, in accordance with the EU Water Framework Directive, the River Basin Management Plans, the Groundwater Protection Scheme and source protection plans for public water supplies.

WI12

Ensure the implementation of Sustainable Urban Drainage Systems (SUDS) and in particular, to ensure that all surface water generated in a new development is disposed of on-site or is attenuated and treated prior to discharge to an approved surface water system.

WI6

In order to fulfil the objectives of the Core Strategy, Wicklow County Council will work alongside and facilitate the delivery of Irish Water's Water Services Investment Programme, to ensure that all lands zoned for development are serviced by an adequate wastewater collection and treatment system and in particular, to endeavour to secure the delivery of regional and strategic wastewater schemes. In particular, to support and facilitate the development of a WWTP in Arklow, at an optimal location following detailed technical and environmental assessment and public consultation.

WI7

Permission will be considered for private wastewater treatment plants for single rural houses where: • the specific ground conditions have been shown to be suitable for the construction of a treatment plant and any associated percolation area;

- the system will not give rise to unacceptable adverse impacts on ground waters / aquifers and the type of treatment proposed has been drawn up in accordance with the appropriate groundwater protection response set out in the Wicklow Groundwater Protection Scheme (2003);
- the proposed method of treatment and disposal complies with Wicklow County Council's Policy for Wastewater Treatment & Disposal Systems for Single Houses (PE ≤ 10) and the Environmental Protection Agency "Waste Water Treatment Manuals"; and
- in all cases the protection of ground and surface water quality shall remain the overriding priority and proposals must definitively demonstrate that the Proposed Development will not have an adverse impact on water quality standards and requirements set out in EU and national legislation and guidance documents.

WI9

Private wastewater treatment plants for commercial / employment generating development will only be considered where:

- Irish Water has confirmed the site is due to be connected to a future public system in the area or Irish Water have confirmed there are no plans for a public system in the area;
- it can clearly demonstrated that the proposed system can meet all EPA / Local Authority environmental criteria; and
- an annually renewed contract for the management and maintenance of the system is contracted with a reputable company / person, details of which shall be provided to the Local Authority.