



Appropriate Assessment Screening Report
for proposed HV Substation and Grid Connection at Grange Castle,
Co. Dublin

prepared for Marston Planning Consultancy

on behalf of CyrusOne Irish Data Centre Holdings Ltd.

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This report has been prepared by Scott Cawley Ltd. in accordance with the particular instructions and requirements of our agreement with the Client, the project's budgetary and time constraints and in line with best industry standards. The methodology adopted and the sources of information used by Scott Cawley Ltd. in providing its services are outlined in this report. The scope of this report and the services are defined by these circumstances.

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The conclusions presented in this report represent Scott Cawley Ltd.'s best professional judgement based on review of site conditions observed during the site visit (if applicable) and the relevant information available at the time of writing. Scott Cawley Ltd. has used reasonable skill, care and diligence in compiling this report and no warranty is provided as to the report's accuracy.

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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 consists of an amendment to the permitted scheme under Reg. Ref. SD18A/0134 / An Bord Pleanála Ref. ABP-302813-18 to replace the permitted 110kV electricity substation building (125sqm) with associated transformer compound with a new two storey 110kV GIS substation and two transformer bays. Additionally, the placement of two underground single circuit 110kV transmission lines from the proposed substation to the existing 220kV / 110kV Castlebaggot substation. Upon completion of the works by the developer the 110kV substation and underground transmission lines will be handed over to Eirgrid who will be responsible for operating, and the transmission line will form part of the ESNB Infrastructure. The permitted single storey switch room building will not be amended and is outside of the application boundary. A detailed description of the proposed development is included in Section 4.
- 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)

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).

- *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)

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:



Conclusions of screening assessment process

- 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 21 July 2020):
 - Online data available on European sites and protected habitats/species as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie, 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.

- 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

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 14 July 2020 by Lorna Gill of Scott Cawley Ltd. following the methodology described in *Best Practice Guidance for Habitat Survey and Mapping*⁵. All habitat types were classified using the *Guide to Habitats in Ireland*⁶, recording the indicator species and abundance using the DAFOR scale⁷ and recording any species of conservation interest. Vascular and bryophyte plant nomenclature generally follow that of *The National Vegetation Database*⁸, having regard to more recent taxonomic changes to species names after the *New Flora of the British Isles*⁹ and the British Bryological Society's *Mosses and Liverworts of Britain and Ireland: A Field Guide*¹⁰. Annex I habitat types were classified after the *Interpretation manual of European Union Habitats EUR28*¹¹ 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*¹².

⁵ 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.

⁶ Fossitt, J.A. (2000) *A Guide to Habitats in Ireland*. Heritage Council, Kilkenny.

⁷ 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.

⁸ 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.

⁹ Stace, C. (2019) *New Flora of the British Isles. 4th Edition*. C&M Floristics.

¹⁰ Atherton, I., Bosanquet, S. & Lawley, M. (2010) *Mosses and Liverworts of Britain and Ireland: A Field Guide*. Latimer Trend & Co., Plymouth.

¹¹ CEC. (Commission of the European Communities) (2013) *Interpretation manual of European Union Habitats EUR28*. European Commission, DG Environment.

¹² NPWS (2019). *The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview*. Unpublished NPWS report.

3 Provision of Information for Screening for Appropriate Assessment

- 14 The following sections provide information to facilitate the Appropriate Assessment screening of the proposed development to be undertaken by the competent authority.
- 15 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).
- 16 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 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.

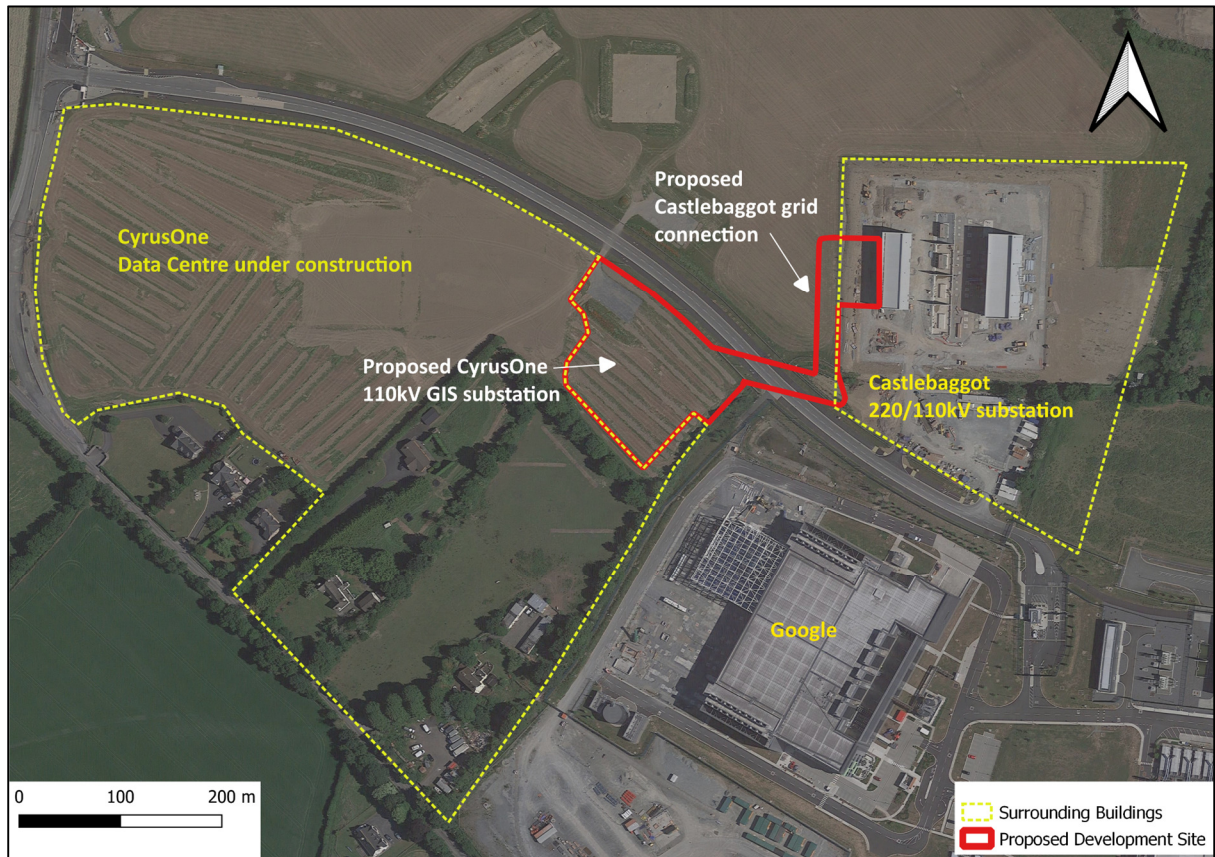
3.1 Description of the Proposed Development

- 17 Full details of the Proposed Development are provided in Chapter 2 of the Environmental Impact Assessment Report (Marston Planning Consultancy, 2020) accompanying this report. In brief, the Proposed Development comprises: an amendment to the permitted scheme under Reg. Ref. SD18A/0134 / An Bord Pleanála Ref. ABP-302813-18 to replace the permitted 110kV electricity substation building (125sqm) with associated transformer compound with a new 110kV GIS substation compound. The permitted single storey switch room building will not be amended under this application. The compound area will slightly alter as a result of the proposal.
- 18 The Proposed Development primarily comprises the provision of two no. 110kV transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation compound along with associated and ancillary works and is described as follows:
- 19 The proposed 110kV GIS Substation Compound is to be located on lands to the north-east of the two storey data centre facility and associated three storey office block that was permitted under SDCC Reg. Ref. SD18A/0134 / An Bord Pleanála Ref. ABP-302813-18, and within an overall landholding bound to the north by the Grange Castle South Business Park access road; to the west by the Baldonnel Road and to the south by 3 no. residential properties and the Baldonnel Road; and to the east by the Google data centre facility within Grange Castle South Business Park, Baldonnel, Dublin 22. The site of the proposed development has an area of c. 0.9163 hectares.
- 20 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 1,307.2sqm) (known as the Aungierstown Substation), two transformers, lighting masts, car parking, associated underground services and roads within a 3.5m high fenced compound and all associated construction and ancillary works.
- 21 Two proposed underground single circuit 110kV transmission lines will connect the proposed Aungierstown 110kV GIS Substation to the existing 220kV / 110kV Castlebaggot Substation to the immediate north-east. The proposed transmission line covers a distance of approximately 150m within the townlands of Ballybane, and Aungierstown and Ballybane.
- 22 The development includes the connections to the two substations (existing and proposed), changes to landscaping permitted under SDCC Reg. Ref. SD18A/0134 / An Bord Pleanála Ref. ABP-302813-18 and all associated construction and ancillary works.
- 23 There are two stream culvert crossings along the route that will require exploratory works to be carried out to assess existing utilities and/or culverted structure. It is currently envisaged that the support of the existing stream culverts will require steel beams with support strapping to protect in place. There will be a requirement to excavate and hand dig below existing utilities and culverts to the required depth. The 110kV transmission lines will pass under the extended culvert at a depth of 1.5m within two trenches close to the south-west corner of the Castlebaggot substation. These works will include:
 - All surveying, CAT scanning and trial holes will be carried out in advance of the works.

- Sawcut (where appropriate) and remove the existing surface
 - All trenching will be constructed using an excavator and hand digging where required in accordance with safe work procedures and HSA Code of Practice for Avoiding Danger From Underground Services. Trenches will be excavated with stable sloping, benching where required and a suitable access and egress point. A suitable pump will be available on site and installed if groundwater is encountered to ensure trench stability and worker safety. All trenching will be constructed in accordance with guidance outlined within the Environmental Impact Assessment included within this application. Particular attention will be provided to the outlined requirements while working on the existing stream culverts crossing as well as in close proximity to the existing stream.
 - Where existing utilities are encountered along the route and require supporting in place, the following process will be implemented. Note that two stream culvert crossings have been identified along the route:
 - Exploratory works will be carried out to assess existing utilities and/or culverted structure.
 - Where required Temporary Works Designs and Certificates will be completed and confirmed by the PSDP. The temporary works design will be installed as specified. Currently envisaged that the support of the existing stream culverts will require steel beams with support strapping to protect in place
 - Excavate and hand dig below existing utilities and culverts to required depth.
 - Install ducting trench as described below.
 - Reinstatement backfill and surrounding material to specified requirements to ensure underside of utilities and culverts are fully supported for load bearing purposes on completion
 - Ducting, bedding, surrounding fill material, warning marker boards and tape will be installed as per design in accordance with Eirgrid specification while maintain safe clearance from existing utilities.
 - Chambers and sandpits to be installed as per design in accordance with Eirgrid specifications
 - Trench will be backfilled with suitable material and surface finishes will be returned to original state
- 24 Furthermore, where the path of the trenches for the grid connection intersect the stream culvert, the excavations will be performed by hand beneath the culvert with the appropriate supports and measures in place as per the project Construction Environmental Management Plan (CEMP) has been prepared by CSEA for the Proposed Development. There is no direct hydraulic link to the Griffeen of Liffey Rivers or the Grand Canal pNHA to the north.
- 25 Storm water from the roof area of the 110Kv sub-station, will be directed via rain water pipes into an on-site reticulation system. The outflow from this system will be discharged directly into a Stormtech, or similar, attenuation system, located in the north-west of the site, near the access road off Grange Castle South Access Road. Storm water from all other hardstanding areas, except for the roof and surrounds of the MV switch (client control) building will be drained into the aforementioned attenuation tank. Prior to discharge into the mains network, the run-off will be directed through appropriately sized Conder Separator(s) CNSB3s/21 (or similar approved) petrol interceptors.
- 26 Run-off from the MV switch (client control) building and surrounds was permitted under Reg. Ref. SD18A/0134 / An Bord Pleanála Ref. ABP-302813-18. This development commenced construction in the summer of 2019. This included for the construction of the Client Control building of the substation that was permitted under the original permission. Further to extensive site investigations, it would appear that the existing sub-soil would provide inadequate soil infiltration rates and thus it is not practical to install a soakaway system. It is proposed to ultimately discharge surface water from the proposed development, post attenuation and outflow restrictions, via a 300mm diameter gravity sewer network and connect into existing manhole located adjacent to the ESB sub-station, to the north of the subject site.
- 27 It is proposed to discharge foul water from the Proposed Development, via a 225mm gravity foul sewer network and connect into the 225mm diameter sewer, located along the Grange Castle South Access Road

adjacent to the northern boundary of the property. There is an existing manhole located at the property boundary near the site access to the north. This gravity sewer connection was laid to facilitate development of these lands and for other lands within Grange Castle South Business Park. This sewer then connects into a 375mm diameter pipe on Baldonnell Road and ultimately drains via gravity, into the Grange Castle Business Park pumping station, circa 1.9km to the north.

Figure 1: Indicative red line boundary for the Proposed Development site

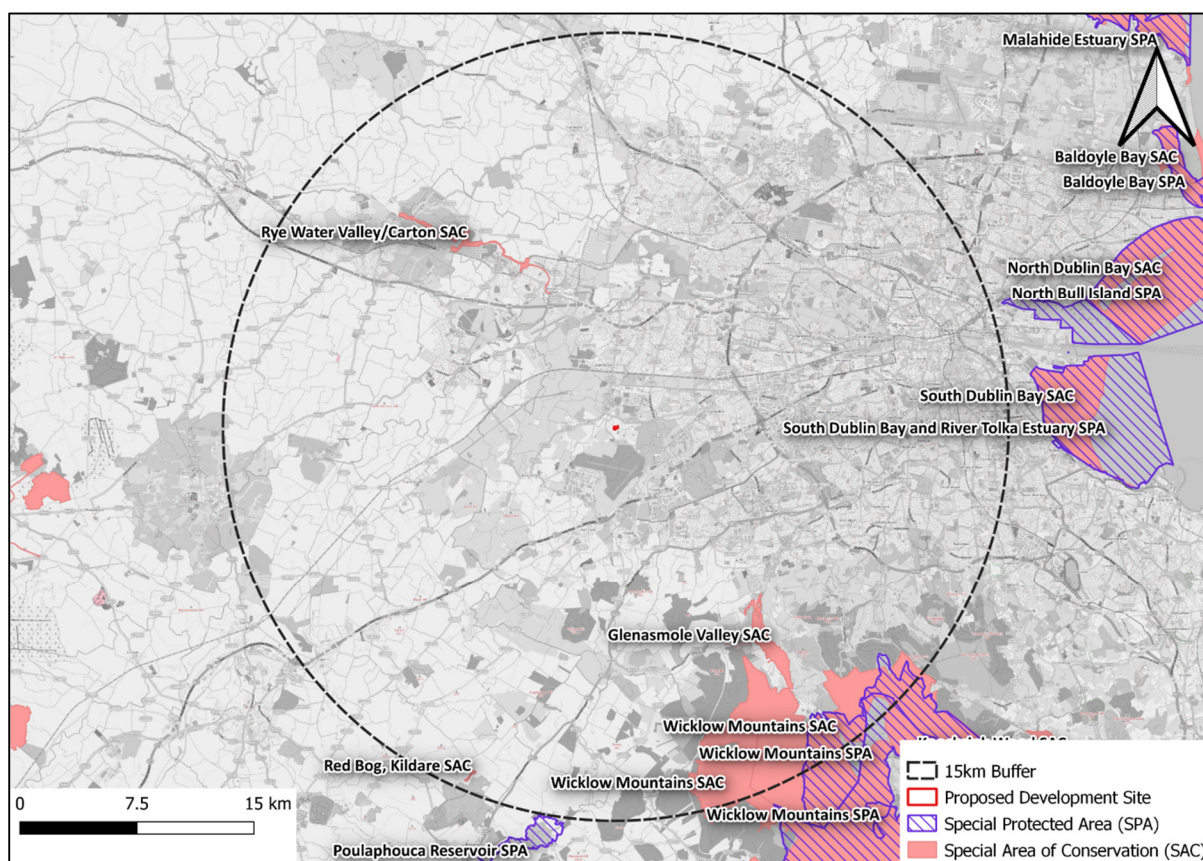


3.2 Overview of the Receiving Environment

3.2.1 European sites

- 28 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. 5.8km to the north-west.
- 29 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

- 30 The proposed site is centred on grid reference O 02997 30648. The proposed site is currently being used as a construction compound for the construction works of the data centre to the west of the site (Figure 1). The grid connection will cross the Grange Castle Business Park Access Road including a small area of amenity grassland on either side of the road. The grid connection extends north beyond this road into an agricultural field before connecting to the existing Castlebaggot 220/110kv substation. The desktop study found no records of any habitats for which European sites listed in Appendix I are designated within the subject lands or environs and a visit to the site on 14 July 2020 confirmed this.

3.2.3 Flora and Fauna Species

- 31 A data search of a custom polygon approx. 2km around the proposed development site returned the following records of Annex I bird species and Annex II/Annex IV fauna species.

- Common Kingfisher *Alcedo atthis*
- Corn Crake *Crex crex*
- Hen Harrier *Circus cyaneus*
- Little Egret *Egretta garzetta*
- Merlin *Falco columbarius*
- Peregrine Falcon *Falco peregrinus*
- Marsh Fritillary *Euphydryas aurinia*
- Desmoulin's Whorl Snail *Vertigo (Vertigo) moulinsiana*
- Brown Long-eared Bat *Plecotus auritus*

- Daubenton's Bat *Myotis daubentonii*
- European Otter *Lutra lutra*
- Leislars Bat *Nyctalus leisleri*
- Pipistrelle *Pipistrellus pipistrellus sensu lato*
- Soprano Pipistrelle *Pipistrellus pygmaeus*

- 32 Common pipistrelle bat *Pipistrellus pipistrellus* were recorded within the Proposed Development site in August 2018, however, these bat species are not listed as a QI of any European site in Ireland. There are no features present within the Proposed Development site that would provide suitable habitat for otter.
- 33 The data search did not return any records of flora and fauna species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and none were identified during site visits.

3.2.4 Hydrology

- 34 The proposed development site is located within the Liffey and Dublin Bay catchment and River Liffey sub-catchment. According to the EPA Envision Map Viewer, the Milltown Stream emerges close to the proposed development site on the far side of the adjacent road to the north of the site Grange Castle South Access Road and converges with the River Griffeen c. 520m downstream of the proposed development site. The Milltown Stream is culverted beneath the east of the proposed development site and culverted under Grange Castle South Access Road where it outfalls to the River Griffeen. The River Griffeen converges with the River Liffey c. 5.5km downstream of the proposed development site. The River Liffey discharges into a complex of marine and intertidal European sites in Dublin Bay.
- 35 According to EPA online Envision Maps, the water quality of the surface, transitional and coastal water is as follows:
- The water quality of the Milltown Stream is currently unknown;
 - River Griffeen is classified as of "Poor" water quality status (i.e. Q3) c. 260m upstream of the proposed development site;
 - The River Liffey is classified as of "Good" water quality status (i.e. Q4) c. 5.5km downstream of the proposed development site;
 - 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.
- 36 The River Liffey is classified as "at risk of not achieving good status" under the Water Framework Directive (WFD) risk scoring system.

3.2.5 Hydrogeology

- 37 The groundwater body at the proposed development site is within the "Dublin Urban" ground waterbody and is described as "Poorly productive bedrock" and is "Expected to achieve good status" under the WFD risk scoring system. According to the Geological Survey Ireland (GSI) Map Viewer, the level of vulnerability to groundwater contamination from human activities in the immediate area is deemed to be "Extreme" and the proposed development site is located on an area of "rock at or near the surface or karst". It is also described as "Locally Important Aquifer – Bedrock which is moderately productive only in local zones".

3.2.6 Soils & Geology

- 38 Site investigations confirmed the absence of contaminated soil.

3.3 Assessment of Effects on European Sites

39 This section identifies all the potential impacts associated with the proposed development, examines whether there are any European sites within the Zol 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.

40 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*

41 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.

42 As the proposed development does not traverse any European sites there is no potential for habitat fragmentation to occur.

43 The proposed development site does not support populations of any fauna species linked with the QI/SCI populations of any European site(s).

44 As the proposed development will not result in habitat loss or habitat fragmentation within any European site, 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*

45 There will be no interaction between the works and the culverted watercourse, the Milltown stream. Surface water run-off and discharges from the proposed development will drain to the existing local surface water drainage network. Foul waters from the proposed development, which will arise from a single WC in the substation building, 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 (Zol) of potential effects on water quality from the proposed development could extend to Dublin Bay

Surface Water

46 Surface water run-off and discharges from the proposed development will enter the downstream receiving environment via the existing surface water drainage network.

47 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 relatively low volume of any potential surface water run-off or discharge events relative to the receiving surface water and marine environments (due to the small scale of this development) 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

48 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 and these features of the proposed development are not included within the design to avoid or reduce any potential harmful effects to any European sites.

49 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

- 50 Foul water, comprising of 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.
- 51 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 status¹³. 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 2019¹⁴, which will increase capacity at the plant, and
 - An Bord Pleanála granted planning permission¹⁵ for the Greater Dublin Drainage (GDD) Project which will involve the construction of a new regional wastewater treatment facility in Clonshaugh in North County Dublin, the development of which will help alleviate capacity issues at Ringsend WWTP.
- 52 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.
- 53 Considering the above, particularly the current unpolluted status of Dublin Bay, and that foul water discharges 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.
- 54 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

- 55 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 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.
- 56 The *Regional Planning Guidelines for the Greater Dublin Area 2010-2022* (The Regional Planning Guidelines Office, 2010) include the following policy objectives relevant to the protection of European sites and the

¹³ Transitional and Coastal Surface Water Quality data (2010-2012) accessed from the EPA Envision Mapviewer www.gis.epa.ie/Envision (accessed May 2019)

¹⁴ 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

¹⁵ An Bord Pleanála Case Reference PL06F.301908 - *Greater Dublin Drainage Project consisting of a new wastewater treatment plant, sludge hub centre, orbital sewer, outfall pipeline and regional bio solids storage facility*. Available online at www.pleanala.ie/casenum/301908.htm

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:

Strategic Policy GIP2: To protect and conserve the natural environment, including in particular nationally important and EU designated sites such as Special Protection Areas, Candidate Special Areas of Conservation and proposed Natural Heritage Areas, protected habitats and species, and habitats and species of local biodiversity value. This policy also includes new or extended ecological sites that are notified or designated in the lifetime of the RPGs. Appropriate measures to protect Natura 2000 sites should be identified at the initial stages of all planning processes and included as a material consideration in order to inform future development.

Strategic Recommendation SR6: Plans and projects associated with zoned expansions needed to meet Economic Development and satisfy the Settlement Strategy that have the potential to negatively impact on Natura 2000 sites will be subject to HDA according to Article 6 of the Habitats Directive and in accordance with best practice and guidance.

Strategic Recommendation PIR15: Seek continued investment in Waste Water Treatment facilities and networks to meet the needs of the River Basin Management Plans and to achieve the targets for good water status for river, coastal and transitional waters in the Water Framework Directive.

Strategic Recommendation PIR16: Ensure that future capacity is provided in growth towns through expansion and upgrading of facilities where necessary and/or exploration of alternatives such as connecting to adjoining drainage systems or changes to catchments to enable growth towns to provide for the population growth envisaged in the settlement strategy and thus enable a more sustainable settlement pattern to be supported.

Strategic Recommendation PIR17: Identification and development of a suitable site for the Greater Dublin Regional Drainage Project - Regional Waste Water Treatment, Marine Outfall and Orbital Drainage System in the north coast of the GDA to enable the continued population and economic growth and the physical consolidation of the metropolitan area, by reducing the catchment size for Ringsend and providing new treatment capacity through network connections.

Strategic Recommendation PIR18: The management of land use and policies of Development Plans, Local Area Plans and Development Management decisions shall ensure that the scale of development is managed to achieve compliance with the waste water discharge licences of waste water treatment facilities. Breach of compliance is now a criminal offence under the EU Directives 2006/11/EC and 2000/60/EC given effect in the Waste Water Discharge Regulations 2007.

Strategic Recommendation PIR19: Plans and projects associated with all waste water and/or surface water treatments that have the potential to negatively impact on Natura 2000 sites will be subject to a Habitats Directive Assessment (HDA) according to Article 6 of the habitats directive and in accordance with best practice and guidance.

- 57 The planning authority for the proposed development is 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.

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.

- 58 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.
- 59 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.

- 60 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.
- 61 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*

- 62 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. Information published by GSI on the Dublin GWB¹⁶ states that “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.
- 63 Additional European sites with ground water dependant habitats within 15km of the proposed development include Glenasmole Valley SAC, Wicklow Mountains SAC, and Red Bog, Kildare SAC however these sites are located in different GWB and therefore not considered to be affected.
- 64 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*

- 65 The proposed development site comprises existing hard standing, amenity and agricultural grassland that does not support any non-native invasive species which could be accidentally spread or introduced to habitats within European sites.

3.3.5 *Disturbance and displacement impacts*

- 66 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 150m¹⁷. 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.¹⁸ There are no European sites within the

¹⁶ https://secure.dcaae.gov.ie/GSI_DOWNLOAD/Groundwater/Reports/GWB/DublinGWB.pdf

¹⁷ 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 ZOI of construction related disturbance likely to be much less in reality.

¹⁸ The disturbance zone of influence for waterbirds is based on the relationship between the noise levels generated by general construction traffic/works (BS 5228:2009 Code of Practice for Noise and Vibration Control on Construction and Open Sites – Part 1 Noise) and the proximity of those noise levels to birds – as assessed in Cutts, N. Phelps, A. & Burdon, D. (2009) *Construction and Waterfowl: Defining Sensitivity, Response, Impacts and Guidance*, and Wright, M., Goodman, P & Cameron,

disturbance Zol; the next nearest European site to the proposed development is Rye Water Valley/Carton SAC c. 5.8km away. There are also no habitat areas within the disturbance Zol of the proposed development that support populations of qualifying/special conservation interest species of any European site.¹⁹

- 67 As the proposed development will not result in the disturbance/displacement 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.

3.3.6 Summary

- 68 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.
- 69 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.
- 70 The potential impacts of the proposed development on the receiving environment, their Zol, 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	No

T. (2010) Exploring Behavioural Responses of Shorebirds to Impulsive Noise. *Wildfowl* (2010) 60: 150–167. At 300m, noise levels are below 60dB or, in most cases, are approaching the 50dB threshold below which no disturbance or displacement effects would arise.

¹⁹There is a need to consider use of habitat areas outside of an SPA by SCI bird species where they support the SCI populations and the site’s conservation objectives. These habitat areas can comprise alternative roosting sites, foraging areas, staging grounds or migration routes and can, but not necessarily exclusively, be situated within the immediate hinterland of the SPA, or in areas ecologically connected to it.

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 areas within, adjacent to, and potentially downstream of the proposed development site.	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.

4 Conclusions of Screening Assessment Process

- 71 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.
- 72 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) Conservation objectives for Rye Water Valley/Carton SAC [001398]. Generic Version 7.0. Department of Culture, Heritage and the Gaeltacht.²⁰</p>	<p>Located c. 5.8km northwest 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) Conservation objectives for Glenasmole Valley SAC [001209]. Generic Version 7.0. Department of Culture, Heritage and the Gaeltacht.</p>	<p>Located c. 8.4km southeast 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>Located c. 10.1km southeast of the proposed development site.</p>

²⁰ The versions of the conservation objectives documents referenced in this table are the most recent published versions at the time of writing

European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Development Site
<p>NPWS (2017) Conservation Objectives: Wicklow Mountains SAC 002122. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.</p>	
<p>Red Bog Kildare SAC [000397] 7140 Transition mires and quaking bog</p> <p>NPWS (2019) Conservation Objectives: Red Bog, Kildare SAC 000397. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.</p>	<p>Located c. 14.2km southwest 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) Conservation objectives for Wicklow Mountains SPA [004040]. Generic Version 7.0. Department of Culture, Heritage and the Gaeltacht.</p>	<p>Located c. 13.3km southeast of the proposed development site.</p>

Appendix II

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

Dún Laoghaire-Rathdown County Development Plan 2016-2022
<p>Policy LHB19: Protection of Natural Heritage and the Environment</p> <p>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.</p> <p>Policy LHB20: Habitats Directive</p> <p>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.</p> <p>Policy LHB22: Designated Sites</p> <p>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.</p> <p>Policy EI2: Wastewater Treatment and Appropriate Assessment</p> <p>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.</p> <p>Policy EI3: Surface Water Drainage and Appropriate Assessment</p> <p>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.</p>
Fingal Development Plan 2017-2023
<p>Objective NH10</p> <p>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.</p> <p>Objective NH11</p> <p>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.</p> <p>Objective NH15</p> <p>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.</p> <p>Objective SW04</p> <p>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.</p> <p>Objective WQ01</p> <p>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</p>

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

Policy 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.

Policy 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.

Objective 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.

Policy 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.

Policy S118

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 ($PE \leq 10$) 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 be 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.