

# Central Dublin Substation Project

## Report to Inform Screening for Appropriate Assessment

File Ref: CP1273-RPS-02-EN-XX-R-O-1004

IE000451AA  
Central Dublin  
Substation Project  
S5 P01  
July 2025

Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

Document status					
Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
S5 P01	Planning Issue	MS	MN	CR	28/07/2025
Approval for issue					
DC				July 2025	

© Copyright R P S Group Limited. All rights reserved.

The report has been prepared for the exclusive use and benefit of our client, and for the sole and specific purpose for which it is provided. R P S Group Limited, any of its subsidiaries, or a related entity (collectively 'RPS') does not accept any liability if this report is used for an alternative purpose from which it is intended. The report does not account for any changes relating the subject matter of the report, or any legislative or regulatory changes that have occurred since the report was produced and that may affect the report.

RPS does not accept any responsibility for any documents or information supplied to RPS by others. It is expressly stated that no independent verification of any documents or information supplied by others has been made.

Unless otherwise agreed in writing by RPS no other party may use, make use of, or rely on the contents of this report. RPS does not accept any responsibility or liability for loss whatsoever to any third party caused by, related to, or arising out of any use or reliance on the report.

Prepared by:	Prepared for:
RPS	EirGrid

Dublin | Cork | Galway | Sligo | Kilkenny  
rpsgroup.com

RPS Group Limited, registered in Ireland No. 91911  
RPS Consulting Engineers Limited, registered in Ireland No. 161581  
RPS Engineering Services Limited, registered in Ireland No. 99795  
The Registered office of each of the above companies is West Pier  
Business Campus, Dun Laoghaire, Co. Dublin, A96 N6T7



## Contents

<b>1</b>	<b>Introduction.....</b>	<b>1</b>
1.1	Nature of the Application .....	1
1.2	Scope of Report .....	1
1.3	EirGrid .....	1
1.4	Legislative Context .....	2
1.4.1	European Sites .....	2
1.4.2	Appropriate Assessment .....	3
1.5	Stages of Appropriate Assessment .....	3
<b>2</b>	<b>Site Location and Context .....</b>	<b>5</b>
<b>3</b>	<b>The Proposed Development .....</b>	<b>8</b>
3.1	Proposed Development.....	8
3.1.1	Gas Insulated Switchgear (GIS) Substation Buildings .....	8
3.1.2	Back Up Power.....	10
3.1.3	Connection to Electricity Grid (not part of the subject planning application) ....	10
3.1.4	Access Arrangements .....	10
3.1.5	Surface Water Drainage .....	11
3.1.6	Potable Water Supply.....	11
3.1.7	Foul Water Drainage .....	12
3.1.8	Firefighting Systems and Controls .....	12
3.1.9	Lighting and Security.....	12
3.1.10	Boundary Treatment and Landscaping .....	13
3.2	Construction Phase Activities.....	14
3.2.1	Confirmatory Ground Investigations.....	15
3.2.2	Site Preparation.....	15
3.2.3	Civil Works .....	16
3.2.4	Electrical Works.....	17
3.2.5	Temporary Compound .....	17
3.2.6	Construction Traffic .....	17
3.2.7	Hours of Work .....	17
3.2.8	Construction Personnel.....	18
3.2.9	Construction Timeline.....	18
3.2.10	Grid Connection (not part of subject planning application).....	18
3.2.11	Traffic Management .....	20
3.2.12	Waste Management .....	21
3.3	Operation and Maintenance .....	22
3.4	Decommissioning Phase.....	22
3.5	Community Benefit Fund.....	22
<b>4</b>	<b>Methodology .....</b>	<b>23</b>
4.1	Appropriate Assessment Guidance .....	23
4.2	Desk Study .....	24
4.3	Field Study .....	25
4.4	Limitations .....	25
4.5	Identifying Relevant European Sites .....	25
4.5.1	Source-Pathway-Receptor Model .....	26
4.5.2	Zone of Influence.....	26
4.5.3	Scoping of European Sites.....	27
4.5.4	Identification of Likely Significant Effects .....	27
<b>5</b>	<b>Receiving Environment.....</b>	<b>29</b>
5.1	Habitats .....	29

5.2	Hydrological Connectivity .....	29
5.3	Hydrogeological Connectivity .....	29
5.4	Potential Ex-Situ Foraging Sites.....	30
5.5	European Sites.....	30
5.6	Features of European Sites.....	33
5.6.1	Qualifying Interests.....	33
5.6.2	Special Conservation Interests.....	33
5.7	Invasive Alien Plants and Animals.....	38
<b>6</b>	<b>Screening Assessment .....</b>	<b>40</b>
6.1	Management of European Sites.....	40
6.2	Summary of Information Required.....	40
6.3	Assessment of Likely Significant Effects Alone .....	40
6.3.1	Source-Pathway-Receptor Model .....	40
6.3.2	European Sites within the Zone of Influence .....	43
6.4	In-combination Effects .....	55
6.4.1	Plans .....	56
6.4.2	Projects .....	60
6.4.3	In-combination Conclusion .....	64
<b>7</b>	<b>Screening Conclusion and Statement.....</b>	<b>65</b>
<b>8</b>	<b>References .....</b>	<b>66</b>

## Figures

Figure 2.1: Site Location .....	6
Figure 2.2: Site Context.....	7
Figure 3.1: Proposed Site Layout and Site Levels.....	9
Figure 3.2: Horizontal Directional Drilling Midi Rig.....	19
Figure 3.3: Trenchless Crossing .....	20
Figure 5.1: European Sites .....	32

## Tables

Table 3.1: Peak Construction Traffic.....	17
Table 3.2: Indicative Construction Programme .....	18
Table 5.1: European Sites within the initial Zol .....	30
Table 5.2: Special Conservation Interest birds returned from the NBDC search.....	33
Table 5.3: IAPS returned from the NBDC search .....	38
Table 6.1: Source-Pathway-Receptor Model for the Proposed Development (Relevant Pathways are identified as grey rows).....	41
Table 6.2: Conservation Objectives of European Sites within the Zol .....	43
Table 6.3: Planning Search Results - Plans and Programmes.....	56
Table 6.4: Planning Search - Projects .....	60

# 1 Introduction

## 1.1 Nature of the Application

RPS has been appointed by EirGrid plc (hereafter EirGrid) to prepare a Strategic Infrastructure Development (SID) planning application under Section 182A of the Planning and Development Act 2000, as amended (the Act) for the Central Dublin Substation Project which comprises of the construction of a new transmission substation in East Wall, Dublin 3 (hereafter referred to as the “Proposed Development”).

The SID planning application is made following receipt of the formal notice from An Coimisiún Pleanála (ACP), dated 12th June 2025 (Ref: ABP-322217-25) which confirms that the Proposed Development constitutes strategic infrastructure under Section 182 of the Act, and formally concludes pre-application consultation with An Coimisiún Pleanála.

## 1.2 Scope of Report

RPS has been commissioned by EirGrid to prepare this Report to Inform a Screening for Appropriate Assessment (AA) with respect to the proposed construction and operation of the proposed Central Dublin Substation Project, hereafter called the Proposed Development. This screening report comprises part of the SID application documentation submitted to An Coimisiún Pleanála. The location of the Proposed Development is shown in Figure 2.1.

The Proposed Development involves building a new transmission substation in Central Dublin. Also assessed for the purposes of this report is the Grid Connection which does not form part of the subject planning application. Transmission substations are interface points between the Transmission System and Distribution System. The driver of these projects is security of supply. The need for investment relates to a lack of capacity at existing transmission substations and transmission circuits to supply the increased demand that the Distribution System Operator (DSO) has forecast<sup>1</sup>.

This report is an examination of whether, in view of best scientific knowledge on the basis of a preliminary assessment and objective criteria and applying the precautionary principle<sup>2</sup>, the Proposed Development, either individually or in combination with other plans or projects, could have a significant effect on any European site(s). This report will identify if there may be such effects as a result of the Proposed Development, and in such circumstances a full AA will be required. The assessment was carried out in accordance with the legislative context outlined in **Section 1.4**.

## 1.3 EirGrid

EirGrid is the State-owned electric power transmission operator (TSO). It is a public limited company, registered under the Companies Acts. EirGrid was established to act as the independent Transmission System Operator (TSO), in line with the requirements of the EU Electricity Directive. EirGrid became operational as the TSO on 1 July 2006.

Pursuant to provisions of SI No 445/2000 - European Communities (Internal Market in Electricity) Regulations, 2000 (as amended), EirGrid has the exclusive function to operate and ensure the maintenance of and if necessary, develop a safe, secure, reliable, economical, and efficient transmission system.

As TSO in Ireland, EirGrid’s statutory role is as follows:

---

<sup>1</sup> EirGrid TSO PR5 Local/Dublin Security of Supply: PR5 Balanced Scorecard and Incentive Multi-Year Plan 2023-2027

<sup>2</sup> Set out in Article [191](#) of the Treaty on the Functioning of the European Union (TFEU).

- Develop, ensure maintenance, and operate a safe, secure, reliable, economical, and efficient national electricity grid with due regard for the environment.
- Plan and develop the grid infrastructure needed to support Ireland's economy.
- Supervise the security of the national grid.
- Schedule electricity generation with power generators and stations.
- Facilitate the market for renewable electricity in Ireland.

As TSO, EirGrid is regulated by the Commission for the Regulation of Utilities (CRU).

EirGrid, as the TSO of Ireland, and ESB Networks, as the DSO and Transmission Asset Owner (TAO) of Ireland, work collaboratively to ensure that the needs of transmission and distribution connected customers are met. This includes planning the development of transmission interface stations. A transmission interface station or transmission substation is a point of connection between the transmission and distribution system. A primary function of these stations is to facilitate power flows between the transmission and distribution systems to enable power to be distributed to where it is needed.

As part of feedback collected during the Shaping our Electricity Future consultation, the DSO has highlighted to EirGrid emerging needs for additional capacity at transmission interface stations in the Dublin area. This capacity is needed to accommodate forecast growth of electricity demand in the distribution network. This projected demand growth is driven by several factors, including residential, electrification of heat and transport, and growth in commercial sectors.

The significant electricity demand growth in the distribution system also leads to a significant pressure on the transmission system, particularly at existing transmission substations and the associated transmission circuits. The existing transmission substations and the associated transmission circuits are at risk of reaching their capacity limits and as a result the existing infrastructure will not be capable to supply sufficient power to where it is needed. To address this need, new infrastructure is required.

Since publication of the original Shaping Our Electricity Future v1.0 Roadmap in 2021<sup>3</sup>, the emerging needs have translated into connection requests made by the DSO to the TSO. Currently there are three projects underway to deliver new transmission substations, one each in North County Dublin (CP1214), West County Dublin (CP1226), and Dublin Central (CP1273).

The focus of this report is the Central Dublin Substation Project. Further details on the project are provided in **Section 2** of this report.

## 1.4 Legislative Context

### 1.4.1 European Sites

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, as amended, better known as “The Habitats Directive”, provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of community interest through the establishment and conservation of a European Union-wide network of sites known as Natura 2000 (hereafter referred to as ‘European sites’). In the Republic of Ireland, European sites comprise:

- Special Areas of Conservation (SACs) designated for habitats, plants, and non-bird species, under the Habitats Directive (92/43/EEC);

---

<sup>3</sup> The latest version of Shaping Our Electricity Future Roadmap is v1.1, published in 2023. Available at [https://cms.eirgrid.ie/sites/default/files/publications/Shaping-Our-Electricity-Future-Roadmap\\_Version-1.1\\_07.23.pdf](https://cms.eirgrid.ie/sites/default/files/publications/Shaping-Our-Electricity-Future-Roadmap_Version-1.1_07.23.pdf). Accessed July 2025.

- Special Protection Areas (SPAs) classified for bird species and their habitats, under the Birds Directive (79/409/ECC as codified by Directive 2009/147/EC); and
- ‘Candidate’ sites including ‘cSACs’ and ‘proposed’ sites including ‘pSPAs’. The process of designating cSACs as SACs and pSPAs as SPAs is ongoing in Ireland. Throughout this report, the term ‘SAC’ is used for both SACs and cSACs and the term ‘SPA’ is used for both SPAs and pSPAs, given they are subject to equal protection.

Each European site has assigned Conservation Objectives (CO) and a list of Qualifying Interests (QIs) or Special Conservation Interests (SCIs). The CO concept appears in the eighth recital of Directive 92/43/EEC which reads: *‘whereas it is appropriate, in each area designated, to implement the necessary measures having regard to the conservation objectives pursued’*. Article 1 then explains that *‘conservation means a series of measures required to maintain or restore the natural habitats and the populations of species of wild fauna and flora at a favourable status’*.

The National Parks and Wildlife Service (NPWS) publish COs for European sites on their website. NPWS advise in the general introductory notes of their site-specific CO series publications, that an appropriate assessment based on their *“published conservation objectives will remain valid even if the conservation objective targets are subsequently updated, providing they were the most recent objectives available when the assessment was carried out”*. NPWS advise that to assist in that regard, it is essential that the date and version are included when objectives are cited.

### 1.4.2 Appropriate Assessment

#### 1.4.2.1 European Context

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to have a significant effect on or to adversely affect the integrity of European sites (Annex 1.1). Article 6(3) establishes the requirement for AA:

*“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and if appropriate, after having obtained the opinion of the general public”.*

Article 6(4) states:

*“If, in spite of a negative assessment of the implications for the [European] site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.”*

#### 1.4.2.2 National Context

In the context of the Proposed Development, the requirement (to screen) for AA under the Habitats Directive is transposed by the European Communities (Birds and Natural Habitats) Regulations 2011, as amended, and the Planning and Development Act 2000, as amended.

## 1.5 Stages of Appropriate Assessment

### Stage 1: Screening/Test of Significance

This process identifies whether the proposed development is directly connected to or necessary for the management of a European site(s) and identifies whether the development is likely to have



significant impacts upon a European site(s) either alone or in combination with other projects or plans.

The output from this stage is a determination for each European site(s) of not significant, significant, potentially significant, or uncertain effects. The latter three determinations will cause that site to be brought forward to Stage 2.

### Stage 2: Appropriate Assessment

This stage considers the impact of the proposed development on the integrity of a European site(s), either alone or in combination with other projects or plans, with respect to: (i) the site's conservation objectives; and (ii) the site's structure, function, and its overall integrity. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts is undertaken.

The output from this stage is a Natura Impact Statement (NIS). This document must include sufficient information for the competent authority to carry out the appropriate assessment. If the assessment is negative, i.e., adverse effects on the integrity of a site cannot be excluded, then the process must consider alternatives (Stage 3) or proceed to Stage 4.

### Stage 3: Assessment of Alternatives

This process examines alternative ways of achieving the objectives of the project that avoid adverse impacts on the integrity of the European Site. This assessment may be carried out concurrently with Stage 2 in order to find the most appropriate solution. If no alternatives exist or all alternatives would result in negative impacts to the integrity of the European sites, then the process either moves to Stage 4 or the project is abandoned.

### Stage 4: Assessment where Adverse Impacts Remain

This stage considers whether, despite a finding of likely adverse impacts on the integrity of a European site, the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, subject to all compensatory measures necessary to ensure the overall coherence of European sites is protected.



## 2 Site Location and Context

The subject 1.124 ha site is located at East Wall Road (R131 regional road), East Wall, Dublin 3, as illustrated in **Figure 2.1**.

The majority of the site is owned by ESB, with a strip of land along the East Wall Road footpath being within the control of Dublin City Council. Letters of consent to include these lands are enclosed as part of the SID application pack.

The site is currently in use as a temporary surface car park for ESB Networks staff with an adjacent vacant brownfield site. Access to the site is via the East Wall Road with two gated entrances – only one of which is in operation. The security-controlled surface car park has been in operation at the location since 2016, as permitted by DCC (under Planning Reference 3052/16 and 2766/21) and will expire in August 2026.

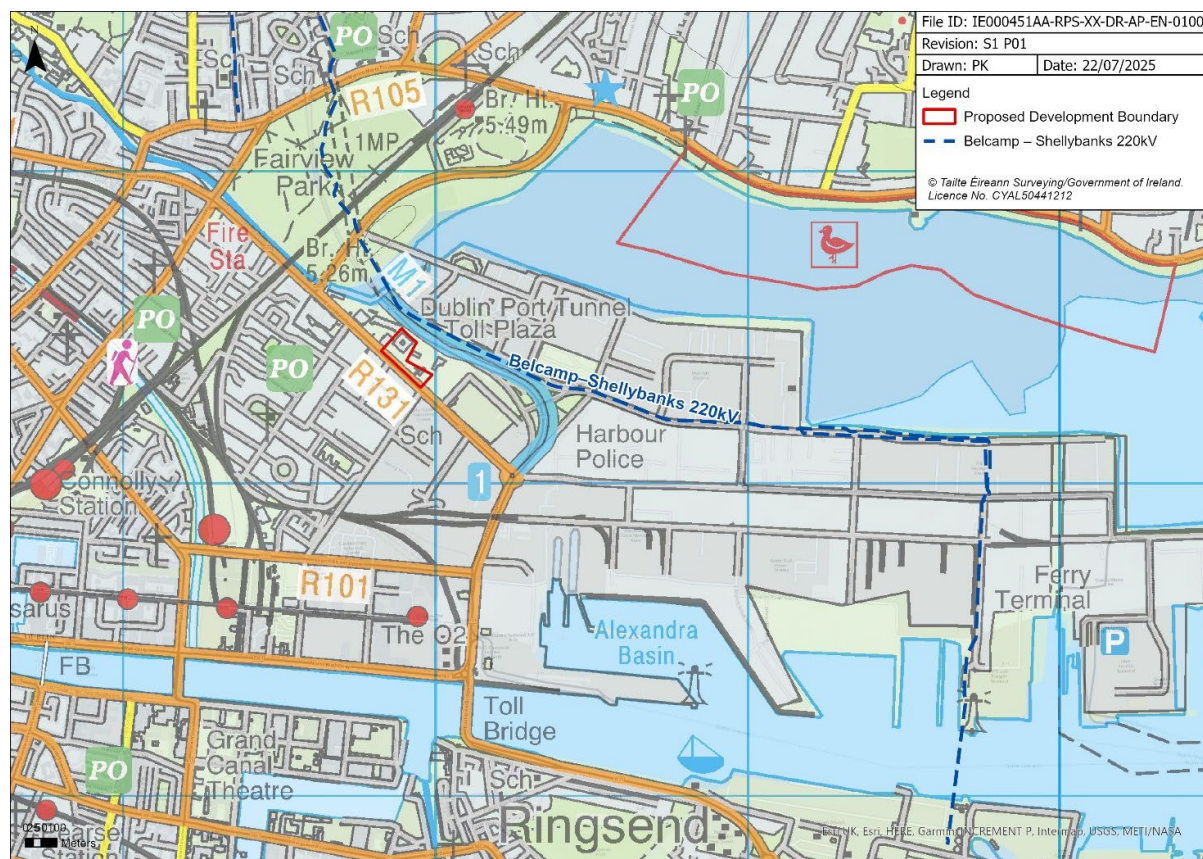
As illustrated in **Figure 2.2**, the residential area of East Wall is located immediately to the southwest of the site and generally comprises two storey residential dwellings. The site is bounded to the west by the Portside Business Centre, to the east by a Dublin Port Company (DPC) Storage Site, to the north by the M50 and Port Tunnel Control building and Tolling facility.

The Eastpoint Business Park lies immediately to the north of the M50 and Port Tunnel which consists of numerous office buildings with access to the Business Park from two security-controlled access points from Alfie Byrne Road and Bond Road. Further afield to the northwest of the application site, the River Tolka flows out into the Dublin Bay Estuary. The M50 crosses the river near the estuary before entering the port tunnel.

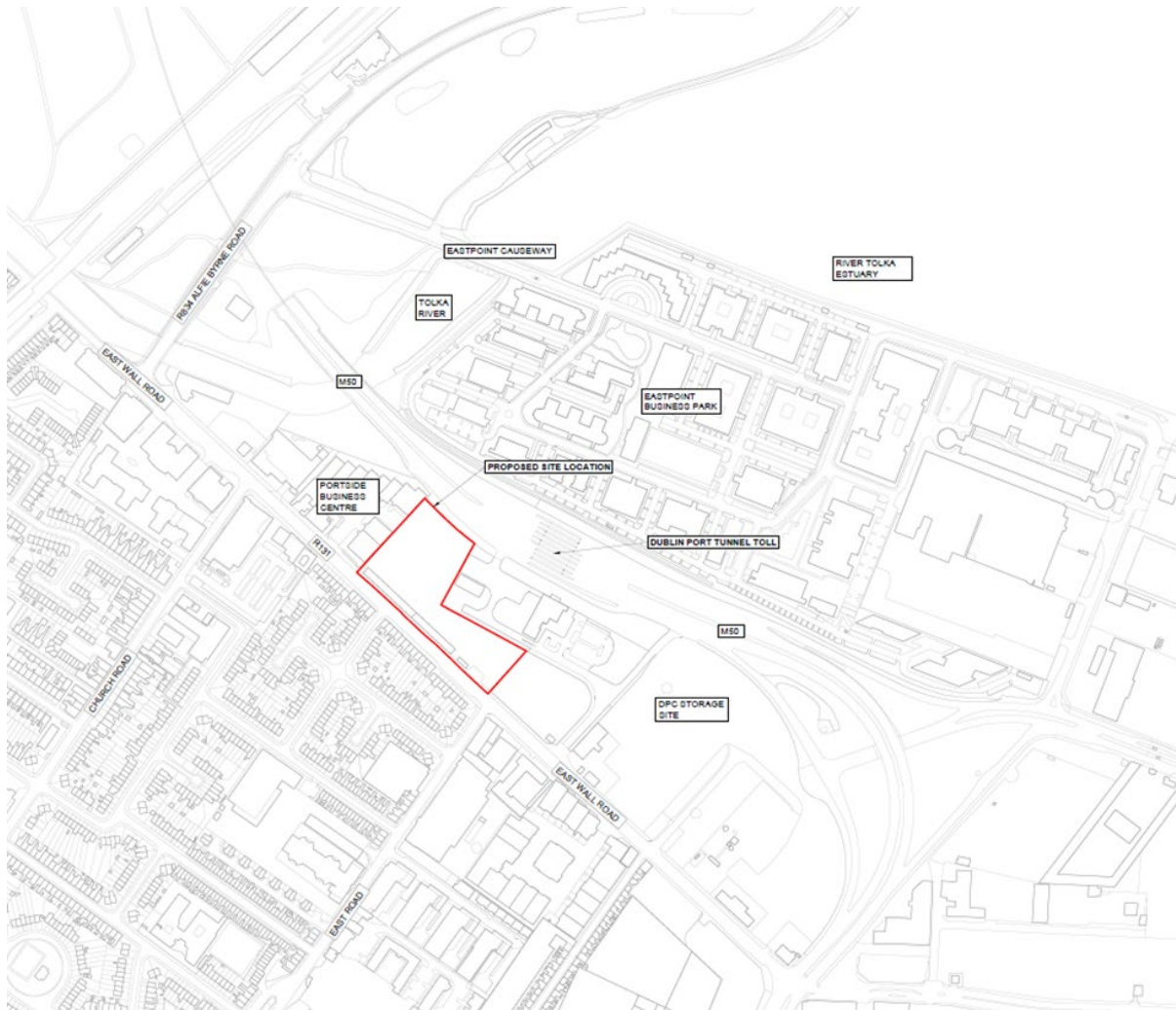
The location is approximately 50m south from the Belcamp – Shellybanks 220 kV circuit which currently runs on the northern side of the M50. The proposed substation will connect into this 220 kV circuit via a trenchless crossing of the M50. This Grid Connection does not form part of the proposed SID planning application and will be subject to separate consent however although not part of the application it has been considered and assessed within this screening report.

For the purposes of this AA Screening Report:

- The “Proposed Development” relates to the development as detailed in **Section 3**, and is the subject of this SID planning application.
- The “Grid Connection (not part of the subject planning application)” relates to the trenchless crossing of the M50 from the site. The Grid Connection will facilitate the connection of the Proposed Development to the national electricity grid.



**Figure 2.1: Site Location**



**Figure 2.2: Site Context**

## 3 The Proposed Development

### 3.1 Proposed Development

A summary of the Proposed Development is outlined below and described in more detail throughout this Chapter.

The Proposed Development comprises of:

- Change of use from car park to electricity infrastructure;
- Demolition of existing buildings, structures and general site clearance;
- 1 no. 2-storey 220kV Gas Insulated Switchgear (GIS) substation building occupying an area of c. 51.8m x 22.2m and 20m in height to include the GIS switchgear comprising of insulated circuit breakers, disconnectors and other high voltage equipment, an emergency diesel generator, all necessary welfare facilities, office spaces, and monitoring and control equipment required for the operation and maintenance of the substation;
- 1 no. 2-storey 110kV GIS substation building occupying an area of c. 51m x 15.9m and 16.5m in height to include the GIS switchgear comprising of insulated circuit breakers, disconnectors and other high voltage equipment, an emergency diesel generator, all necessary welfare facilities, office spaces, and monitoring and control equipment required for the operation and maintenance of the substations;
- 3 no. transformers to transform electrical power from 220kV to 110kV and associated acoustic enclosures (c. 5.3m in height) and c 1m high lightning protection rods extending to a height of c. 11m above ground level;
- Electrical cables located within the site boundary;
- Site lighting within the substation compound;
- Closure of all existing entrances to the site and the provision of new vehicular and pedestrian access from East Wall Road;
- Ancillary car parking spaces including internal access roads;
- 2.6 m high palisade security fence and associated gates;
- A public-facing fence and associated gates along East Wall Road varying in height from c. 2.4m to c. 3m;
- Public realm improvements including the provision of seating areas and landscaping;
- Associated utility connections including water supply, foul drainage and surface water drainage, including the provision of an underground storm water attenuation tank; and
- All other associated ancillary above and below ground development, including works comprising or relating to construction works, roadworks and excavation.

The proposed substation will tie into the existing Belcamp – Shellybanks 220 kV circuit which runs along the northern side of the M50 motorway. This connection does not form part of the proposed SID planning application, however although not part of the application it has been considered within this report.

#### 3.1.1 Gas Insulated Switchgear (GIS) Substation Buildings

A 220kV and 110kV GIS 2 storey buildings are proposed for the development designed to meet EirGrid's standard specifications. The general arrangement and scale of the 220kV and 110KV GIS



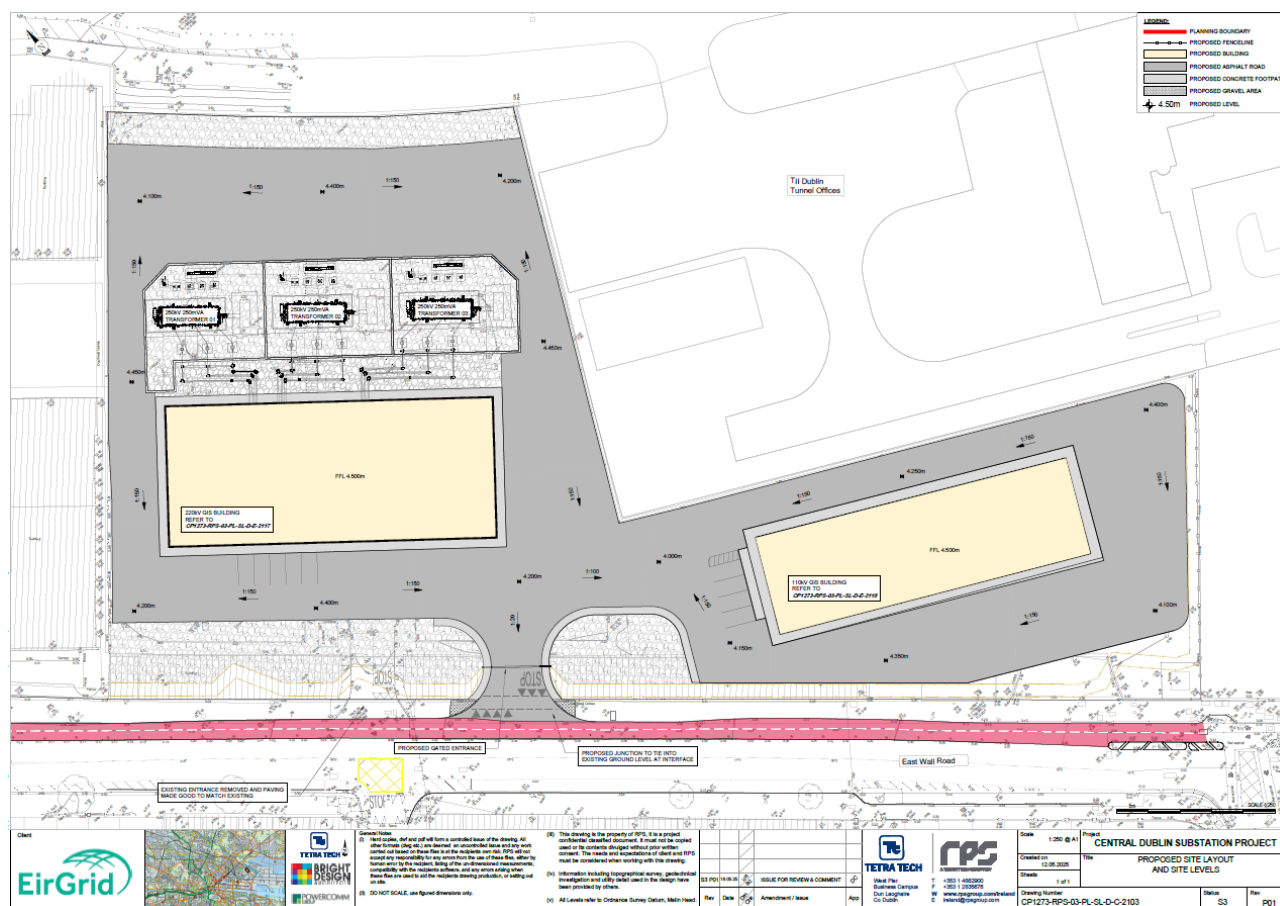
## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

Substation buildings has been largely determined on the basis of technical requirements, including the dimensions of the plant and equipment (including necessary separation and distances).

Each building will comprise a two-storey structure. The buildings will house the SF6 free (non SF6 gases) gas insulated switchgear comprising of insulated circuit breakers, disconnectors and other high voltage equipment.

The buildings will provide all necessary welfare facilities, office spaces, monitoring and control equipment required for the operation and maintenance of the substations. It is envisaged that both buildings will be steel framed, incorporating precast concrete floors and an insulated cladding system.

While the selected materials and finishes have been carefully considered to address feedback from DCC and the local community while meeting ESB's technical requirements, it is accepted that there is scope for further discussion and agreement with DCC regarding specific details of finishes, without affecting the principle, nature and extent of the proposed development. EirGrid would therefore be happy to accept a condition of permission (should ACP be disposed to grant permission) to further discuss and agree these details with DCC. The proposed 220kV substation is approximately 51.8m x 22.2m and 20m in height, while the proposed 110kV substation is approximately 51m x 15.9m and 16.5m in height. The proposed layout is shown in **Figure 3.1** and on Drawing CP1273-RPS-03-PL-SL-D-C-2103 prepared by RPS enclosed as part of the SID application pack.



**Figure 3.1: Proposed Site Layout and Site Levels**

### 3.1.2 Back Up Power

An emergency diesel generator (provisionally sized at 250 – 300 kVA) will be installed within each Gas Insulated Switchgear (GIS) substation building. These generators will operate only during power outages to support essential services such as lighting, control systems and ventilation.

Each generator will be housed in a dedicated room with appropriate fire protection, ventilation and spill containment measures.

A diesel storage tank with an estimated capacity of 3000 litres will be located nearby to provide approximately 48 hours of back-up power. The tank will be securely positioned, bunded to prevent environmental contamination and safely accessible for refuelling.

### 3.1.3 Connection to Electricity Grid (not part of the subject planning application)

The Proposed Development is approximately 50m from the existing Belcamp – Shellybanks 220 kV circuit which currently runs on the northern side of the M50. The existing Belcamp – Shellybanks 220kV circuit will tie in to the Proposed Development. This Grid Connection does not form part of the proposed SID planning application and will be subject to separate consent however although not part of the application it has been considered and assessed within this PECR.

To tie into the substation building within the Proposed Development, the circuit must cross the M50. This crossing will be through trenchless means. The proposed crossing methodology is horizontal directional drilling (HDD) which will minimise any traffic disruption to the M50. During trenchless crossings (HDD), bentonite is anticipated to be used as drilling mud to lubricate and cool cutting tools, to remove cuttings and help prevent blowouts. Bentonite is widely used in the construction industry as a drilling fluid, as a lining for the base of landfills and for the construction of curtain walls to waterproof below-grade excavations. It is a naturally occurring clay, it inorganic and considered non-toxic. Further details on the HDD construction methodology is provided in **Section 3.2.10**.

The HDD crossing is approximately 100m in length and reaches a depth of up to 10m below the M50 roadway. It is estimated that the HDD crossing would take one week to complete.

### 3.1.4 Access Arrangements

The existing gated entrance onto East Wall has two-way vehicular access and pedestrian access either side.

It crosses the footpath via a raised ramp and a two-way cycle lane on East Wall Road. There is tactile paving on the footpath either side of the entrance. This existing entrance is to be closed, all of the surfacing and gates will be removed and recycled where appropriate. The existing pathway will be reinstated to match the existing pathway. The remaining entrance area will be incorporated into the boundary landscape proposals.

A new entrance will be constructed 23.0m to the East. The proposed entrance will be 8.0m wide and will allow for two-way traffic. Pedestrian access will be provided either side via a 1.2m footpath. The general arrangement will be similar to that of the existing entrance with a ramp and tactile paving provided. The landscaping and fencing along the southern boundary will be placed to achieve the appropriate sight lines when entering East Wall Road.

Internal roads and maintenance areas have been designed using Autotrack software to ensure adequate turning space for maintenance and emergency vehicles.

Car parking has been provided based on the staffing levels anticipated during the operational phase. While the substation will operate unmanned, personnel will periodically attend the site for routine inspections and maintenance. Accordingly, 9 car parking spaces are provided within the compound for use during these visits.

Due to the low occupancy and infrequent use, disabled parking spaces and electric vehicle charging points are not proposed.

### 3.1.5 Surface Water Drainage

The existing surface water network on the site currently discharges to the existing 300mm public surface water gravity sewer located to the East Wall Road, parallel to the southern boundary of the site.

As part of the Proposed Development, a new storm water drainage system is to be provided to effectively manage runoff from hardstanding areas, building roofs, internal access roads, and car parking within the substation compound. The proposed drainage network will consist of a series of strategically placed gullies and channel drains that collect surface water from all impermeable and semi-permeable areas and discharge to an existing gravity network. Collected surface water runoff will pass through an oil/petrol interceptor to remove hydrocarbons and other potential contaminants before entering an underground attenuation system, which has been designed to regulate the outflow from the Proposed Development to match the greenfield runoff from the site (without any development). The attenuation discharge rate has been designed on the basis of a 1 in 100-year return period critical storm with 20% climate change allowance.

The discharge rate will be limited to the maximum of  $Q_{bar}$  or 2l/sec/ha, in accordance with DCC requirements. The outflow from the site will be restricted to 5l/s during a 1 in 100 Year storm, in accordance with local authority requirements to prevent downstream flooding and protect the receiving network. The attenuated discharge will exit the site via a controlled outfall and connect to the public surface water drainage system.

All surface water drainage design and construction will be carried out in compliance with The Greater Dublin Strategic Drainage Study (GDSDS), CIRIA The SuDS Manual and Building Regulations 2010 Part H.

Details of the proposed surface water drainage system, including layout and specifications are provided on **Drawing CP1273-RPS-03-PL-SL-D-C-2111** prepared by RPS enclosed as part of the SID application pack.

Sustainable Urban Drainage System (SuDS) measures are proposed to be provided within the Proposed Development, to mitigate the adverse effects of urban stormwater drainage by replicating the natural predevelopment catchment characteristics of the site. Based on the requirements of the Proposed development and particular constraints of the site, a number of potential SuDS measures are not feasible as part of the development. Further details on the SuDS requirements and demonstration of compliance with DCC's Sustainable Drainage Design and Evaluation Guide (2021) is provided in the Engineering Services Report prepared by RPS and which is provided under separate cover.

### 3.1.6 Potable Water Supply

The Proposed Development will require a water supply for potable water for domestic use within the GIS substation buildings. The potable water demand will be relatively low as the proposed substation compound will be normally "unmanned" and operated remotely.

The proposed watermain size is 110mm. To prevent issues such as stagnation in the water supply line and its associated problems, there will be a continuous water demand of 24 litres per week from automatically flushing WC's within the station. A water meter will be installed on the public side east of the substation entrance.

The watermain layout, including the locations of valves, hydrants, and other components, is detailed in Drawing **CP1273-RPS-03-PL-SL-D-C-2120** prepared by RPS enclosed as part of the SID application pack.



The potable water supply for the site is planned to be sourced from the Dublin City Council watermain, as shown on **Drawing CP1273-RPS-03-PL-SL-D-C-2120** prepared by RPS enclosed as part of the SID application pack.

A combined watermain will be used to serve both domestic and firefighting needs. The distribution main will consist of 110 mm diameter pipes and is designed in compliance with Uisce Éireann Code of Practice for Domestic Supply.

### 3.1.7 Foul Water Drainage

The Proposed Development is an unmanned substation with occasional access for operation, inspection and maintenance. The foul drainage design will accommodate the wastewater produced by the welfare facilities within the Proposed Development. These facilities include a small canteen, toilet, and wash hand basin in each of the two buildings.

Sanitary wastewater, including effluent from toilets, washing facilities, and the canteen, will be collected within each building and conveyed to the existing public foul sewer through a foul water collection network. The estimated sanitary wastewater discharge to the sewer is up to 0.32 m<sup>3</sup> per day, based on five employees at the substation and a maximum of two visitors daily.

If the facilities become unmanned, resulting in significantly reduced foul loading, a common issue is odour buildup in the toilets. To address this, self-flushing toilets are proposed for the station, which will automatically flush twice weekly.

The proposed foul water network is illustrated on Drawing **CP1273-RPS-03-PL-SL-D-C-2111** prepared by RPS enclosed as part of the SID application pack. The foul water collection system will operate by gravity, as the site's slope is sufficient to allow gravity discharge.

### 3.1.8 Firefighting Systems and Controls

The individual GIS substation buildings will be designed to fully comply with the relevant Building Regulations, including those relating to fire safety. A Fire Safety Certificate application will be submitted to Dublin City Council prior to the commencement of construction, in line with the standard process for substation developments. During the detailed design stage, a fire detection and alarm system will be specified in compliance with EirGrid's functional and operational requirements.

Firefighting provisions will include the installation of external fire hydrants positioned to serve both GIS buildings, ensuring adequate coverage in the event of an emergency. Hydrant locations will be determined based on access for emergency services and in consultation with Dublin Fire Brigade.

Transformer bays will be provided with reinforced concrete blast walls between units to prevent the escalation of any fire or explosion event. These walls are designed to meet EirGrid's specification and relevant safety standards.

In the event of a fire, firewater runoff will be managed through the site's surface water drainage system. This system will be designed to capture and isolate firewater, allowing for containment and subsequent testing prior to discharge. If fire water is found to be contaminated, it will be retained on-site and removed by an appropriately licensed contractor. The need for a dedicated firewater retention tank will be assessed during the detailed design phase, in consultation with relevant environmental and fire safety authorities.

### 3.1.9 Lighting and Security

Security of the substation compound from both a health and safety perspective and against trespassing is a design requirement of the project. The site is bounded by party walls to the North and the West.

It is essential to prevent unauthorised access to the site, especially to the compound and buildings, as such access could lead to property damage, loss of life, and/or disruption of supply from this strategic asset.

The site security measures designed to prevent unauthorised entry to the substation consist of:

- one vehicle security gate and two side pedestrian gates to the compound located at the main entrance. The vehicular gates are 2.6 metres high and will be secured meshed panels and anti-ram barriers.
- existing walls on the northern, eastern and western boundaries. The walls are generally constructed using modular concrete blocks and are between 3.0m and 5.0m in height.
- a palisade fence along the southern boundary, except at the site entrance, consisting of a 2.6m high palisade panels as shown on Drawing CP1273-RPS-03-PL-SL-D-C-2103;
- an additional decorative 2.6m and 3.0m high fence between the palisade fence and East Wall Road.
- a CCTV system to monitor the substation entrance;
- anti-intruder alarms will be installed in all lockable buildings.

The lighting design for the substation compound prioritises minimising light pollution, particularly given its location within a residential area. All external lighting will be mounted and directed inwards, facing the buildings and internal operational areas, to avoid light spill beyond the site boundary and reduce visual impacts on nearby residential receptors.

The buildings will have external lighting installed for operational and safety purposes. However, this will be limited to façade-mounted, downcast fixtures to ensure lighting is contained within the compound perimeter and security lighting will also be provided, designed to operate on motion sensors or timers where appropriate to limit unnecessary continuous illumination.

Emergency escape lighting will be installed on the building in compliance with relevant health and safety standards to ensure safe evacuation during low-visibility conditions or power outages.

To support site security, Closed Circuit Television (CCTV) cameras will be installed strategically throughout the compound. These will monitor key access points, the perimeter and critical infrastructure to deter theft, vandalism and unauthorised access. All security measures will comply with GDPR and relevant data protection regulations.

Overall, the lighting and security strategy has been carefully designed to balance operational requirements with the need to minimise environmental and visual impacts on surrounding residential properties.

### 3.1.10 Boundary Treatment and Landscaping

A Landscape Planting Design has been developed for the Proposed Development. Ensuring electrical substation safety is crucial to prevent accidents, protect personnel and ensure uninterrupted power supply and maintaining the reliability of supply. There are various technical, engineering and safety requirements which have influenced the Landscape Design. These included the following:

- Maintaining the required safety clearances around electrical infrastructure;
- Maintaining the required safety clearances to the earth grid;
- Damage to electrical infrastructure;
- Introduction of shock and fire hazards;

- Interference of root structures with critical electrical infrastructure including future cable routes.
- Required maintenance associated with planting.

The proposed planting proposals have had regard to the above requirements.

Pre-planning application meetings were held with DCC to discuss the key information of the Proposed Development and discuss the approach to the Boundary Treatment and Landscape Design.

The landscape design comprises a mix of shrub and ornamental planting along with street tree planting. The landscape design is illustrated in **Drawing CP1273-RPS-03-PL-SL-D-A-2150** prepared by RPS enclosed as part of the SID application pack. These elements have been designed to soften and complement the Proposed Development, in particular the facades of the 220kV and 110kV substation buildings as these present to the streetscape of East Wall Road. The available space for the soft landscape scheme is limited. With this in mind, street tree species have been chosen with an upright or fastigate growth habit, these being Sorbus 'Sheerwater Seedling' (refer photo below). This tree species is suitable for this particular urban setting, next to a busy street and are positioned not to overhang the external boundary fence so that they cannot be used as a climbing aid to gain unauthorised entry to the compound. The choice of tree species and ornamental shrub mixes have been informed by the All-Ireland Pollinator Plan 2015-2020 endorsed by both ESB and EirGrid.

The site features an internal security palisade fence and an outer decorative railing which extends along the street parallel to the 2.6m high palisade fence. A pyracantha hedge is proposed to be located in front of the palisade fence but behind the decorative railing. This evergreen hedge will screen the palisade fence as growth advances to maturity (within 7-10 years). The pyracantha hedge also features thorns which will be a deterrent to unauthorized entry to the compound. Low growing ornamental planting extends along the streetscape, many of the species' choice have also been informed by the All-Ireland Pollinator Plan.

While the proposed interface with the public realm has been carefully considered to address feedback from DCC while meeting ESB's technical requirements, it is accepted that there is scope for further discussion and agreement with DCC regarding specific details of finishes, without affecting the principle, nature and extent of the proposed development. EirGrid would therefore be happy to accept a condition of permission (should ACP be disposed to grant permission) to further discuss and agree these details with DCC.

### 3.2 Construction Phase Activities

General construction phase activities associated with the substation are set out below

- Site entrance preparation
- Site establishment
- Temporary site drainage works
- Earthworks
- GIS building works
- Transformer compound construction
- Underground cable ducting and services installation
- Permanent drainage works
- Paving and surfacing
- Fencing and security infrastructure

- Landscaping and finishing works
- Testing and commissioning

### 3.2.1 Confirmatory Ground Investigations

Historical geotechnical reports which are publicly available on the sites adjacent to the Proposed Development site have been reviewed to interpolate the ground conditions for the Proposed Development site. These reports indicate the ground conditions consist of made ground extending in depths to some 4m to 5.0m below ground level. Based on this available data, a conservative approach has been adopted for the preliminary design of the Proposed Development which has assumed that the soil bearing capacity is poor and as such the proposed substation structures have been designed to be supported on piled foundations which will provide adequate support to the proposed structures.

Confirmatory ground investigations (GI) will be required confirm the existing ground conditions. Given the footprint of the subject site (1.124ha), the GI works will be very limited in nature. This will include the following:

- Hand dug inspection pits
- 6 no. Boreholes;
- 2 no. Trial pits;
- 4 no. Slit Trenches; and
- Materials sampling and testing.

The boreholes will consist of a mix of percussion drilling and rotary coring. Given that the subject site is located on an area which was subject to land reclamation in the 20th century and the historical industrial nature of the surrounding area, a conservation approach has been adopted which assumes contamination is likely present and as such laboratory testing of samples from boreholes and trial pits will be carried out. Should areas of unknown contamination be encountered during the construction phase the procedures outlined in **Section 3.2.10** will be followed.

### 3.2.2 Site Preparation

The site preparation works will include:

- Demarcation of construction areas
- Clearance of plant material, vegetation clearance, rubbish and other detritus
- Site levelling and grading
- Demolition and removal of obstructions including the demolition of the existing lean-to-shed structures
- Utility and service disconnections
- Site drainage works
- Soil stabilisation and ground improvement
- Preparation of equipment foundation areas
- Establishing temporary site facilities
- Environmental and safety control measures

### 3.2.3 Civil Works

The main civil works for construction the new GIS substation buildings will include:

- Foundation works;
- Structural steelwork erection;
- Cladding and building finishing works;
- Permanent water supply and drainage works;
- Miscellaneous civil works such as paving, landscaping, permanent fencing etc.

#### 3.2.3.1 Foundation Works

There are minimal fall across the site. 4.0 mOD (Mailin Head) at the northern to 3.8 mOD at the southern boundary. At the eastern boundary 3.9 mOD and 3.6mOD in the west.

A flood risk assessment was completed, and the building floor levels are set at 4.5m. Due to the relatively constrained nature of the site and the large building footprints the building ground floor levels will dictate the earthworks strategy for the site.

The existing car park surfacing, and subgrades will be removed. It is intended to make the maximum use of the material on site to reduce the import and export from site. Suitable material will be imported to achieve the levels required. A cut fill balance was completed and the import of approximately 6000m<sup>3</sup> will be required to achieve design levels and provide surfacing. This is illustrated Drawing **CP1273-RPS-03-PL-D-C-2129** prepared by RPS enclosed as part of the SID application pack.

The foundation installation will involve excavation, formwork, steel reinforcement and concrete placement foundations will be designed in accordance with the appropriate EirGrid technical specifications. Excavated materials will either be reused on-site or disposed of off-site in accordance with the Waste Management Act 1996, as amended and associated regulations.

Once the foundations are set, a below ground earth grid will be installed around the foundation in a grid arrangement. This earth mat ensures personnel and public safety during electrical faults on the transmission grid. The earth grid installation will comply with the necessary safety standards.

#### 3.2.3.2 Structural Steelworks

Following the completion of the foundation and earth mat installation, construction activities will proceed with the erection of the structural steel works. The GIS Building will be a steel portal, two-storey structure designed and constructed in line with EirGrid technical specifications.

The buildings are designed as steel framed structures, with a proprietary cladding, constructed on reinforced concrete floor slabs. It is envisaged that the floor slabs will be piled. The ground floor will house service rooms, a loading bay, generator room, control room, battery room and access to the cable basement area. The first floor will be constructed to accommodate the switchgear assembly into a storage area.

#### 3.2.3.3 Cladding and Building Finishes

Cladding and building finishing work and the installation of building services, e.g. drainage, internal circulation road, will be undertaken once the structural frame and steel support structures are completed.

#### 3.2.3.4 Miscellaneous Civil Works

Transformer bunds will be constructed using cast in-situ reinforced concrete, featuring a piled slab base. These bunds will provide secondary oil containment in case of a transformer oil leak. Once the

bunds are cured, transformers will be delivered to the site and offloaded near their respective bunds before being skidded into their final position.

### 3.2.4 Electrical Works

The GIS plant will be delivered to the substation and unloaded at the relevant GIS building loading bay. Using the gantry crane in the hosting area, the plant will be lifted to the first storey and positioned within the GIS equipment room, where it will be bolted in place. Following installation, wiring and cabling of the GIS plant and associated protection and control cabinets will be carried out in accordance with the manufacturer's specifications and standards.

The transformer units will be delivered to site and unloaded at the designated transformer bay using suitable heavy-lifting equipment. Once positioned on the plinths, the transformer will be carefully aligned and secured in place. Following mechanical installation, connection works will commence, including the installation of high-voltage and low voltage cabling, earthing and associated auxiliary systems. All wiring and terminations will be carried out in accordance with the manufacturer's guidelines and relevant industry standards, ensuring full compliance with safety and performance requirements.

### 3.2.5 Temporary Compound

For the construction phase of the project, the temporary construction compound will be located within the Proposed Development site. No additional areas outside of the site have been identified for use as a temporary compound.

### 3.2.6 Construction Traffic

It is anticipated that the worst case peak traffic movements associated with the Proposed Development would occur during the "civil works" phase and this is therefore the peak construction period. It is estimated that there would be a peak of 75 construction vehicle movements per day as identified in **Table 3.1**.

**Table 3.1: Peak Construction Traffic**

Period	Arrivals		Departures		Total	
	Car+LGV	HGV	Car+LGV	HGV	Arrivals	Departures
Daily	50	25	50	25	75	75

The peak number of cars/light good vehicles (LGV) entering/exiting the site per day is assumed to be 50 two-way trips. Peak HGV's entering/exiting the site per day is estimated to be 25 two-way trips. This is expected to reduce during the electrical installation and commissioning phase of the substation which would have fewer traffic movements as the number of construction workers required for these phases reduces.

### 3.2.7 Hours of Work

Having regard to the location of the site, adjacent to residential properties, it is envisaged that construction activities will be undertaken during normal working hours i.e., 07.00 to 19.00 hours Monday to Friday and 08.00 to 16.30 hours on Saturdays, with no working on Sundays and Public Holidays.

For some activities, there may be a need to schedule works outside the above e.g. to avoid additional traffic impacts. In these circumstances, works outside the above hours will only be undertaken with prior agreement with DCC's Traffic Department in accordance with relevant procedures.



This can be provided for in the Construction Environmental Management Plan (CEMP), which is a key contract document that the appointed contractor will be required to implement in full. The CEMP will inform the construction management on the site and proposed working arrangements will include a protocol for when the contractor would notify the local authorities regarding hours of construction. The CEMP will also provide for working hours relating to other activities later on in the construction time frame (e.g, relating to internal fit out, landscaping and the pre-commissioning phase) when there will be no or limited impact on the receiving environment baseline noise levels.

### 3.2.8 Construction Personnel

The total number of construction staff on-site will vary during the construction phase of the works but are expected to peak at approximately 16 persons.

### 3.2.9 Construction Timeline

The construction programme is dependent on a number of factors which may be subject to change, including the determination for development consent, availability and lead-in times associated with procurement and appointment of a contractor and project components.

The construction phase (site preparation and civil works) is expected to be 2 years in duration and this will be followed by a commissioning phase (electrical works and energisation) expected to be 1 year in duration.. The intensity of the works will vary over the course of the construction programme, with the main works occurring during the civil works phase. The intensity of the works during the commissioning and energisation phases are expected to be minimal.

An indicative programme for the project and the estimated duration of works is outlined below. Some of the activities noted in **Table 3.2** below will be carried out in parallel.

**Table 3.2: Indicative Construction Programme**

Construction Phase	Activity	Estimated Duration
Site Preparation	<ul style="list-style-type: none"><li>• Site preparation</li><li>• Preliminary site drainage works</li><li>• Earthworks</li><li>• Drainage</li><li>• Anything else to be considered</li></ul>	6 months
Substation Civil Works	<ul style="list-style-type: none"><li>• Civil Construction of substation buildings</li><li>• Miscellaneous Civil works such as paving, landscaping and permanent fencing</li><li>• Compound finishing surface</li></ul>	18 months
Substation Electrical Works	<ul style="list-style-type: none"><li>• Electrical installation</li><li>• Pre-commissioning</li></ul>	6 months
Substation Energisation	<ul style="list-style-type: none"><li>• Final commissioning and energisation</li></ul>	6 months

### 3.2.10 Grid Connection (not part of subject planning application)

As outlined in **Section 3.1.3** the existing Belcamp – Shellybanks 220kV circuit will tie in to the proposed Substation although this is not part of the subject application. The proposed crossing methodology is horizontal directional drilling (HDD). Horizontal Directional Drilling (HDD) is a trenchless method of installing underground ducting, cables and service conduits. The HDD technique is used widely in the installation of utilities and HDD's can be completed of varying lengths and diameters. HDD length, diameter, geometry and ground conditions have a bearing on the selection of the most appropriate plant.



It involves the use of a directional drilling rig, drill pipe and associated attachments, to accurately drill a small pilot hole along a predetermined path from one side of the obstacle / crossing to the other. Once the pilot hole has been completed the hole is expanded by the use of incrementally larger reaming bits until the required size bore has been completed.

### 3.2.10.1 HDD Site Set Up

The temporary site area required for the completion of a HDD crossing will depend on a number of factors including the crossing length, diameter and expected ground conditions, these factors will determine the size of equipment required and this in turn will determine the space required. The space required for a typical midi rig will typically be 200m<sup>2</sup> – 400m<sup>2</sup> in order to fit the drill rig, fluids recycling equipment, launch pit and various attendant plant. On the reception side the site will likely be smaller.

A midi rig (refer to **Figure 3.2**) will be set up on the proposed substation development site as outlined in **Figure 3.3**. The workspace shown is approximately 900m<sup>2</sup> (30mx30m). The reception side is on the northern side of the M50 in the Eastpoint Business Park car park. The reception side workspace shown is approximately 460m<sup>2</sup> (20mx23m). The reception side is where the pipe will be laid out and welded/jointed together to make one long pipe that will be pulled back through the HDD bore. The exact location of the pipe will be agreed with the Business Park to minimise disruption to the businesses.



**Figure 3.2: Horizontal Directional Drilling Midi Rig**



**Figure 3.3: Trenchless Crossing**

## 3.2.10.2 Work Description

Once the equipment is established on site a pilot hole will be completed, following the bore profile, this pilot hole is approx. 150mm diameter. Hole reaming will follow using appropriate reaming sizes based on soil conditions. Throughout the drilling process an inert bentonite mix (drilling fluid) is pumped through the drill pipe. This bentonite provides stability to the drill hole and assists in the removal of cuttings which are picked up in the drilling fluid and returned along the length of the bore to the launch pit.

A closed loop drill fluid recycling system involving the use of screens for large / small solids separation and removal along with a centrifuge for the removal of the fine fractions of slit is used to separate the cuttings from the drilling fluid. This processed drilling fluid is then recirculated through the drill pipe whilst the cuttings/spoil separated from the drill fluid (which are now semi-dry) are held in a bunded area and regularly removed from site for appropriate disposal.

Regular monitoring of drilling fluid volumes, pressure, pH, weight and viscosity is undertaken to ensure that any loss of drill fluids can be identified and measures put in place to prevent further loss, this might include changing the viscosity of the fluid to provide higher gel strength or the introduction of other additives such as shredded paper or shredded coconut husks to thicken the fluid and seal any gaps.

When the bore hole has been reamed out to the correct diameter a further series of passes are made back through the bore to ensure that the hole is clear of any large objects and that the drilling fluid in the hole is well mixed. This prepares the hole for the pipe to be pulled in. Once the driller is satisfied that the hole is clear and ready for the pipe, the pulling head and pipe string is connected to the drill string via a swivel. The swivel prevents the pipe from rotation during the pullback.

## 3.2.11 Traffic Management

Prior to commencement of the development, a construction Traffic Management Plan (CTMP) will be prepared by the appointed contractor in consultation with and with the agreement of Dublin City Council, Transport Infrastructure Ireland (TII) and An Garda Síochána. The CTMP will outline measures to manage construction traffic, minimise disruption to local residents and ensure the safety of all road users during the construction phase.

The CTMP will include details on construction traffic routes, delivery schedules, access and egress points, and measures to manage peak hour traffic and avoid school or commuter congestion. A designated site access point will be used for all deliveries and construction-related vehicles and appropriate signage will be installed to guide traffic safely to and from the site.

Vehicle movements will be carefully considered to avoid queuing on public roads, and where possible deliveries will be scheduled outside of peak traffic periods. The plan will also include provisions for

the safe movement of pedestrians and cyclists around the site perimeter during construction, including temporary footpaths or crossings if necessary.

The CTMP will also identify parking arrangements for construction workers, which may include off-site parking and shuttle arrangement to prevent overspill into surrounding residential streets. Regular communication with local residents and businesses will be maintained to keep them informed of construction activities and traffic impacts.

### 3.2.11.1 220kV Transformer Delivery

The delivery of the 220 kV transformers represents a critical milestone during the electrical installation phase of the project. Each of the 3 transformers is a substantial piece of electrical infrastructure, typically requiring specialist handling and transport due to their size and weight (exact dimensions and weights to be confirmed by the supplier). These units will be delivered directly from Dublin Port to the substation site. At Dublin Port, the transformers will be offloaded by crane onto a specially designed transport vehicle capable of accommodating abnormal loads. From there, the convoy will travel via a pre-agreed route to the substation, where the transformers will be installed using a skid system into their respective bunds upon arrival. It is envisaged that the transformers will be transported to the site via Alexandra Road and East Wall Road using a Self-Propelled Modular Transporter (SPMT) which will transport the transformers through the site entrance and across the site. All lifting and positioning activities will be carried out in accordance with best practise guidelines and safety procedures. Vehicle tracking software has demonstrated that a SPMT can navigate the proposed entrance and deliver/remove the transformers to their respective locations within the site.

As these deliveries constitute abnormal loads, they will be subject to the requirements set out in the Road Traffic (Construction and Use of Vehicles) regulations 2003 (S. I No. 5 of 2003), as well as the maximum height restrictions outlined in S. I. No. 366 of 2008. During the civil construction phase, no abnormal load movements are anticipated, however, such movements will be necessary during the electrical installation phase.

Prior to any abnormal load movement, the appointed contractor will liaise with An Garda Síochána and Dublin City Council to arrange the required permits, discuss the need for a Garda escort and confirm an appropriate delivery window. Deliveries will be scheduled during off-peak hours to minimise traffic disruptions, avoiding sensitive times such as school drop-offs, church services and peak commuting periods.

Each abnormal load convoy will be accompanied by escort vehicles to ensure traffic is managed safely along the route and to respond to any unforeseen circumstances that may arise. Additionally, local residents located along key sections of the delivery route will be notified in advance of scheduled deliveries to reduce potential inconvenience and ensure clear communication throughout the process.

### 3.2.12 Waste Management

All waste products (general waste, plastic, timber, etc.) arising during the construction phase will be managed and disposed of in accordance with the provisions of the Waste Management Act 1996 and associated amendments and regulations, and a Waste Management Plan (WMP) will be prepared by the appointed Contractor prior to the commencement of construction. The Plan will be prepared in accordance with Best Practice Guidelines for the Preparation of Resources & Waste Management Plans for Construction and Demolition Projects (EPA, 2021). The Plan will, as a minimum address the following aspects:

- Identify how the waste will be dealt with (i.e. disposal, re-use on/off site etc);
- On-site segregation of non-hazardous waste materials into appropriate categories, where possible, including any excavated soils, concrete, bricks, metals, timber etc.

- On-site segregation of all hazardous waste materials into appropriate categories including contaminated soils, waste oil and fuels and paints, glues, adhesives and other known hazardous substances etc.
- Segregation of waste at source where practical.
- All waste materials will be stored in skips or other suitable receptacles in designated areas of the site. The waste storage area(s) will be assigned and all construction staff provided with training regarding the waste management procedures on commencement of the project.
- Implement a 'just in time' materials delivery systems to avoid materials being stockpiled, which increases the risk of the damage and disposal as waste
- Measures to ensure appropriate staff training and levels of awareness in relation to waste management.
- To ensure appropriate disposal, Waste Acceptance Criteria (WAC) testing will be conducted on any waste suspected of containing hazardous substances.
- Waste streams will be collected by an appropriately licensed and permitted private waste contractor, appointed by the contractor for recycling, recovery or disposal at suitably licensed facilities.

### 3.3 Operation and Maintenance

Following the construction phase, the operation and maintenance of the Proposed Development will be managed by ESBN. Once commissioned, the substation will operate 24-hours per day, seven days a week, 365 days a year.

During operation, the substation will operate unmanned, however there will be personnel on-site periodically to carry out routine engineering inspections and maintenance.

### 3.4 Decommissioning Phase

Subject to the granting of statutory approval, the EirGrid/ESBN substation and grid connections will form part of the national electrical grid infrastructure. The design life of the substation is approximately 40 years. It is expected that the substation site will remain a permanent part of the national electricity transmission network and will be refurbished and / or redeveloped as required rather than be decommissioned.

### 3.5 Community Benefit Fund

The Proposed Development has the potential to provide significant additional investment in community initiatives which will benefit local residents and businesses through an annual community benefit fund. The community benefit fund will become live once the Project has received its planning approval and the fund will be released on a phased basis as the project progresses.



## 4 Methodology

### 4.1 Appropriate Assessment Guidance

Both EU and national guidance exists in relation to member states fulfilling their requirements under the EU Habitats Directive, with particular reference to Article 6(3) and 6(4) of that Directive. The methodology followed in relation to this assessment has had regard to the following guidance:

- Balmer, D.E., Gillings, S., Caffrey, B.J., Swann, R.L., Downie, I.S. & Fuller, R.J. (2013) Bird Atlas 2007– 11: The Breeding and Wintering Birds of Britain and Ireland. BTO Books, Thetford;
- DoEHLG (2009, rev. 2010) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government;
- EC (2000) Communication from the Commission on the Precautionary Principle. Office for Official Publications of the European Communities, Luxembourg;
- EC (2001) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC. Office for Official Publications of the European Communities, Brussels;
- EC (2013) Interpretation Manual of European Union Habitats. Version EUR 28. European Communities, Luxembourg;
- EC (2018) Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. Office for Official Publications of the European Communities, Luxembourg;
- EC (2021a) (Amended) Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC. Office for Official Publications of the European Communities, Luxembourg;
- EC (2021b) (Amended) 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. Office for Official Publications of the European Communities, Luxembourg;
- NPWS (2019a) The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview. Unpublished Report, National Parks and Wildlife Services. Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland;
- NPWS (2019b) The Status of EU Protected Habitats and Species in Ireland. Habitat Assessments Volume 2. Version 1.0. Unpublished Report, National Parks and Wildlife Services. Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland;
- NPWS (2019c) The Status of EU Protected Habitats and Species in Ireland. Species Assessments Volume 3, Version 1.0. Unpublished Report, National Parks and Wildlife Services. Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland; and
- Office of the Planning Regulator (OPR) (2021) Appropriate Assessment Screening for Development Management. Office of the Planning Regulator.

There have been significant changes to AA practice since both the EC (2001, 2021b) and the DoEHLG (2009, rev. 2010) guidance, arising from practice and rulings in UK, European, and Irish courts. These changes have been addressed in the preparation of this report.

### 4.2 Desk Study

A desk study was completed to assess the potential for all QIs and SCIs of European sites to occur, given their ecological requirements identified by Balmer *et al.* (2013) for SCIs, and the National Parks and Wildlife Service (NPWS) for QIs (NPWS, 2019a, b, c).

SCI birds and mobile QI species can travel many kilometres from their core areas, and desktop surveys assessed the potential presence of such species beyond the European sites for which they are QIs/SCIs. The desktop study had particular regard for the following sources:

- Environmental Protection Agency (EPA) online interactive mapping tools<sup>4</sup> for water quality data including surface and ground water quality status, and river catchment boundaries;
- Information on ranges of mobile QI populations in Volume 1 of NPWS' Status of EU Protected Habitats and Species in Ireland (NPWS, 2019a), and associated digital shapefiles obtained from the NPWS Research Branch;
- Information on ranges of mobile SCIs bird populations from Bird Atlas 2007–11 (Balmer *et al.*, 2013), excluding birds of prey whose ranges were determined with reference to Hardey *et al.* (2013);
- Mapping of European site boundaries and Conservation Objectives for relevant sites in County Dublin and beyond, as relevant, available online from the NPWS<sup>5</sup>;
- Information on wetland sites using BirdWatch Ireland's mapping website for the Irish Wetlands Bird Survey (I-WeBS)<sup>6</sup>;
- Any local surveys of flora, fauna, and habitats available using the Heritage Councils mapping website<sup>7</sup>;
- Distribution records for QI and SCI species of European sites held online by the National Biodiversity Data Centre (NBDC)<sup>8</sup>;
- Information on groundwater aquifers, recharge, and vulnerability available from the online database of Geological Survey Ireland (GSI)<sup>9</sup>;
- Boundaries for catchments with confirmed or potential freshwater pearl mussel (FWPM) *Margaritifera* populations in GIS format available online from the NPWS<sup>10</sup>; and
- Dublin City Biodiversity Action Plan 2021-2025 (DCC, 2021).

---

<sup>4</sup> Available online at <https://gis.epa.ie/EPAMaps>. Accessed July 2025.

<sup>5</sup> Available online at <https://www.npws.ie/protected-sites>. Accessed July 2025.

<sup>6</sup> Available online at <https://bwi.maps.arcgis.com/apps/View/index.html?appid=1043ba01fcb74c78bc75e306eda48d3a>. Accessed July 2025.

<sup>7</sup> Available online at <https://experience.arcgis.com/experience/ca514d04c83c453e9469d0263d30a72c/page/Viewer>. Accessed July 2025.

<sup>8</sup> Assessing records up to 10 years old (from date of search), for an area of 5 km from the Proposed Development. Available online at <https://maps.biodiversityireland.ie/Map>. Accessed July 2025.

<sup>9</sup> Available online at <https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228>. Accessed July 2025.

<sup>10</sup> Available online at <https://www.npws.ie/maps-and-data/habitat-and-species-data>. Accessed July 2025.

### 4.3 Field Study

In addition to the desktop studies, field surveys were carried out by suitably qualified ecologists. Walkover surveys of the Proposed Development site were carried out in 25 September and 15 October 2024 and a walkover survey of the Dublin Port lands immediately south-east of the Proposed Development site was carried out on 7 July 2025. The surveys assessed the potential for all QIs/SCIs of European sites and scheduled<sup>11</sup> invasive alien plant species (IAPS) to occur. Dedicated breeding bird surveys on 17 April, 8 May, and 5 June, dedicated IAPS surveys on 25 September 2024 and 5 June 2025, and a bat roost assessment survey on 12 May 2024 and emergence survey on 17 June 2025 were also carried out.

The walkover surveys included checks of suitable habitats for all highly mobile QI/SCI species potentially occurring. Many wintering SCI bird species travel outside of their designated habitats to forage such as brent geese in Dublin Bay travelling inland to forage on areas of amenity grassland. Waterfowl can have foraging ranges of up to 20 km from their night roosts (NatureScot, 2016). Given this ex-situ potential, surveys assessed potential presence of foraging sites of SCI species. The field surveys were carried out with cognisance of relevant guidance on ecological survey techniques (e.g. NRA, 2009). The potential of any buildings, vegetation, or features within the Zone of Influence (Zoi) of the Proposed Development to offer nesting, foraging, or roosting habitat to SCI and QI populations, was assessed.

### 4.4 Limitations

The receiving environment (i.e. baseline condition) may naturally vary through seasons and between years (NRA, 2008). This limitation is acknowledged and incorporated into the assessment, which adopts the precautionary principle.

Sources of desk study information are neither exhaustive nor necessarily readily available, and a reasoned effort was made to obtain ecological data in the public domain to inform the description of the receiving environment and its assessment. Additional information, not in the public domain, is likely to exist. This limitation is acknowledged and incorporated into the assessment, which adopts the precautionary principle.

### 4.5 Identifying Relevant European Sites

The identification of relevant European sites to be included in this report was based on the identification of the Zoi of the Proposed Development, a source-pathway-receptor model of effects, and the likely significance of any identified effects.

In the screening assessment of the Proposed Development, the Proposed Development and the Grid Connection, which is not part of the subject planning application, were assessed together. For the purposes of the screening assessment, the Grid Connection is considered within the assessment of effects of the Proposed Development alone (see **Section 6.3**) and is not considered as a separate project within the assessment of in-combination effects (see **Section 6.4**)

---

<sup>11</sup> The control of invasive alien species in Ireland is regulated through the European Communities (EC) (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011), (as amended), and also through the European Union (EU) (Invasive Alien Species) Regulations 2024 (SI 374 of 2024). Both of these pieces of legislation state that it is an offence to introduce or spread certain invasive alien species or their propagules. These species are listed under the Third Schedule of SI 477 of 2011, as amended, and under the First Schedule of SI 374 of 2024.



### 4.5.1 Source-Pathway-Receptor Model

The likely effects of the Proposed Development on any European site have been assessed using a source-pathway-receptor model, where:

- A 'source' is defined as the individual element of the Proposed Development that has the potential to impact on a European site, its qualifying features and its conservation objectives.
- A 'pathway' is defined as the means or route by which a source can affect the ecological receptor; and
- A 'receptor' is defined as the SCI of SPAs or QI of SACs for which conservation objectives have been set for the European sites being screened.

A source-pathway-receptor model is a standard tool used in environmental assessment. In order for an effect to be likely, all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism results in no likelihood for the effect to occur. The source-pathway-receptor model was used to identify European sites, and their QIs/SCIs, with potential links to the Proposed Development. These are termed as 'relevant' European sites/QIs/SCIs throughout this report.

### 4.5.2 Zone of Influence

The proximity of the Proposed Development to European sites, and more importantly QIs/SCIs of the European sites, is of importance when identifying potentially likely significant effects. A conservative approach has been used, which minimises the risk of overlooking distant or obscure effect pathways, while also avoiding reliance on buffer zones (e.g., 15 km), within which all European sites should be considered. This approach assesses the complete list of all QIs/SCIs of European sites in Ireland (i.e. potential receptors), instead of listing European sites within buffer zones. This follows Irish departmental guidance on AA:

*"For projects, the distance could be much less than 15 km, and in some cases less than 100m, but this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects"* (DoEHLG, 2010; p.32, para 1).

Following the guidance set out by the NRA (2009), the Proposed Development has been evaluated based on an identified Zol with regard to the potential impact pathways to ecological features (e.g. mobile and static). The Zol of the Proposed Development on mobile species (e.g. birds, mammals, and fish) and static species and habitats (e.g. saltmarshes, woodlands, and flora) is considered differently. Mobile species have 'ranges' outside of the European sites in which they are QIs/SCIs. The ranges of mobile QI/SCI species vary considerably, from several metres (e.g. in the case of whorl snails *Vertigo* spp.) to thousands of kilometres (in the case of migratory wetland birds). Whilst static species and habitats are generally considered to have Zols within close proximity of the Proposed Development, they can be significantly affected at considerable distances from an effect source; for example, where an aquatic QI habitat or plant is located many kilometres downstream from a pollution source.

Hydrological linkages between the Proposed Development and European sites (and their QIs/SCIs) can occur over significant distances; however, any effect will be site specific depending on the receiving water environment and nature of the potential impact. As a precautionary measure, a reasonable worst-case Zol for water pollution from the Proposed Development is considered to be the surface water catchment. In this report, the surface water catchment is defined at the scale of the relevant sub catchment as adopted in the Third Cycle River Basin Management Plan (RBMP) 2022-2027 (DoHLGH, 2024a). The Zol then extends into the first coastal water body.

Hydrogeological linkages between the Proposed Development and European sites (and their QIs/SCIs) are highly variable based on the characteristics of the groundwater body, methodologies used, and the presence of groundwater dependant habitats and species.

For groundwater flow and yield, as a precautionary measure, a reasonable worst-case spatial Zol is considered to be 500 m from the point of excavation, which is a precautionary doubling of the 250 m stated as the potential Zol from intrusive excavations to sensitive upland peatland sites (SEPA, 2014).

A reasonable worst-case Zol for groundwater pollution from the Proposed Development is considered to capture the entirety of each groundwater body which the Proposed Development overlies.

The initial zone of influence is therefore combined to capture the sub catchment unit as a whole, the relevant groundwater and coastal waterbodies, and, to account for other pathways of impacts including the potential *ex situ* presence of mobile species, 15 km around the Proposed Development (20 km in the case of SPAs).

### 4.5.3 Scoping of European Sites

Following the identification of European sites within the initial Zol, a secondary scoping was carried out before sites were taken forward to the assessment stage. Disturbance buffers and hydrological and hydrogeological linkages extending from the Proposed Development were assessed to determine if pollution sources arising from the Proposed Development, used during the construction and operation of the Proposed Development, could come into contact with QI/SCI habitats and species.

Where it was deemed that there is potential for one QI or SCI habitat/species from a European site within the Zol to come into contact with a pollution source, the entire European site is brought into the assessment stage.

### 4.5.4 Identification of Likely Significant Effects

The Commission's Notice (EC, 2018) advises that the appropriate assessment procedure under Article 6(3) is triggered not by the certainty but by the likelihood of significant effects, arising from plans or projects regardless of their location inside or outside a protected site. Such likelihood exists if significant effects on the site cannot be excluded. The significance of effects should be determined in relation to the specific features and environmental conditions of the site concerned by the plan or project, taking particular account of the site's conservation objectives and ecological characteristics.

The threshold for an LSE is treated in the screening exercise as being above a *de minimis* level<sup>12</sup>.

In this report, therefore, 'relevant' European sites are those within the potential Zol of activities associated with the construction and operation of the Proposed Development, where LSE pathways to European sites were identified through the source-pathway-receptor model.

A significant effect is triggered when:

- There is a probability or a risk of a plan or project having a significant effect on a European site;

---

<sup>12</sup> Sweetman v. An Bord Pleanála (Court of Justice of the EU, case C-285/11). A *de minimis* effect is a level of risk that is too small to be concerned with when considering ecological requirements of an Annex I habitat or a population of Annex II species present on a European site necessary to ensure their favourable conservation condition. If low level effects on habitats or individuals of species are judged to be in this order of magnitude and that judgment has been made in the absence of reasonable scientific doubt, then those effects are not considered to be likely significant effects.

- The project is likely to undermine the site's conservation objectives;
- A significant effect cannot be excluded on the basis of objective information; and
- Measures to avoid or reduce effects [mitigation measures] would be required.

The Screening for Appropriate Assessment (Stage 1) will incorporate the following steps:

- Describing the project or plan;
- Identifying the European sites potentially affected by the project or plan;
- Determining whether a project or plan is directly connected with or necessary to the conservation management of any European sites;
- Identifying and describing any potential effects of the project or plan on European sites, alone, in-combination and cumulatively with other plans/projects; and
- Determine, on the basis of a preliminary assessment and objective criteria, whether the project or plan, alone and in-combination with other plans and projects, could have significant effects on a European site in view of the site's conservation objectives.

## 5 Receiving Environment

This section details the desktop and field survey results, in order to describe the relevant receiving environment of the Proposed Development. The relevant receiving environment relates to anything that may be directly or indirectly related to the QIs/SCIs of relevant European sites.

### 5.1 Habitats

The Proposed Development is predominately situated within lands owned by ESB and is currently in use as a temporary surface car park for ESB Networks staff with an adjacent vacant brownfield site. In addition, as part of the Grid Connection (not part of the subject planning application) there will be proposed works at a location within the East Point Business Park. The predominant land use within the ZoI of the Proposed Development is made up of industrial zones, brownfield, roads, residential, pedestrian footpaths, and planted/vegetated areas.

The walkover surveys conducted in September 2024, and April, May, and June 2025 concluded that there was no Annex I habitats located within the footprint of the Proposed Development site.

### 5.2 Hydrological Connectivity

There is no direct connectivity between the Proposed Development and any surface waterbodies (i.e. river, lake, estuary, coastal, etc.). However, surface water drainage gullies are located both within the hardstanding area of the ESB East Wall car park, along the East Wall Road R131, and within a car park at the Eastpoint Business Park. The collected surface water from the gullies within the existing ESB car park are diverted to a Class 1 oil interceptor prior to discharge to the public surface water sewer located on East Wall Road R131 (300 mm diameter surface water sewer). The gullies along the East Wall Road R131 also connect into this public surface water sewer. The gullies within the Eastpoint Business Park car park are presumed to enter a surface water sewer.

The surface water sewers are presumed to outfall into the Tolka Estuary, north-west of the proposed works area. In the unlikely circumstance that the surface water sewers outfall into the Liffey Estuary, any pollution event would flow down the Liffey Estuary Lower transitional waterbody and into the Dublin Bay coastal waterbody. This would result in greater levels of dilution before any pollutants reach any European sites. Therefore, any impacts of water pollution are likely to be less pronounced in this circumstance. It is considered to be a precautionary approach to presume that the surface water sewers outfall into the Tolka Estuary, and this presumption is the 'worst-case' scenario that is discussed within the assessment.

The Proposed Development does not intersect any watercourses. It is located approximately 120 m south-east of the Tolka Estuary (or 70 m, from the Grid Connection<sup>13</sup> which is not part of the subject planning application). The South Dublin Bay and River Tolka Estuary SPA is approximately 250 m from the Proposed Development (or 170 m, from the Grid Connection<sup>13</sup> which is not part of the subject planning application). The area between this SPA and the Proposed Development is predominately industrial in nature and outside of any populated residential areas. Given the scale and nature of Proposed Development, the setback distance between the Proposed Development and the closest surface waterbody, there is limited hydrological connectivity to any European site(s).

### 5.3 Hydrogeological Connectivity

The Proposed Development has connectivity to only one groundwater body (GWB), as it is located entirely within the Dublin (IE\_EA-G\_008) GWB. This GWB has a status of 'Good' for the period of 2016-2021. Groundwater discharges to the numerous streams and rivers crossing the aquifer, and

---

<sup>13</sup> This includes the area of HDD and the reception site north of the M50

to the springs and seeps towards the coast<sup>14</sup>. This GWB is located in the Greater Dublin City area and extends southwest towards Kildare.

Groundwater vulnerability describes the natural ground characteristics that determine the ease with which groundwater may be contaminated by human activities. Bedrock aquifers are protected by the subsoil and therefore the type and thickness of the subsoil will determine the aquifers vulnerability. The groundwater vulnerability within the Proposed Development is low.

### 5.4 Potential Ex-Situ Foraging Sites

According to publicly accessible data and information, including sources such as Benson (2009), Scott Cawley Ltd. (2017), and Enviro Guide (2019), which draw upon records compiled by the Irish Brent Goose Research Group, BirdWatch Ireland, and survey data collected for research and planning purposes, it is confirmed that a network of ex-situ inland feeding sites exists for SCI bird species of SPAs. The data primarily centres around brent geese, but it also encompasses information about other SCI bird species, including black-headed gull, lapwing, golden plover, oystercatcher, and curlew, though this list is not exhaustive. This network of inland feeding sites situated outside these SPAs boundaries serves as essential foraging habitat, supporting the winter conservation interests of these bird species. These winter bird ex-situ inland feeding sites are categorised into major, high, and moderate importance, Benson (2009).

The closest site of known ex-situ foraging importance is at the Alfie Bryne Pitches, approximately 280 m north of the Proposed Development (or approximately 210 m from the Grid Connection<sup>13</sup> which is not part of the subject planning application). However, there is an existing high level of road and rail traffic and other human activity at shorter distances from these ex-situ foraging sites, and there is visual and noise screening from the Proposed Development provided by intervening built fabric and vegetation.

### 5.5 European Sites

In order to determine the potential for likely significant effect (LSE), it is necessary to identify the Zone of Influence (Zol) of the Proposed Development and the European sites therein. European sites identified within the initial Zol of the Proposed Development are detailed in **Table 5.1**. The Zol of the Proposed Development is the geographical area over which the Proposed Development could affect the receiving environment in a way that could have LSEs directly or indirectly on European site(s). The Zol is established using the Source-Pathway-Receptor (S-P-R) model which is a standard tool used in environmental assessment. In order for an effect to be likely, all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism results in no likelihood for the effect to occur. Any SPA within approx. 20 km (NatureScot, 2016) of Dublin Bay has the potential for LSEs to occur to *ex-situ* foraging SCI species within Dublin Bay.

**Table 5.1: European Sites within the initial Zol**

European Site (Code)	Distance from Proposed Development and Grid Connection (not part of the subject planning application)
South Dublin Bay and River Tolka Estuary SPA (004024) (NPWS, 2015a)	Located c. 170 m north
South Dublin Bay SAC (000210) (NPWS, 2013a)	Located c. 2.4 km south-east

<sup>14</sup> Information available at [www.gsi.ie](http://www.gsi.ie) Accessed in July 2025

## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

European Site (Code)	Distance from Proposed Development and Grid Connection (not part of the subject planning application)
North Bull Island SPA (004006) (NPWS, 2015b)	Located c. 3.1 km east
North Dublin Bay SAC (000206) (NPWS, 2013b)	Located c. 3.2 km east
Northwest Irish Sea SPA (004236) (NPWS, 2023)	Located c. 5.4 km east
Rockabill to Dalkey Island SAC (003000) (NPWS, 2013c)	Located c. 9.3 km east
Howth Head SAC (00202) (NPWS, 2016)	Located c. 8.9 km east
Baldoye Bay SPA (004016) (NPWS, 2013c)	Located c. 8.2 km north-east
Baldoye Bay SAC (000199) (NPWS, 2012)	Located c. 8.0 km north-east
Dalkey Islands SPA (004172) (NPWS, 2022a)	Located c. 12.3 km south-east
Howth Head Coast SPA (004113) (NPWS, 2022b)	Located c. 11.6 km east
Ireland's Eye SAC (002193) (NPWS, 2017a)	Located c. 11.9 km north-east
Ireland's Eye SPA (004117) (NPWS, 2022c)	Located c. 11.7 km north-east
Malahide Estuary SAC (000205) (NPWS, 2013e)	Located c. 11.0 km north
Wicklow Mountains SAC (002122) (NPWS, 2017b)	Located c. 13.5 km south
Wicklow Mountains SPA (004040) (NPWS, 2022d)	Located c. 13.8 km south
Malahide Estuary SPA (004025) (NPWS, 2013f)	Located c. 11.3 km north
Glenasmole Valley SAC (001209) (NPWS, 2021)	Located c. 14.2 km south-west
Rogerstown Estuary SPA (004015) (NPWS, 2013g)	Located c. 16.0 km north
Lambay Island SPA (004069) (NPWS, 2022e)	Located c. 19.3 km north-east



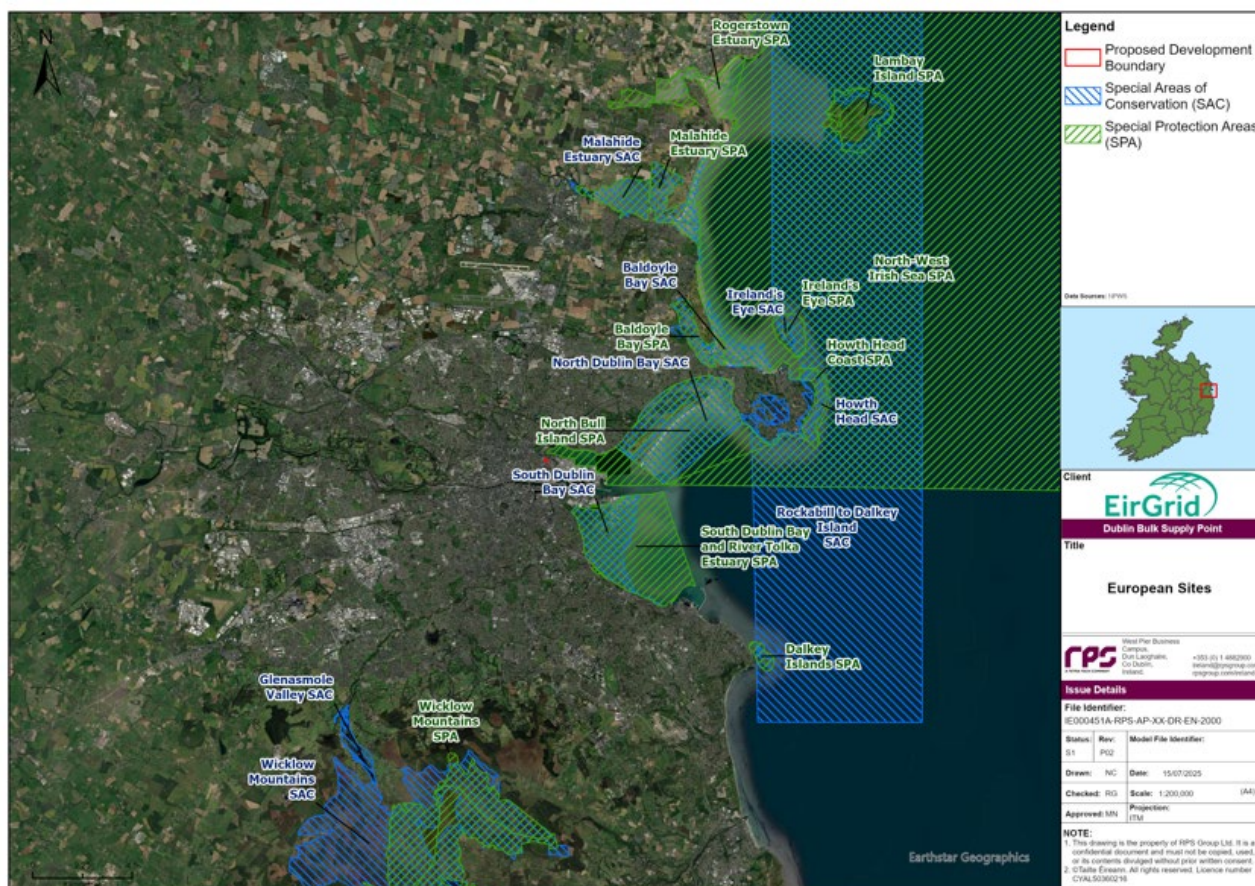


Figure 5.1: European Sites



## 5.6 Features of European Sites

The walkover surveys included checks of suitable habitats for all highly mobile QI/SCI species potentially occurring.

### 5.6.1 Qualifying Interests

The desk study returned no evidence of QI species within the footprint of the Proposed Development. This was confirmed during the field study as there were no habitats offering significant breeding or foraging sites for any QI species noted.

### 5.6.2 Special Conservation Interests

No evidence of SCI species was recorded in the field study. There are no habitats offering significant breeding or foraging sites for any SCI species within the footprint of the Proposed Development. The desk study returned records for 46 SCI bird species from the preceding ten years within 5 km of the Proposed Development (see **Table 5.2**). Herring gull (*Larus argentatus*) were the only SCI species recorded during the field study. There are no habitats offering significant breeding or foraging sites for this, or any other SCI species, within the footprint of the Proposed Development.

**Table 5.2: Special Conservation Interest birds returned from the NBDC search**

Common Name Scientific Name	Record Count	Date of Last Record	Habitat Preferences <sup>15</sup>
Bar-tailed godwit ( <i>Limosa lapponica</i> )	31	23/03/2023	Winter visitor. Wintering distribution entirely coastal. They are largely confined to estuaries, with largest numbers recorded on sandy estuaries. Small numbers recorded using non-estuarine coastline.
Black-headed gull ( <i>Chroicocephalus ridibundus</i> )	159	08/12/2024	Mainly a coastal breeding bird, but in Ireland the species also breeds inland on the freshwater lakes.
Black-tailed godwit ( <i>Limosa limosa</i> )	51	18/09/2024	Winters in a variety of habitats, both inland (particularly grassland and river deltas) and coastal (particularly estuaries), though seldom seen along non-estuarine coast.
Brent goose ( <i>Branta bernicla</i> )	118	13/12/2024	Mostly found on coastal estuaries, often migrating to grasslands from mid-winter.
Common gull ( <i>Larus canus</i> )	52	03/12/2022	Local breeding species on islands in larger lakes in western Ireland. Breeds on the coast and inland in the west of Ireland, from Dingle to Malin Head, with most colonies in Co. Galway, Co. Mayo and Co. Donegal. Inland it can breed on islands in lakes where it has declined. These declines, have been attributed to predation by American Mink.

<sup>15</sup> Available at <https://birdwatchireland.ie/> Accessed July 2025

## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

Common Name Scientific Name	Record Count	Date of Last Record	Habitat Preferences <sup>15</sup>
Common tern ( <i>Sterna hirundo</i> )	31	30/07/2020	Summer visitor, nest colonially on the ground from August to October. Breeds on the coast, with larger colonies in Co. Dublin, Co. Wexford and Co. Galway.
Coot ( <i>Fulica atra</i> )	52	03/06/2024	Requires large bodies of water to nest, usually in waters that are rich in nutrients and have abundant bottom vegetation.
Cormorant ( <i>Phalacrocorax carbo</i> )	105	15/11/2023	Breeds in colonies mainly around the coast of Ireland, with some birds breeding inland. Most of the larger coastal colonies in Ireland are on the south and north west coasts with big colonies also in Co. Dublin.
Curlew ( <i>Numenius arquata</i> )	76	06/02/2023	Winter visitor to wetlands throughout Ireland, as well as breeding in small numbers in floodplains and boglands. Numbers and range have declined substantially in recent decades, likely to increased afforestation and agricultural improvement. Nests on the ground in rough pastures, meadows and heather.
Dunlin ( <i>Calidris alpina</i> )	34	25/04/2021	Common along all coastal areas - especially on tidal mudflats and estuaries. Very few inland.
Golden plover ( <i>Pluvialis apricaria</i> )	9	13/01/2018	Breed in heather moors, blanket bogs & acidic grasslands. Widespread wintering distribution in various coastal and inland habitats.
Goldeneye ( <i>Bucephala clangula</i> )	3	15/01/2018	Winter visitor, winter on coastal estuaries and inland lakes.
Great black-backed gull ( <i>Larus marinus</i> )	50	28/04/2023	Resident along all Irish coasts. Less frequently seen inland, usually only following storms. Breeds on the ground in colonies all around the coast of Ireland.
Great crested grebe ( <i>Podiceps cristatus</i> )	20	30/07/2020	Resident along all Irish coasts and on larger freshwater bodies. Winter distribution is widespread with greatest concentration in the north midlands and northeast and birds from the continent join the resident population.
Great northern diver ( <i>Gavia immer</i> )	4	03/04/2021	Great Northern Divers occur along the Irish coastline between September and April and are usually observed as single birds or small groups. They are the most numerous of the divers occurring in Ireland and are particularly abundant off the south, west and northwest coasts over the winter.
Greenshank ( <i>Tringa nebularia</i> )	33	23/01/2021	Mostly coastal distribution - while the majority are found on estuaries, up to 30% are estimated to winter along non-estuarine coast.
Grey heron ( <i>Ardea cinerea</i> )	270	17/12/2024	Common resident at wetlands, estuaries and along rivers. Grey Herons breed in large trees. Found in the

## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

Common Name Scientific Name	Record Count	Date of Last Record	Habitat Preferences <sup>15</sup>
			same wetland habitats during the winter as in the breeding season.
Grey plover ( <i>Pluvialis squatarola</i> )	16	07/03/2018	Distribution is widespread, but exclusively coastal. They occur mostly along eastern and southern coasts, most often on large muddy estuaries. They regularly roost among dense flocks during high tide, while their distribution is more scattered while feeding.
Herring gull ( <i>Larus argentatus</i> )	253	08/12/2024	Breeds in colonies around the coast of Ireland.
Kingfisher ( <i>Alcedo atthis</i> )	41	27/07/2024	Resident on Irish streams, rivers, and canals. Prefers still or gently flowing water, with egg laying occurring from March to July. Nest sites can be over 250 m from foraging waters, and can infrequently occur in walls, rotten trees stumps, or concrete structures
Kittiwake ( <i>Rissa tridactyla</i> )	12	27/03/2023	Mainly a coastal breeding bird. Breeds on steep sea cliffs where it builds a nesting platform on the most vertical and sometimes improbably steep areas. Will occasionally use man-made structures such as old buildings
Knot ( <i>Calidris canutus</i> )	33	26/02/2024	Winter visitor, wintering distribution is entirely coastal, and their preferred habitat mostly includes estuarine sites with extensive areas of muddy sand.
Lapwing ( <i>Vanellus vanellus</i> )	9	07/09/2018	Wintering distribution in Ireland is widespread. Large flocks regularly recorded in a variety of habitats, including most of the major wetlands, pasture and rough land adjacent to bogs. They breed on open farmland, and appear to prefer nesting in fields that are relatively bare (particularly when cultivated in the spring) and adjacent to grass.
Lesser black-backed gull ( <i>Larus fuscus</i> )	76	27/07/2024	Breeds colonially, often with other gull species especially Herring Gull. Nests on the ground. Will use a variety of sites, including off shore islands, islands in inland lakes, sand dunes and coastal cliffs.
Little grebe ( <i>Tachybaptus ruficollis</i> )	33	07/01/2023	Resident on ponds and lakes throughout Ireland. Extend their wintering habitat to include ephemeral wetlands and are often encountered on sheltered coasts, estuaries and coastal lakes and lagoons.
Little gull ( <i>Hydrocoloeus minutus</i> )	2	11/05/2024	Winter visitor to east and south coasts from October to March, and scarce passage migrant in spring and autumn. Does not breed in Ireland.
Mallard ( <i>Anas platyrhynchos</i> )	187	08/12/2024	Nest sites vary, mostly in ground where hidden in vegetation

## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

Common Name Scientific Name	Record Count	Date of Last Record	Habitat Preferences <sup>15</sup>
Mediterranean gull ( <i>Ichthyaetus melanocephalus</i> )	11	11/03/2024	Breeds in small numbers in the south-east. Present in Ireland as a wintering species in increasing numbers. Is widespread around the east coast and can also been seen elsewhere in smaller numbers. Sandycove in south Co. Dublin is particularly good for this species during the winter months.
Merlin ( <i>Falco columbarius</i> )	1	16/10/2019	Local summer visitor to uplands throughout Ireland. Widespread winter visitor at lowland sites from October to April. A rare breeding bird in Ireland. Nests on the ground on moorland, mountain and blanket bog. More widely distributed in the winter, can often be seen on the coast, where concentrations of other birds are attractive as prey species.
Oystercatcher ( <i>Haematopus ostralegus</i> )	77	26/12/2024	Use all coastal habitats, and particularly favour open sandy coasts.
Peregrine ( <i>Falco peregrinus</i> )	18	30/05/2024	Breeds on coastal and inland cliffs. Resident in Ireland but shows some movement away from its breeding areas in the winter. Can be found on the coast, especially on estuaries where they hunt on concentrations of water birds.
Pochard ( <i>Aythya ferina</i> )	5	27/04/2024	Scarce summer visitor and widespread winter migrant - most occur between October & February. In winter shows a preference for large shallow eutrophic waters, particularly those with well-vegetated marshes and swamps and slow flowing rivers.
Purple sandpiper ( <i>Calidris maritima</i> )	3	23/11/2022	Winter visitor, occurs at many rocky shore sites and harbours all around the coast. Does not breed in Ireland
Red-breasted merganser ( <i>Mergus serrator</i> )	17	25/03/2024	Nest on sheltered lakes and large rivers throughout the west and north of the country. Winter exclusively in brackish and marine waters, particularly in shallow protected estuaries and bays and lagoons, and also offshore.
Redshank ( <i>Tringa totanus</i> )	75	18/09/2024	Winters all around the coasts of Ireland. Favours mudflats, large estuaries and inlets. Smaller numbers at inland lakes and large rivers. Nests on the ground in grassy tussock, in wet, marshy areas and occasionally heather. Breeds mainly in midlands (especially Shannon Callows) and northern half of the country.
Ringed plover ( <i>Charadrius hiaticula</i> )	18	11/02/2024	Winter around the entire coastline, but are quite sparse along the north and southeast coasts. Mostly recorded along sandy stretches or along the upper shores of estuaries and non-estuarine coastline. Mostly coastal breeding distribution, preferring to nest on exposed wide sandy or shingle beaches. Some breed inland, particularly in the west, where their preferred nesting

## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

Common Name Scientific Name	Record Count	Date of Last Record	Habitat Preferences <sup>15</sup>
			habitat is on short-grazed pasture beside rivers and along lake
Sanderling ( <i>Calidris alba</i> )	19	18/09/2024	Winter visitor, mostly found along sandy coastlines, especially non-estuarine.
Sandwich tern ( <i>Thalasseus sandvicensis</i> )	12	18/09/2024	Summer visitor to all Irish coasts from March to September. Winters in small numbers in Galway Bay and Strangford Lough. Nest colonially on the ground, mainly on the coast but with some colonies inland. Nests on islands, shingle spits and sand dunes.
Scaup ( <i>Aythya marila</i> )	5	27/10/2017	Winter visitor, occur mostly in small parties and occasionally larger flocks around coastal estuaries and bays, on brackish lagoons and in shallow marine waters, usually less than 10 m in depth. Does not breed in Ireland.
Shag ( <i>Gulosus aristotelis</i> )	11	05/09/2020	Breeds all around the coast of Ireland wherever suitable cliffs exist. Nests on ledges, in crevices, in caves or under boulders. A colonial nester in loose colonies with prolonged breeding season. More plentiful on the west and south coasts but with notable concentrations in Co. Dublin.
Shelduck ( <i>Tadorna tadorna</i> )	38	14/05/2023	Breeds in open areas along seashores, larger lakes and rivers. Nest in holes in banks, trees, occasionally strawstacks or buildings. Winter on sheltered estuaries or tidal mudflats.
Shoveler ( <i>Spatula clypeata</i> )	16	15/11/2023	Prefer shallow eutrophic waters rich in plankton, and occur on a variety of habitats while wintering in Ireland, including coastal estuaries, lagoons and inland lakes and callows. Nests on the ground among waterside vegetation, often many nests in close proximity. Breeding in Ireland is centred around Lough Neagh and the mid- Shannon basin.
Teal ( <i>Anas crecca</i> )	36	10/01/2024	Widespread on wetlands with good cover, such as reedbeds. Wide variety of habitats, both coastal and inland, and usually below an altitude of 200 metres, including coastal lagoons and estuaries and inland marshes, lakes, ponds and turloughs. Usually nest near small freshwater lakes or pools and small upland streams away from the coast, and also in thick cover.
Tufted duck ( <i>Aythya fuligula</i> )	115	08/12/2024	Show a preference for large open lakes in lowland areas, where nests are built in waterside vegetation. Winter on lowland freshwater lakes. Often seen on town lakes, canals and slow-moving rivers.
Turnstone ( <i>Arenaria interpres</i> )	36	12/01/2024	Winter visitor, winters all around the Irish coast. Does not breed in Ireland.



Common Name Scientific Name	Record Count	Date of Last Record	Habitat Preferences <sup>15</sup>
Whooper swan ( <i>Cygnus cygnus</i> )	1	04/03/2020	Winter visitor to wetlands throughout Ireland from October to April. Winters most on lowland open farmland around inland wetlands, regularly seen while feeding on grasslands and stubble.

## 5.7 Invasive Alien Plants and Animals

No scheduled invasive alien plant or animal species were recorded within or adjacent to the footprint of the Proposed Development.

A search of the NBDC database was conducted for records of scheduled invasive species. The desk study returned records of ten scheduled IAPS species from the preceding ten years within 5 km of the Proposed Development (see **Table 5.3**). Invasive alien animal species recorded within the preceding ten years within 5 km of the Proposed Development were harlequin ladybird (*Harmonia axyridis*), American mink (*Neovison vison*), brown rat (*Rattus norvegicus*), fallow deer (*Dama dama*), and grey squirrel (*Sciurus carolinensis*).

**Table 5.3: IAPS returned from the NBDC search**

Common Name Scientific Name	Record Count	Date of Last Record	Habitat Preferences
Japanese knotweed ( <i>Reynoutria japonica</i> )	199	09/05/2025	Mires, bogs & fens; heath, scrubland & tundra; woodland, forest, and other wooded land; regularly or recently cultivated agricultural, horticultural, or domestic habitat; inland unvegetated or sparsely vegetated habitats; constructed, industrial or other artificial habitats
Indian balsam ( <i>Impatiens glandulifera</i> )	173	09/05/2025	Mires, bogs & fens; heath, scrubland & tundra; woodland, forest and other wooded land; regularly or recently cultivated agricultural, horticultural or domestic habitat.
American skunk-cabbage ( <i>Lysichiton americanus</i> )	2	29/03/2019	Grows in transition zone of terrestrial, semi-aquatic, and aquatic habitats such as swamps, wet woods and shrubs, along streams, riverbanks, lakesides, ponds, and in boggy and other wet areas (mires, bogs & fens).
Brazilian giant-rhubarb ( <i>Gunnera manicata</i> )	2	29/03/2019	Dense thickets in damp places and in woodland near lakes and rivers.
Canadian waterweed ( <i>Elodea canadensis</i> )	15	08/07/2020	Lakes, rivers, canals, and other slow moving waterbodies.
Giant hogweed ( <i>Heracleum mantegazzianum</i> )	135	07/05/2025	Mires, bogs and fens, grasslands, woodland, forest, artificial habitats, forest edges and glades, in riparian zones, and in mountainous areas.
Giant-rhubarb ( <i>Gunnera tinctoria</i> )	2	28/06/2020	Coastal; mires, bogs & fens; grasslands and landscapes dominated by forbs, mosses or lichens; inland unvegetated or

## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

Common Name Scientific Name	Record Count	Date of Last Record	Habitat Preferences
			sparsely vegetated habitats; constructed, industrial or other artificial habitats.
Sea-buckthorn ( <i>Hippophae rhamnoides</i> )	17	31/08/2022	Naturalised on sand dunes and sandy ground and cliffs.
Spanish bluebell ( <i>Hyacinthoides hispanica</i> )	6	15/04/2025	Commonly found in woodland and gardens, hedgerows, churchyards, shady roadsides, rough ground, and waste places.
Three-cornered garlic ( <i>Allium triquetrum</i> )	46	03/03/2025	Found along roadsides, field margins and other waster ground, prefers damp shaded areas.

## 6 Screening Assessment

### 6.1 Management of European Sites

AA screening is not required where the Proposed Development is connected with, or necessary to the management of any European site. In this case, the Proposed Development is not directly connected with or necessary to the management of any European site(s).

### 6.2 Summary of Information Required

The screening assessment for AA follows the methodologies set out in **Section 3**, and analysis of the following information:

- Zol of effect from the Proposed Development; and
- Distribution of QIs and SCIs in relation to the Zol.

### 6.3 Assessment of Likely Significant Effects Alone

#### 6.3.1 Source-Pathway-Receptor Model

As described in the methodology (**Section 3**), the screening for AA report assessment adopts a comprehensive and precautionary approach for which the starting point is an initial Zol scoping followed by the identification of potential impact/effects and an assessment stage on relevant European sites and their QI/SCIs (source-pathway-receptor model). The potential impacts that could arise from the Proposed Development were identified as follows:

- Habitat loss, destruction, fragmentation or deterioration;
- Noise, vibration, lighting, and human presence-related disturbance;
- Surface water run-off carrying suspended silt or contaminants into local watercourses;
- Changes to groundwater quality, yield and/or flow paths;
- Air pollution from releasing dust and vehicle emissions; and
- Disturbance of invasive species during the Proposed Development.

In this context, Table 6.1 outlines the specific source-pathway model for the Proposed Development. Given the location, the small scale, and the nature of operational phase activities, which have negligible potential to result in pollution events, disturbance, or any other impacts, an S-P-R link does not exist to European sites during the operational phase. Therefore, the potential impacts outlined **Table 6.1** describe construction impact pathways only.

**Table 6.1: Source-Pathway-Receptor Model for the Proposed Development (Relevant Pathways are identified as grey rows)**

Source of Potential Effect	Description of Effect Pathway	Potential Zone of Influence
Habitat loss, destruction, fragmentation or deterioration	Vegetation clearance required to accommodate the Proposed Development could have direct or indirect impacts to the qualifying habitat of European sites or supporting habitats of QI and SCI species, resulting in habitat loss and fragmentation.	<p>The Proposed Development is within hard standing areas and brownfield habitats.</p> <p>As the Proposed Development does not intersect with any SACs or SPAs, habitat loss, destruction, fragmentation or deterioration will not impact the integrity of any European site(s).</p> <p>This potential impact is therefore <b>scoped out from further consideration</b>.</p>
Noise, vibration, lighting, and human presence during movements of vehicles and staff associated with the works.	Noise or other construction-related disturbance could reduce the ability of populations of QI/ SCI species to forage, roost, or breed.	<p>The pathways for disturbance effects are generally assessed within 300 m of the Proposed Development (Cutts <i>et al.</i>, 2009). However, distance can be significantly lower (e.g. 150 m for otter underground sites (NRA, 2006), or higher (e.g. hen harriers may take flight when nesting at up to 750 m from disturbance (Whitfield <i>et al.</i>, 2008)).</p> <p>In the specific context of the Proposed Development site, including the known distribution of suitable SCI foraging habitats (both within and outside of European sites), designated sites which lie within 300 m of the Proposed Development are considered for assessment.</p> <p>Given the distance between the Proposed Development (excluding the HDD reception site for the Grid Connection which is not part of the subject planning application, from which, disturbance impacts will be negligible), the closest European site (170 m; South Dublin Bay and River Tolka Estuary SPA (004024) (NPWS, 2015a)), and the closest sites of significant ex-situ foraging importance (Alfie Byrne Pitches c. 280 m), the existing high level of vehicle traffic and other human activity between the Proposed Development and these sites, and the visual and noise screening provided by intervening built fabric and vegetation, there is no pathway for potentially significant disturbance impacts on any European sites.</p> <p>This potential impact is therefore <b>scoped out from further consideration</b>.</p>
Surface water run-off carrying suspended silt or contaminants into watercourses	Silt, hydrocarbons, and/or other contaminants (oils, fuels, etc.) may enter nearby watercourses through surface water run-off.	<p>Hydrological linkages between the Proposed Development and European sites (and their QIs/SCIs) can occur over significant distances. However, any effect will be site specific depending on the receiving water environment, nature of the linkage and consequent nature of the potential impact.</p> <p>This potential impact cannot be ruled out at this stage with regards to European sites within the Zol.</p> <p>This potential impact is therefore <b>scoped in for further consideration</b>.</p>
Changes of groundwater quality, yield, and/or flow paths associated	The works could interfere with groundwater quality, yields and/or flow paths, potentially affecting	<p>For groundwater flow and yield, as a precautionary measure, a reasonable worst-case spatial Zol is considered to be 500 m from the point of excavation, which is a precautionary doubling of the 250 m stated as the potential Zol from intrusive excavations to sensitive upland peatland sites (SEPA, 2014).</p>

Source of Potential Effect	Description of Effect Pathway	Potential Zone of Influence
with earthworks during construction.	the water quality or habitats dependent on groundwater supply.	<p>A reasonable worst-case Zol for groundwater pollution from the Proposed Development is considered to capture the entirety of each GWB which the Proposed Development overlies.</p> <p>The Proposed Development is located within the Dublin (IE_EA-G_008) GWB. This GWB has a status of 'Good'. The groundwater vulnerability within the Proposed Development is low.</p> <p>The element with greatest potential for impacts on groundwater is the installation of the Grid Connection (not part of the subject planning application) which requires HDD to cross under the M50. This will be approximately 70 m from the Tolka Estuary at the closest point at the reception side of the HDD works (the exact location of the pipe will be agreed with the Business Park to minimise disruption to the businesses). The proposed location and depths of the HDD works for the Grid Connection (not part of the subject planning application) are shown in <b>Figure 3.3</b>.</p> <p>Given the low groundwater vulnerability, the limited length, diameter, and depth of the HDD (see <b>Section 3.2.10</b>), no impacts related to groundwater quality, yield, and/or flow paths are anticipated.</p> <p>The closest groundwater-dependant QI habitat is humid dune slacks [2190] within North Dublin Bay SAC. This habitat is on Bull Island, approximately 4 km east of the Proposed Development at the closest point. Any impacts on groundwater from the Proposed Development would be imperceptible to negligible at this distance.</p> <p>This potential impact is therefore <b>scoped out from further consideration</b>.</p>
Air pollution from releasing dust and vehicle emissions	Air pollution from the proposed development may affect sensitive habitats/species in the vicinity of the works. Dust or particles falling onto plants can physically smother the leaves affecting photosynthesis, respiration and transpiration, or particles falling into water can result in fine silt/sediment becoming suspended in the water.	<p>Significant effects on vegetation can occur up to 25 m from major construction sites and 10 m from minor construction sites. Soiling of vegetation can occur up to 100 m, 50 m, and 25 m from major, moderate, and minor construction sites, respectively (NRA, 2011). The principal pollutants of concern which originate from construction plant and road vehicles are the nitrogen oxides (NO<sub>x</sub>), in terms of impact on sensitive ecosystems. Nitrogen oxides may have a positive or negative impact by acting as a fertiliser or a phytotoxicant. Effects are mainly on vegetation growth, photosynthesis, and nitrogen assimilation/metabolism.</p> <p>The closest receptor, such as an ex-situ foraging site, waterbody, or European site, for which air pollution impacts could result in significant effects on a European site, is the Tolka Estuary. The Tolka Estuary flows into the South Dublin Bay and River Tolka Estuary SPA and is 120 m from the Proposed Development (and 70 m from the HDD reception site for the Grid Connection which is not part of the subject planning application, from which, emissions will be negligible). Given the scale of the Proposed Development and the distances from the proposed works to any receptor with connectivity to a European site, and due to the short-term nature of the works, there will be no appreciable effects on any European site.</p> <p>This potential impact is therefore <b>scoped out from further consideration</b>.</p>
Disturbance of invasive species during the construction of the	The proposed development could lead to the dispersal of scheduled invasive species either via machinery,	<p>The Zol of effects for spread of terrestrial invasive species is difficult to accurately estimate, as plant fragments may be spread on tyre treads to distant unrelated sites. In relation to water-borne spread of vegetation, the Zol generally is restricted to the surface water Catchment Management Unit.</p>



Source of Potential Effect	Description of Effect Pathway	Potential Zone of Influence
proposed development.	materials, clothing, or wild animals.	No invasive alien plant species were recorded within 20 m of the Proposed Development. Therefore, as no invasive alien species are located within the footprint of the construction works, no effect as a result of the spread of non-native invasive alien plant species will occur. This potential impact is therefore <b>scoped out from further consideration</b> .

Based on the results of Table 6.1, the relevant Source-Pathway-Receptor linkage to the Proposed Development has been identified as Surface water run-off carrying suspended silt or contaminants into watercourses.

As stated in **Section 4.5.2**, with regard to surface water run-off, the Zol extends to the first coastal waterbody. Any potential release of pollutants would travel from the Tolka Estuary transitional waterbody, through the Liffey Estuary Lower transitional waterbody, and into the Dublin Bay coastal waterbody. The Tolka Estuary has a status of 'poor' and is deemed at risk of not meeting WFD goals. The Liffey Estuary Lower has a status of 'moderate' and is also deemed at risk of not meeting WFD goals. Dublin Bay has a status of 'good' and is deemed not at risk of not meeting WFD goals. However, given the small scale of any potential pollution event, any pollutants are considered to become diluted to negligible levels within the water column before reaching the the Liffey Estuary transitional waterbody, Dublin Bay coastal waterbody, or north of the Bull Wall. Therefore, any European sites with QIs/SCIs with potential to occur below the high-water mark within the Tolka Estuary transitional waterbody (excluding the area north of the Bull Wall) are within the Zol of potential effects arising from surface water run-off.

### 6.3.2 European Sites within the Zone of Influence

The European sites which were identified in the initial Zol in **Section 5.5** have been further screened, based on the Zol of effects and S-P-R model detailed in **Table 6.1** above, to identify those European site which have potential to be subject to LSEs and require further assessment. This screening is detailed in **Table 6.2**.

**Table 6.2: Conservation Objectives of European Sites within the Zol**

European Site (Code)	Qualifying Interest(s) (*Priority Habitat) and Special Conservation Interest(s)	Conservation Objective(s)	Distance from Proposed Development	To be Assessed Further in Screening?
South Dublin Bay and River Tolka Estuary SPA (004024) (NPWS, 2015a)	Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [A046] Oystercatcher ( <i>Haematopus ostralegus</i> ) [A130] Ringed Plover ( <i>Charadrius hiaticula</i> ) [A137] Grey Plover ( <i>Pluvialis squatarola</i> ) [A141] Knot ( <i>Calidris canutus</i> ) [A143]	To maintain each feature in favourable condition	Located c. 170 m north of the Proposed Development and Grid Connection (not part of the subject planning application)	<b>Yes.</b> Although no suitable habitat exists within the Proposed Development site for the relevant SCI species, there is potential hydrological connectivity to this site via surface water management.

## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

European Site (Code)	Qualifying Interest(s) (*Priority Habitat) and Special Conservation Interest(s)	Conservation Objective(s)	Distance from Proposed Development	To be Assessed Further in Screening?
	Sanderling ( <i>Calidris alba</i> ) [A144]			
	Dunlin ( <i>Calidris alpina alpina</i> ) [A149]			
	Bar-tailed Godwit ( <i>Limosa lapponica</i> ) [A157]			
	Redshank ( <i>Tringa totanus</i> ) [A162]			
	Black-headed Gull ( <i>Chroicocephalus ridibundus</i> ) [A179]			
	Roseate Tern ( <i>Sterna dougallii</i> ) [A192]			
	Common Tern ( <i>Sterna hirundo</i> ) [A193]			
	Arctic Tern ( <i>Sterna paradisaea</i> ) [A194]			
	Wetlands [A999]			
South Dublin Bay SAC (000210) (NPWS, 2013a)	Mudflats and sandflats not covered by seawater at low tide [1140]	To maintain the favourable conservation condition	Located c. 2.4 km south-east of the Proposed Development and Grid Connection (not part of the subject planning application)	<b>No.</b> Distance in which contaminants must travel through the water column and the capacity of the large marine waterbody to dilute any elevated concentrations of released contaminants negates any likelihood of a significant effect occurring.
	Annual vegetation of drift lines [1210]	To maintain the favourable conservation condition		
	Salicornia and other annuals colonising mud and sand [1310]	To restore the favourable conservation condition		
	Embryonic shifting dunes [2110]	To maintain the favourable conservation condition		
North Bull Island SPA (004006) (NPWS, 2015b)	Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [A046]	To maintain each feature in favourable condition	Located c. 3.1 km east of the Proposed Development and Grid Connection (not part of the	<b>No.</b> Distance in which contaminants must travel through the water column and the capacity of the large marine waterbody to dilute any elevated concentrations of
	Shelduck ( <i>Tadorna tadorna</i> ) [A048]			
	Teal ( <i>Anas crecca</i> ) [A052]			

## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

European Site (Code)	Qualifying Interest(s) (*Priority Habitat) and Special Conservation Interest(s)	Conservation Objective(s)	Distance from Proposed Development	To be Assessed Further in Screening?
	Pintail ( <i>Anas acuta</i> ) [A054]		subject planning application)	released contaminants negates any likelihood of a significant effect occurring.
	Shoveler ( <i>Anas clypeata</i> ) [A056]			
	Oystercatcher ( <i>Haematopus ostralegus</i> ) [A130]			
	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]			
	Grey Plover ( <i>Pluvialis squatarola</i> ) [A141]			
	Knot ( <i>Calidris canutus</i> ) [A143]			
	Sanderling ( <i>Calidris alba</i> ) [A144]			
	Dunlin ( <i>Calidris alpina</i> ) [A149]			
	Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156]			
	Bar-tailed Godwit ( <i>Limosa lapponica</i> ) [A157]			
	Curlew ( <i>Numenius arquata</i> ) [A160]			
	Redshank ( <i>Tringa totanus</i> ) [A162]			
	Turnstone ( <i>Arenaria interpres</i> ) [A169]			
	Black-headed Gull ( <i>Chroicocephalus ridibundus</i> ) [A179]			
	Wetlands and Waterbirds [A999]			
North Dublin Bay SAC (000206) (NPWS, 2013b)	Mudflats and sandflats not covered by seawater at low tide [1140]	To maintain the favourable conservation condition	Located c. 3.2 km east of the Proposed Development and Grid Connection (not part of the subject planning application)	<b>No.</b> Distance in which contaminants must travel through the water column and the capacity of the large marine waterbody to dilute any elevated concentrations of released contaminants negates any likelihood of
	Annual vegetation of drift lines [1210]	To maintain the favourable conservation condition		

## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

European Site (Code)	Qualifying Interest(s) (*Priority Habitat) and Special Conservation Interest(s)	Conservation Objective(s)	Distance from Proposed Development	To be Assessed Further in Screening?
	Salicornia and other annuals colonising mud and sand [1310]	To restore the favourable conservation condition		a significant effect occurring.
	Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritima</i> ) [1330]	To maintain the favourable conservation condition		
	Mediterranean salt meadows ( <i>Punctilio maritimi</i> ) [1410]	To maintain the favourable conservation condition		
	Embryonic shifting dunes [2110]	To maintain the favourable conservation condition		
	Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]	To restore the favourable conservation condition		
	Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	To restore the favourable conservation condition		
	Humid dune slacks [2190]	To restore the favourable conservation condition		
	<i>Petalophyllum ralfsii</i> (Petalwort) [1395]	To maintain the favourable conservation condition		
Northwest Irish Sea SPA (004236) (NPWS, 2023)	Red-throated Diver ( <i>Gavia stellata</i> ) [A001]	To maintain the favourable conservation condition	Located c. 5.4 km east of the Proposed Development and Grid Connection (not part of the subject planning application)	<b>No.</b> Distance in which contaminants must travel through the water column and the capacity of the large marine waterbody to dilute any elevated concentrations of released contaminants negates any likelihood of a significant effect occurring.
	Great Northern Diver ( <i>Gavia immer</i> ) [A003]	To maintain the favourable conservation condition		
	Fulmar ( <i>Fulmarus glacialis</i> ) [A009]	To restore the favourable conservation condition		

European Site (Code)	Qualifying Interest(s) (*Priority Habitat) and Special Conservation Interest(s)	Conservation Objective(s)	Distance from Proposed Development	To be Assessed Further in Screening?
	Manx Shearwater ( <i>Puffinus puffinus</i> ) [A013]	To maintain the favourable conservation condition		
	Cormorant ( <i>Phalacrocorax carbo</i> ) [A017]	To restore the favourable conservation condition		
	Shag ( <i>Phalacrocorax aristotelis</i> ) [A018]	To restore the favourable conservation condition		
	Common Scoter ( <i>Melanitta nigra</i> ) [A065]	To maintain the favourable conservation condition		
	Little Gull ( <i>Larus minutus</i> ) [A862]	To restore the favourable conservation condition		
	Black-headed Gull ( <i>Chroicocephalus ridibundus</i> ) [A179]	To maintain the favourable conservation condition		
	Common Gull ( <i>Larus canus</i> ) [A182]	To maintain the favourable conservation condition		
	Lesser Black-backed Gull ( <i>Larus fuscus</i> ) [A183]	To maintain the favourable conservation condition		
	Herring Gull ( <i>Larus argentatus</i> ) [A184]	To restore the favourable conservation condition		
	Great Black-backed Gull ( <i>Larus marinus</i> ) [A187]	To maintain the favourable conservation condition		
	Kittiwake ( <i>Rissa tridactyla</i> ) [A188]	To restore the favourable conservation condition		



## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

European Site (Code)	Qualifying Interest(s) (*Priority Habitat) and Special Conservation Interest(s)	Conservation Objective(s)	Distance from Proposed Development	To be Assessed Further in Screening?
	Roseate Tern ( <i>Sterna dougallii</i> ) [A192]	To maintain the favourable conservation condition		
	Common Tern ( <i>Sterna hirundo</i> ) [A193]	To maintain the favourable conservation condition		
	Arctic Tern ( <i>Sterna paradisaea</i> ) [A194]	To maintain the favourable conservation condition		
	Little Tern ( <i>Sterna albifrons</i> ) [A195]	To maintain the favourable conservation condition		
	Guillemot ( <i>Uria aalge</i> ) [A199]	To maintain the favourable conservation condition		
	Razorbill ( <i>Alca torda</i> ) [A200]	To maintain the favourable conservation condition		
	Puffin ( <i>Fratercula arctica</i> ) [A204]	To restore the favourable conservation condition		
Rockabill to Dalkey Island SAC (003000) (NPWS, 2013c)	Reefs [1170] <i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	To maintain the favourable conservation condition	Located c. 9.3 km east of the Proposed Development and Grid Connection (not part of the subject planning application)	<b>No.</b> Distance in which contaminants must travel through the water column and the capacity of the large marine waterbody to dilute any elevated concentrations of released contaminants negates any likelihood of significant effect occurring.
Howth Head SAC (00202) (NPWS, 2016)	Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030]	To maintain each feature in favourable condition	Located c. 8.9 km east of the Proposed Development and Grid Connection (not part of the	<b>No.</b> Distance in which contaminants must travel through the water column and the capacity of the large marine waterbody to dilute any elevated concentrations of released contaminants

## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

European Site (Code)	Qualifying Interest(s) (*Priority Habitat) and Special Conservation Interest(s)	Conservation Objective(s)	Distance from Proposed Development	To be Assessed Further in Screening?
			subject planning application)	negates any likelihood of a significant effect occurring.
Baldoyle Bay SPA (004016) (NPWS, 2013c)	Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [A046]	To maintain the favourable conservation condition	Located c. 8.2 km north-east of the proposed development and Grid Connection (not part of the subject planning application)	<b>No.</b> Distance in which contaminants must travel through the water column and the capacity of the large marine waterbody to dilute any elevated concentrations of released contaminants negates any likelihood of a significant effect occurring.
	Shelduck ( <i>Tadorna tadorna</i> ) [A048]	To maintain the favourable conservation condition		
	Ringed Plover ( <i>Charadrius hiaticula</i> ) [A137]	To maintain the favourable conservation condition		
	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]	To maintain the favourable conservation condition		
	Grey Plover ( <i>Pluvialis squatarola</i> ) [A141]	To maintain the favourable conservation condition		
	Bar-tailed Godwit ( <i>Limosa lapponica</i> ) [A157]	To maintain the favourable conservation condition		
	Wetland and Waterbirds [A999]	To maintain the favourable conservation condition		
Baldoyle Bay SAC (000199) (NPWS, 2012)	Mudflats and sandflats not covered by seawater at low tide [1140]	To maintain each feature in favourable condition	Located c. 8.0 km north-east of the Proposed Development and Grid Connection (not part of the subject planning application)	<b>No.</b> Distance in which contaminants must travel through the water column and the capacity of the large marine waterbody to dilute any elevated concentrations of released contaminants negates any likelihood of a significant effect occurring.
	Salicornia and other annuals colonising mud and sand [1310]			
	Atlantic salt meadows ( <i>Glaucopuccinellietalia maritimae</i> ) [1330]			
	Mediterranean salt meadows ( <i>Juncetalia maritimi</i> ) [1410]			

## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

European Site (Code)	Qualifying Interest(s) (*Priority Habitat) and Special Conservation Interest(s)	Conservation Objective(s)	Distance from Proposed Development	To be Assessed Further in Screening?
Dalkey Islands SPA (004172) (NPWS, 2022a)	Roseate Tern ( <i>Sterna dougallii</i> ) [A192] Common Tern ( <i>Sterna hirundo</i> ) [A193] Arctic Tern ( <i>Sterna paradisaea</i> ) [A194]	To maintain each feature in favourable conservation condition	Located c. 12.3 km south-east of the Proposed Development and Grid Connection (not part of the subject planning application)	<b>No.</b> Distance in which contaminants must travel through the water column and the capacity of the large marine waterbody to dilute any elevated concentrations of released contaminants negates any likelihood of a significant effect occurring.
Howth Head Coast SPA (004113) (NPWS, 2022b)	Kittiwake ( <i>Rissa tridactyla</i> ) [A188]	To maintain the favourable conservation condition	Located c. 11.6 km east of the Proposed Development and Grid Connection (not part of the subject planning application)	<b>No.</b> Distance in which contaminants must travel through the water column and the capacity of the large marine waterbody to dilute any elevated concentrations of released contaminants negates any likelihood of a significant effect occurring.
Ireland's Eye SAC (002193) (NPWS, 2017a)	Perennial vegetation of stony banks [1220]	To maintain the favourable conservation condition	Located c. 11.9 km north-east of the Proposed Development and Grid Connection (not part of the subject planning application)	<b>No.</b> Distance in which contaminants must travel through the water column and the capacity of the large marine waterbody to dilute any elevated concentrations of released contaminants negates any likelihood of a significant effect occurring.
Ireland's Eye SPA (004117) (NPWS, 2022c)	Cormorant (Phalacrocorax carbo) [A017] Herring Gull ( <i>Larus argentatus</i> ) [A184] Kittiwake ( <i>Rissa tridactyla</i> ) [A188] Guillemot ( <i>Uria aalge</i> ) [A199] Razorbill ( <i>Alca torda</i> ) [A200]	To maintain each feature in favourable conservation condition	Located c. 11.7 km north-east of the Proposed Development and Grid Connection (not part of the subject planning application)	<b>No.</b> Distance in which contaminants must travel through the water column and the capacity of the large marine waterbody to dilute any elevated concentrations of released contaminants negates any likelihood of a significant effect occurring.
Malahide Estuary SAC (000205)	Mudflats and sandflats not covered by seawater at low tide [1140]	To maintain the favourable conservation condition	Located c. 11.0 km north of the Proposed Development and	<b>No.</b> Distance in which contaminants must travel through the water column and the capacity of the

## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

European Site (Code)	Qualifying Interest(s) (*Priority Habitat) and Special Conservation Interest(s)	Conservation Objective(s)	Distance from Proposed Development	To be Assessed Further in Screening?
(NPWS, 2013e)	Salicornia and other annuals colonising mud and sand [1310]	To maintain the favourable conservation condition	Grid Connection (not part of the subject planning application)	large marine waterbody to dilute any elevated concentrations of released contaminants negates any likelihood of a significant effect occurring.
	Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritima</i> ) [1330]	To restore the favourable conservation condition		
	Mediterranean salt meadows ( <i>Juncetalia maritimi</i> ) [1410]	To maintain the favourable conservation condition		
	Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]	To restore the favourable conservation condition		
	Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	To restore the favourable conservation condition		
Wicklow Mountains SAC (002122) (NPWS, 2017b)	Oligotrophic waters containing very few minerals of sandy plains ( <i>Littorelletalia uniflorae</i> ) [3110]	To maintain the favourable conservation condition	Located c. 13.5 km south of the Proposed Development and Grid Connection (not part of the subject planning application)	<b>No.</b> Site is separated from the Proposed Development by existing river water bodies.
	Natural dystrophic lakes and ponds [3160]	To maintain the favourable conservation condition		
	Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010]	To restore the favourable conservation condition		
	European dry heaths [4030]	To restore the favourable conservation condition		
	Alpine and Boreal heaths [4060]	To restore the favourable conservation condition		
	Calaminarian grasslands of the <i>Violetalia calaminariae</i> [6130]	To maintain the favourable conservation condition		

## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

European Site (Code)	Qualifying Interest(s) (*Priority Habitat) and Special Conservation Interest(s)	Conservation Objective(s)	Distance from Proposed Development	To be Assessed Further in Screening?
	Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230]	To restore the favourable conservation condition		
	Blanket bogs (* if active bog) [7130]	To restore the favourable conservation condition		
	Siliceous scree of the montane to snow levels ( <i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i> ) [8110]	To restore the favourable conservation condition		
	Calcareous rocky slopes with chasmophytic vegetation [8210]	To restore the favourable conservation condition		
	Siliceous rocky slopes with chasmophytic vegetation [8220]	To restore the favourable conservation condition		
	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	To restore the favourable conservation condition		
	<i>Lutra lutra</i> (Otter) [1355]	To maintain the favourable conservation condition		
Wicklow Mountains SPA (004040) (NPWS, 2022d)	Merlin ( <i>Falco columbarius</i> ) [A098] Peregrine ( <i>Falco peregrinus</i> ) [A103]	To maintain or restore the favourable conservation condition	Located c. 13.8 km south of the Proposed Development and Grid Connection (not part of the subject planning application)	<b>No.</b> No suitable habitat exists within the Proposed Development for the relevant SCI species.
Malahide Estuary SPA (004025) (NPWS, 2013f)	Great Crested Grebe ( <i>Podiceps cristatus</i> ) [A005] Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [A046] Shelduck ( <i>Tadorna tadorna</i> ) [A048]	To maintain each feature in favourable condition	Located c. 11.3 km north of the Proposed Development and Grid Connection (not part of the subject planning application)	<b>No.</b> Distance in which contaminants must travel through the water column and the capacity of the large marine waterbody to dilute any elevated concentrations of released contaminants



## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

European Site (Code)	Qualifying Interest(s) (*Priority Habitat) and Special Conservation Interest(s)	Conservation Objective(s)	Distance from Proposed Development	To be Assessed Further in Screening?
	Pintail ( <i>Anas acuta</i> ) [A054]			negates any likelihood of a significant effect occurring.
	Goldeneye ( <i>Bucephala clangula</i> ) [A067]			
	Red-breasted Merganser ( <i>Mergus serrator</i> ) [A069]			
	Oystercatcher ( <i>Haematopus ostralegus</i> ) [A130]			
	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]			
	Grey Plover ( <i>Pluvialis squatarola</i> ) [A141]			
	Knot ( <i>Calidris canutus</i> ) [A143]			
	Dunlin ( <i>Calidris alpina</i> ) [A149]			
	Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156]			
	Bar-tailed Godwit ( <i>Limosa lapponica</i> ) [A157]			
	Redshank ( <i>Tringa totanus</i> ) [A162]			
	Wetland and Waterbirds [A999]			
Glenasmole Valley SAC (001209) (NPWS, 2021)	Semi-natural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco-Brometalia</i> ) (*important orchid sites) [6210]	To restore the favourable conservation condition of each feature	Located c. 14.2 km south-west of the Proposed Development and Grid Connection (not part of the subject planning application)	<b>No.</b> Site is separated from the Proposed Development by existing river water bodies.
	Molinia meadows on calcareous, peaty or clayey-silt-laden soils ( <i>Molinion caeruleae</i> ) [6410]			
	Petrifying springs with tufa formation ( <i>Cratoneurion</i> ) [7220]			
Rogerstown Estuary SPA (004015) (NPWS, 2013g)	Greylag Goose ( <i>Anser anser</i> ) [A043]	To maintain each feature in favourable condition	Located 16.0 km north of the Proposed Development and Grid Connection	<b>No.</b> Distance in which contaminants must travel through the water column and the capacity of the large marine waterbody
	Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [A046]			

## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

European Site (Code)	Qualifying Interest(s) (*Priority Habitat) and Special Conservation Interest(s)	Conservation Objective(s)	Distance from Proposed Development	To be Assessed Further in Screening?
	Shelduck ( <i>Tadorna tadorna</i> ) [A048]		(not part of the subject planning application)	to dilute any elevated concentrations of released contaminants negates any likelihood of a significant effect occurring.
	Shoveler ( <i>Anas clypeata</i> ) [A056]			
	Oystercatcher ( <i>Haematopus ostralegus</i> ) [A130]			
	Ringed Plover ( <i>Charadrius hiaticula</i> ) [A137]			
	Grey Plover ( <i>Pluvialis squatarola</i> ) [A141]			
	Knot ( <i>Calidris canutus</i> ) [A143]			
	Dunlin ( <i>Calidris alpina</i> ) [A149]			
	Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156]			
	Redshank ( <i>Tringa totanus</i> ) [A162]			
	Wetland and Waterbirds [A999]			
Lambay Island SPA (004069) (NPWS, 2022e)	Fulmar ( <i>Fulmarus glacialis</i> ) [A009]	To maintain or restore the favourable conservation condition	Located c. 19.3 km north-east of the Proposed Development and Grid Connection (not part of the subject planning application)	<b>No.</b> No suitable habitat exists within the Proposed Development for the relevant SCI species.
	Cormorant ( <i>Phalacrocorax carbo</i> ) [A017]			
	Shag ( <i>Phalacrocorax aristotelis</i> ) [A018]			
	Greylag Goose ( <i>Anser anser</i> ) [A043]			
	Lesser Black-backed Gull ( <i>Larus fuscus</i> ) [A183]			
	Herring Gull ( <i>Larus argentatus</i> ) [A184]			
	Kittiwake ( <i>Rissa tridactyla</i> ) [A188]			
	Guillemot ( <i>Uria aalge</i> ) [A199]			
	Razorbill ( <i>Alca torda</i> ) [A200]			

European Site (Code)	Qualifying Interest(s) (*Priority Habitat) and Special Conservation Interest(s)	Conservation Objective(s)	Distance from Proposed Development	To be Assessed Further in Screening?
	Puffin ( <i>Fratercula arctica</i> ) [A204]			

Based on the above Zol of effects, South Dublin Bay and River Tolka Estuary SPA is the only European site identified as relevant and assessed against the S-P-R model in **Table 6.1**.

## 6.3.2.1 Surface Water Run-off

The effects of pollution from surface water run-off from the Proposed Development on SCI species and/or QI habitats and species have been assessed using the source-pathway-receptor model.

### Source

There is potential for surface water pollutants to be generated during the construction stage of the Proposed Development. This potential is associated with the excavations in relation to the foundations of buildings and HDD associated with the Grid Connection (not part of the subject planning application). The potential sources of the pollution include silt/suspended solids, hydrocarbons, concrete washings, and/or other contaminants. However, existing petrol interceptors and the separate requirement for Waste Acceptance Criteria (WAC) testing will negate these pollution sources. Uncontaminated silt and suspended solids may result from construction activities; however, given the small scale of any potential pollution event, any pollutants are considered to become diluted to negligible levels within the water column. Furthermore, none of the SCI species in the South Dublin Bay and River Tolka Estuary SPA are highly sensitive to siltation effects (i.e. in contrast, for instance, to certain highly silt-sensitive freshwater fish or molluscs).

### Pathway

The Proposed Development is located approximately 70m from the Tolka Estuary, at the closest point. There is no direct pathway of effect identified. An indirect pathway exists via existing surface water gullies (with petrol interceptors) with the Proposed Development footprint. These gullies are connected to surface water sewers, which are presumed to outfall into the Tolka Estuary.

### Receptor

There is potential for effects on the SCI wetlands associated with South Dublin Bay and River Tolka Estuary SPA. All other relevant receptors have been scoped out. The CO of SCI wetlands of the SPA is to maintain the favourable conservation condition of the wetland habitat in South Dublin Bay and River Tolka Estuary SPA as a resource for the regularly occurring migratory waterbirds that utilise it. This is defined by the target that the permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 2,192 ha, other than that occurring from natural patterns of variation.

### Source-Pathway-Receptor conclusion

Although a pathway and a receptor have been identified, the source of a potential effect via surface water pollution has been deemed to be negligible. Therefore, there is no potential for direct or indirect impacts to occur via surface water run-off carrying suspended silt or contaminants into the Tolka Estuary and no likely significant effects on any European sites within the Zol of the Proposed Development are predicted.

## 6.4 In-combination Effects

Legislation, guidance, and case law (**Section 1.4**) requires that in-combination effects with other plans or projects are considered. On this basis, other plans and projects are considered in terms of

their potential to have in-combination effects with the proposed development on relevant European sites.

## 6.4.1 Plans

A search was conducted of national, regional, and local plans which were deemed relevant to the proposed development. This list is not exhaustive of all plans and programmes but instead focuses on plans which could result in in-combination effects within relevant European sites. Relevant plans are discussed in **Table 6.3**.

**Table 6.3: Planning Search Results - Plans and Programmes**

Plan	Conflicting Policies	Protective Policies	Potential for In-combination Effects
National Development Plan (NDP) 2021-2030 (DoPER, 2021)	n/a	The NDP is a strategic, high-level outline of the governments long-term vision and strategies for economic, social, and environmental development. It covers goals related to infrastructure, education, healthcare, poverty alleviation, job creation, and sustainable growth. Biodiversity is set as a priority, with €1.4 billion apportioned to, amongst others, to support compliance with the EU's Habitats Directive.	No. As all developments under the NDP will be subject to screening for AA (and AA, if necessary), in-combination effects with the Proposed Development are not predicted..
EU Water Framework Directive (2000/60/EC) and Third Cycle River Basin Management Plan 2022-2027 (DoHLGH, 2024a)	n/a	<p>The Water Framework Directive (WFD) provides a framework for the protection and improvement of rivers, lakes, marine and groundwaters in addition to water-dependent habitats. The aim of the WFD is to prevent any deterioration in the existing status of water quality, including the protection of good and high-water quality status where it exists. The priorities of the third cycle River Basin Management Plan (RBMP) for Ireland, covering the period 2022-2027 are to:</p> <ul style="list-style-type: none"> <li>• Ensure full compliance with relevant EU legislation;</li> <li>• Prevent deterioration;</li> <li>• Meet the water standards and objectives for designated protected areas;</li> <li>• Protect high-status waters; and</li> <li>• Implement targeted actions and pilot schemes in focus sub-catchments aimed at (i) targeting water bodies close to meeting their objective and (ii) addressing more complex issues that will build knowledge for future cycles</li> </ul> <p>There are binding obligations on all Irish local authorities, including Dublin City Council, to achieve good status of surface waters, under the terms of</p>	No. The primary purpose of the WFD and RBMPs is to improve the ecological status and management of water quality. In-combination effects are not predicted.

Plan	Conflicting Policies	Protective Policies	Potential for In-combination Effects
		the EU Water Framework Directive 2000/60/EC. The implementation of the RBMP and achievement or maintenance of environmental objectives which will be set for the receiving water bodies will have a positive impact on water dependent habitats and species within European sites.	
Dublin City Development Plan 2022-2028 (DCC, 2022)	n/a	<p>Dublin city development plan sets out the strategic approach and vision to meet the needs and aspirations of citizens of Dublin and the country. The plan also sets out a number of strategies, policies and objectives for the protection of the natural environment and biodiversity, including:</p> <ul style="list-style-type: none"> <li>• Protect and enhance natural habitats, promote urban green spaces, and support biodiversity conservation objectives.</li> <li>• Develop green corridors, parks, and open spaces to improve air quality, provide recreational areas, and manage stormwater.</li> <li>• Implement strategies for waste reduction, recycling, and waste-to-energy conversion to minimize landfill waste.</li> <li>• Manage water resources sustainably, reduce flood risks, and improve water quality through integrated water management strategies.</li> </ul>	No. The Plan was also subject to Strategic Environmental Assessment (SEA) and AA. With the incorporation of biodiversity objectives within the plan and the implementation of mitigation measures contained within the plan, the effects of the development plan will not act in-combination with the Proposed Development.
Dublin City Biodiversity Action Plan 2021-2025 (DCC, 2021)	n/a	<p>Dublin City Biodiversity Action Plan aims to guide how we can find solutions in Dublin to deal with the biodiversity crisis. Relevant objectives include:</p> <ul style="list-style-type: none"> <li>• Preserve and restore diverse habitats such as wetlands, woodlands, and grasslands to support local biodiversity.</li> <li>• Manage and control invasive plant and animal species that threaten native ecosystems and species.</li> <li>• Encourage the planting of native plant species to support local wildlife and enhance ecosystem resilience.</li> <li>• Safeguard and promote the protection of native wildlife species through habitat</li> </ul>	No. As the overall aim of the action plan is to protect biodiversity, in-combination effects with the Proposed Development are not predicted.



## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

Plan	Conflicting Policies	Protective Policies	Potential for In-combination Effects
		<p>preservation and responsible management.</p> <ul style="list-style-type: none"> <li>Establish monitoring programs to track biodiversity trends and assess the effectiveness of conservation actions.</li> </ul>	
Eirgrid Grid Implementation Plan (2023-2028) (Eirgrid, 2024)	n/a	<p>The Grid Implementation Plan (IP) sets out the development of the onshore and offshore grid network as well as temporary emergency generation development. The IP includes the projects which comprise the Powering Up Dublin Programme. The plan sets out a number of policies and objectives for the protection of the natural environment and biodiversity, including:</p> <ul style="list-style-type: none"> <li>BIODO1: "That any grid development project, either individually or in combination with other projects, that has the potential to give rise to significant effect on the integrity of any European (Natura) site(s) shall be subject to AA in accordance with Article 6 of the EU Habitats Directive".</li> <li>ENVP3: To protect the water environment, water quality and aquatic ecology in accordance with the EU Water Framework Directive, in the development of its transmission projects.</li> <li>BIODP1: To protect flora, fauna and habitats and sites designated in the Habitats Directive, the Birds Directive, the Wildlife Act 1976 (as amended), the Flora Protection Order (S.I. no. 235 of 2022) and the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended).</li> </ul>	No. The Plan was subject to SEA and AA. With the incorporation of biodiversity objectives within the plan and the implementation of mitigation measures contained within the plan, the effects of the development plan will not act in combination with the Proposed Development.
Powering Up Dublin Programme	n/a	<p>Due to the ageing of Dublin's electricity infrastructure, the Powering Up Dublin Programme has been introduced as a means to strengthen key electricity infrastructure in Dublin and the surrounding area, making the city 'renewable ready'. The programme is set to replace and upgrade five 220kV circuits across Dublin city. As part of the Powering Up Dublin programme, a</p>	The Central Dublin Substation Project is one of the ongoing plans contained within the Powering Up Dublin Programme. The other projects have been or will be subject to their own AA screenings (And where necessary AA). In-combination effects with the Proposed Development are not predicted.

Plan	Conflicting Policies	Protective Policies	Potential for In-combination Effects
		<p>new 220kV/110kV Gas Insulated Substation (GIS)</p> <p>has also been identified as the best solution to address</p> <p>the city's growing electricity demand.</p>	<p>Additionally, there are protective mitigatory policies for European sites inherent in EirGrid's Grid Implementation Plan 2023-2028 (which includes the projects comprising the Powering Up Dublin Programme), which was subjected to AA.</p>
Greater Dublin Area Transport Strategy 2022-2042		<p>The Transport Strategy for the Greater Dublin Area 2022- 2042 (Transport Strategy) replaces the previous framework, titled the Transport Strategy for the Greater Dublin Area 2016- 2035, which was approved by the then Minister for Transport, Tourism and Sport in 2016. Four objectives have been developed to support the delivery of the overall aim of the Transport Strategy.</p> <ul style="list-style-type: none"> <li>• <b>5.3.1 An Enhanced Natural and Built Environment</b> To create a better environment and meet our environmental obligations by transitioning to a clean, low emission transport system, increasing walking, cycling and public transport use, and reducing car dependency.</li> <li>• <b>5.3.2 Connected Communities and Better Quality of Life</b> To enhance the health and quality of life of our society by improving connectivity between people and places, delivering safe and integrated transport options, and increasing opportunities for walking and cycling.</li> <li>• <b>5.3.3A Strong Sustainable Economy</b> To support sustainable economic activity and growth by improving the opportunity for people to travel for work or business where and when they need to and facilitating the efficient movement of goods.</li> <li>• <b>5.3.4 An Inclusive Transport System</b> To deliver a high quality, equitable and accessible transport system, which caters for the needs of all members of society</li> </ul>	<p>No. The Plan was subject to SEA and AA. With the implementation of mitigation measures contained within the plan, the effects of the Strategy will not act in-combination with the Proposed Development.</p>

## 6.4.2 Projects

A search was conducted of planning applications (projects) using My Plan map viewer<sup>16</sup> and the Dublin City Planning Application Map<sup>17</sup>. The search was limited to the five-year period preceding the date of issue of this report and excluded retention applications (i.e. typically local-scale residential or commercial developments where an impact has already occurred), incomplete, withdrawn, and refused applications. Furthermore, a search of An Coimisiún Pleanála's (ACPs) website was completed to identify any relevant applications within the past five years, including Strategic Infrastructure Developments (SID) and Strategic Housing Developments (SHD), and a search for Part 8 applications in the past three years or in close proximity to the Proposed Development was completed. Notable applications (i.e. those with greater potential to result in in-combination impacts) are displayed in Table 6.4 and their potential for in-combination impacts discussed.

**Table 6.4: Planning Search - Projects**

Planning Application Details	Brief Development Description	Potential for In-combination
<b>Planning applications</b>		
Ref. no: 2071/20 Applicant: Circle K Status: Granted 22/06/2020 Distance from Proposed Development: 1.7 km Location: Circle K, Yard 3, Alexandra Road, Dublin Port, Dublin 1	Increasing the containment volume of the existing bund. Modifications will include raising the height of the existing bund wall by circa 0.5m, extending the bund to the east and lowering the ground level in the area of this bund extension from approximately 4.07m to 3.8m.	No. This development has undergone an Appropriate Assessment Screening, where it was determined that the development, either in itself or in combination with any other plans or projects, is not likely to have a significant impact on any European site. Given the scale of the development; there is no potential for likely significant in-combination effects on any European site.
Ref. no: 2697/20 Applicant: Electricity Supply Board (ESB) Status: Granted 28/08/2020 Distance from Proposed Development: 1.2 km Location: North Wall Power Generating Station, Alexandra Road, Dublin 1	The replacement of existing indoor gas turbines with new and more efficient indoor gas turbines, the replacement of one of the two existing exhaust chimney stack's (approx. 70m tall) and its re-construction at a reduced height of 65m to mirror the second existing exhaust stack, the installation of new gas compressors with associated fan coolers, the replacement of existing roof-mounted fan coolers, a fuel oil pumphouse, a demineralised water pumphouse, a new 1,000m <sup>3</sup> demineralised water tank (approx. 10m tall), a new 1,000m <sup>3</sup> gas oil storage tank (approx. 10m tall).	No. This development has undergone an Appropriate Assessment Screening, where it was determined that the development either individually or in combination with other plans or projects, will not have Likely Significant Effects on any European sites. Given the scale, location, and nature of the development, there is no potential for likely significant in-combination effects on any European site.
Ref. no: 4585/23 Applicant: Dublin Port Company Status: Granted 13/08/2024 Distance from Proposed Development: 0.7 km Location: Dublin Port. Bounded by Alexandra Road,	<ul style="list-style-type: none"> <li>Demolition of overhead bulk material conveyor system (2no. North/South and 1no. East/West), 2no. elevator/weighing towers, transformer building and weighbridge, and associated infrastructure;</li> <li>Relocation of rail line;</li> <li>Relocation of reefer gantries and 30m HML towers and provision of 2no. new reefer gantries;</li> </ul>	No. This development has undergone an Appropriate Assessment, in which the NIS concluded that following the implementation of mitigation measures provided within the NIS, the project would have no adverse effects on the integrity of any European sites. Given the scale, location, and nature of the development, and the mitigation measures provided within the NIS, there is no potential for likely significant in-combination effects on any European site.

<sup>16</sup> Available online at [www.viewer.myplan.ie/](http://www.viewer.myplan.ie/) Accessed July 2025

<sup>17</sup> Available online at [www.mapzone.dublincity.ie](http://www.mapzone.dublincity.ie) Accessed July 2025

# Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

Planning Application Details	Brief Development Description	Potential for In-combination
Branch Road No.1 and rail line, Branch Road No.3, and Alexandra Basin	<ul style="list-style-type: none"> <li>Pavement upgrades and reinforcement works and installation of new 30m HML towers;</li> </ul> <p>Construction of a new bulk product silo facility, to include intake/outtake of bulk product from vessels to quayside storage and onward transport. The facility will consist of 6no. bulk product storage silo bins c.30.0m in height (c.1,701sq.m), below ground conveyor system from intake pit to silo bins (c.-7.5m), above ground conveyor system up to c.32.8m in height, bulk material out-loading building c.9.1m in height (c.234sq.m), weighbridge control office c.4.0m in height (c.59sq.m), motor control centre and switch room c.5.080m in height (c.70sq.m), intake elevator tower and weighting tower c.41.11m in height (c.97sq.m), bulk material intake building c.11.66m in height (c.2,326sq.m), administration office and welfare building c.6.8m in height (c.164sq.m), workshop and covered external area c.6.9m in height (c.592sq.m), weighbridges, associated infrastructure, skip area, chemical storage area, diesel tank bunded area, ancillary lighting, automated gate entry, and other associated site infrastructure.</p>	
<p>Ref. no: 4894/22</p> <p>Applicant: Dublin Port Company</p> <p>Status: Granted</p> <p>28/09/2023</p> <p>Distance from Proposed</p> <p>Development: 0.5 km</p> <p>Location: Site which extends from Promenade Road to Alexandra Road, Dublin Port, Dublin 3</p>	<p>Development comprises multiple alterations of the road network in Dublin Port, including</p> <ul style="list-style-type: none"> <li>A new link road from north of Tolka Quay Road to Alexandra Road, comprising an approximately 250 m long road (two north bound and two south bound lanes) with 3 m wide footpaths on either side and two-way segregated cycleway on eastern side, and associated junctions;</li> <li>Removal of No. 1 Branch Road North;</li> <li>The demolition/ breaking out of existing T10 Link Road junction on Tolka Quay Road; Section of Circle K Terminal 1 perimeter fence; and all associated ancillary works.</li> </ul> <p>Part of the site comprises of an establishment to which the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I.209 of 2015) applies.</p>	<p>No. This application was accompanied by an AA Screening report which concluded that the project, either individually or in combination with other plans or projects, is not likely to have a significant effect on any European sites.</p> <p>Given the scale, location, and nature of the development, there is no potential for likely significant in-combination effects on any European site.</p>
<p>Ref. no: 4353/22</p> <p>Applicant: Dublin Port Company</p> <p>Status: Granted</p> <p>22/5/2023</p> <p>Distance from Proposed</p> <p>Development: 0.1km</p>	<p>The development will consist of the continuance of use of a 100m long 6.5m wide single lane bridge with access ramps over the M50 and a storage area for imported cars and vans and all associated site development and service works as permitted under planning reg. ref. 2495/17 and reg. ref. 3788/11.</p>	<p>No. This development has undergone an Appropriate Assessment Screening, where it was determined that the development either individually or in combination with other plans or projects, will not have likely significant effects on the integrity of any European sites.</p> <p>Given the scale, location, and nature of the development, there is no potential for likely</p>

# Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

Planning Application Details	Brief Development Description	Potential for In-combination
Location: Tolka Quay Road, Dublin Port, Dublin 1		significant in-combination effects on any European site.
Ref. no: 3220/21 Applicant: Dublin Port Company Status: Granted 14/01/2022 Distance from Proposed Development: 0.4km Location: Dublin Port, Alexandra Road, Dublin 1	The proposed development will consist of construction of a new 1.4km pedestrian walkway and a 2-way cycle lane along East Wall Road and Bond Road from the River Liffey to the Tolka Estuary.  The proposed development and proposed amendments include all associated ancillary works, including site clearance, demolitions, earthworks, pavement construction, drainage services, diversion and installation of utility services, installation of road markings and signs.	No. This development has undergone an Appropriate Assessment, in which the NIS concluded that following the implementation of mitigation measures provided within the NIS, the project would have no adverse effects on the integrity of any European sites.  Given the scale, location, and nature of the development, and the mitigation measures provided within the NIS, there is no potential for likely significant in-combination effects on any European site.
Ref. no: 3773/20 Applicant: Circle K Ireland Energy Ltd Status: Granted 8/3/2021 Distance from Proposed Development: 0.75km Location: Circle K, Terminal 1, Alexandra Road, Dublin Port, Dublin 1	Planning permission for the proposed development consists of dismantling a portion of the Terminal 1 site incl. the loading gantry, office buildings, workshops and control tower. Existing equipment including pumps will be moved to facilitate transfer of fuel to other terminals and Bill of Lading facilities will be moved as part of the works and the existing warehouse will be modified to store spare parts. The modifications also include relocating the Jet Fuel loading gantry and installing a new internal entrance gate and fence which is subject of an exempted development application (see application 0184/20). The Major Accidents Directive is applicable to the site and as such a significant modification assessment has been completed.	No. This development has undergone an Appropriate Assessment Screening, where it was determined that the development either individually or in combination with other plans or projects, will not have likely significant effects on the integrity of any European sites.  Given the scale, location, and nature of the development, there is no potential for likely significant in-combination effects on any European site.
<b>ACP Cases</b>		
Ref. no: ABP-320250-24 Applicant: Dublin Port Company Status: Live case Distance from Proposed Development: 0.5km Location: Dublin 1, 3 and 4	Proposed '3FM Project' consisting of a Southern Port Access Route and road network improvements, construction of a Lo-Lo container terminal, Ro-Ro freight terminal and other works.	No. This development has undergone an Appropriate Assessment, in which the NIS concluded that following the implementation of mitigation measures provided within the NIS, the project would have no adverse effects on the integrity of any European sites.  Given the scale, location, and nature of the development, and the mitigation measures provided within the NIS, there is no potential for likely significant in-combination effects on any European site.
Ref. no: ABP-306648-20 Applicant: Dublin Port Company Status: Granted 8/25/2020 Distance from Proposed Development: 0.5 Location: Terminal 4 North Lands, Dublin Port, Dublin 1, bounded by Bond Road, Tolka Quay	Demolition of 10 buildings and removal of temporary structures, for use of the site as a multi-functional storage yard and facilitate wider infrastructural upgrades to provide additional capacity within the Port.	No. This development has undergone an Appropriate Assessment Screening, where it was determined that the development either individually or in combination with other plans or projects, will not have likely significant effects on the integrity of any European sites.  Given the scale, location, and nature of the development, there is no potential for likely significant in-combination effects on any European site.



## Central Dublin Substation Project: Report to Inform Screening for Appropriate Assessment

Planning Application Details	Brief Development Description	Potential for In-combination
<b>Road &amp; Promenade Road</b>		
Ref. no: ABP-309406-21 Applicant: Development Ocht Limited Status: Granted with revised conditions 01/03/2022 Distance from Proposed Development: 0.25 km Location: 68-72, East Road, Dublin 3	Construction of a 106-bedroom hotel from 1 to 8 storeys high.	No. No shared pathway to any European site exists between this development and the Proposed Development.
Ref. no: ABP-312692-22 Applicant: Dublin Port Company Status: Granted with revised conditions Distance from Proposed Development: 0.45km Location: Dublin Port, Alexandra Road, Dublin 1	Construction of a pedestrian walkway and a cycle lane along East Wall Road and Bond Road from the River Liffey to the Tolka Estuary with all associated site development works	No. An NIS accompanied this application, which concluded that, with the implementation of mitigation measures provided within the NIS, the project will not adversely affect the integrity of any European site.  Given the scale, location, and nature of the development, and the mitigation measures provided within the NIS, there is no potential for likely significant in-combination effects on any European site.
<b>SHD/SID applications</b>		
Ref. no: ABP-320164-24 Applicant: Córas Iompair Éireann Status: Live Distance from Proposed Development: 0.40 km Location: Dublin City Centre and Drogheda, located in counties Dublin, Meath and Louth	DART + Coastal North Railway Order 2024 - Northern Line between Dublin City Centre and Drogheda including the Howth Branch	No. An NIS accompanied this application, which concluded that, with the implementation of mitigation measures provided within the NIS, the project will not adversely affect the integrity of any European site.  Given the location and nature of the development, and the mitigation measures provided within the NIS, there is no potential for likely significant in-combination effects on any European site.
Ref. no: ABP-314232-24 Applicant: Córas Iompair Éireann Status: Live - Make Railway Order w cons Distance from Proposed Development: 0.40 km Location: County Dublin, County Meath, County Kildare	DART+ West Railway Order - Dublin City to Maynooth and M3 Parkway	No. An NIS accompanied this application, which concluded that, with the implementation of mitigation measures provided within the NIS, the project will not adversely affect the integrity of any European site.  Given the location and nature of the development, and the mitigation measures provided within the NIS, there is no potential for likely significant in-combination effects on any European site.

### 6.4.3 In-combination Conclusion

Having regard for the above (**Section 6.4.1** and **Section 6.4.2**), no pathways have been identified by which any plan or project could have a likely significant in-combination effect on any European sites. It is concluded that there is no potential for significant in-combination effects.

## 7 Screening Conclusion and Statement

RPS has prepared this report to inform the AA screening of the competent authority, as to whether the Proposed Development, individually or in combination with other plans or projects, and in view of best scientific knowledge, is likely to have a significant effect on any European site(s).

The screening exercise was completed in compliance with relevant European Commission guidance, national guidance, and current case law. The potential impacts of the proposed development have been considered in the context of the European sites potentially affected, their QIs and/or SCIs, and their conservation objectives.

Through an assessment of the source-pathway-receptor model, which considered the ZOI of effects from the Proposed Development and Grid Connection and the potential in-combination effects with other plans or projects, the following findings were reported:

It can be excluded, on the basis of objective information, that the Proposed Development and Grid Connection (not part of the subject planning application), individually or in combination with other plans or projects, will have a significant effect on a European site..

As per Part XAB, Section 177U(5) of the Planning and Development Act 2000, as amended:

*“The competent authority shall determine that an appropriate assessment of a draft Land use plan or a proposed development, as the case may be, is not required if it can be excluded, on the basis of objective information, that the draft Land use plan or proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.”*

In conclusion, it is the opinion of RPS that AA ('Stage 2') is not required.

## 8 References

- Balmer, D. E., Gillings, S., Caffrey, B. J., Swann, R. L., Downie, I. S., & Fuller, R. J. (2013). Bird Atlas 2007- 11: the breeding and wintering birds of Britain and Ireland. Thetford: BTO
- Benson, L. (2009) Use of inland feeding sites by Light-bellied Brent Geese in Dublin 2008-2009: a new conservation concern? Irish Birds 8: 563-570
- Cutts, N., Phelps, A., & Burdon, D. (2009). Construction and waterfowl: Defining sensitivity, response, impacts and guidance. Report to Humber INCA by the Institute of Estuarine and Coastal Studies, University of Hull. EN (2003) The Humber Estuary European Marine Site: English Nature's advice given under Regulation, 33(2).
- DoEHLG (2010) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities. Department of Environment, Heritage and Local Government.
- Department of Housing, Local Government and Heritage (2024) National Biodiversity Action Plan 2023-2030.
- Dublin City Council (2021) Dublin City Biodiversity Action Plan 2021-2025.
- EC (2000) Communication from the Commission on the Precautionary Principle. Office for Official Publications of the European Communities, Luxembourg.
- EC (2001) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC. Office for Official Publications of the European Communities, Brussels.
- EC (2013) Interpretation Manual of European Union Habitats. Version EUR 28. European Communities, Luxembourg.
- EC (2018) Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. Office for Official Publications of the European Communities, Luxembourg.
- EC (2021a) (Amended) Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC. Office for Official Publications of the European Communities, Luxembourg.
- EC (2021b) (Amended) 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, Office for Official Publications of the European Communities, Luxembourg. European Commission.
- EirGrid (2024) Grid Implementation Plan 2023–2028. EirGrid, Dublin, Ireland.
- Enviroguide Consulting (2019) Natura Impact Statement- Information for Stage 2 Appropriate Assessment. Proposed Strategic Housing Development, St Paul's College, Sybil Hill Road, Raheny, Dublin 5.
- Hardey, J., Crick, H., Wernham, C., Riley, H., Etheridge, B. & Thompson, D. (2013) Raptors: a field guide to survey and monitoring (3rd Edition). The Stationery Office, Edinburgh.
- NPWS (2012). Conservation Objectives: Baldoyle Bay SAC 000199. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2013a). Conservation Objectives: South Dublin Bay SAC 000210. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2013b). Conservation Objectives: North Dublin Bay SAC 000206. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2013c). Conservation Objectives: Rockabill to Dalkey Island SAC 003000. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2013d). Conservation Objectives: Baldoyle Bay SPA 004016. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2013e). Conservation Objectives: Malahide Estuary SAC 000205. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht

NPWS (2013f). Conservation Objectives: Malahide Estuary SPA 004025. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2013g) Conservation Objectives: Rogerstown Estuary SPA 004015. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2015a). Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2015b). Conservation Objectives: North Bull Island SPA 004006. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2016). Conservation Objectives: Howth Head SAC 00202. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2017a) Conservation Objectives: Ireland's Eye SAC 002193. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs

NPWS (2017b) Conservation Objectives: Wicklow Mountains SAC 002122. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2019a) The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview. Unpublished Report, National Parks & Wildlife Services. Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2019b) The Status of EU Protected Habitats and Species in Ireland. Volume 2: Habitat Assessments. Unpublished Report, National Parks and Wildlife Service. Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2019c) The Status of EU Protected Habitats and Species in Ireland. Volume 3: Species Assessments. Unpublished Report, National Parks and Wildlife Service. Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2021) Conservation Objectives: Glenasmole Valley SAC 001209. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage

NPWS (2022a). Conservation objectives for Dalkey Islands SPA [004172]. First Order Site-specific Conservation Objectives Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2022b). Conservation objectives for Howth Head Coast SPA [004113]. First Order Site-specific Conservation Objectives Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2022c). Conservation objectives for Ireland's Eye SPA [004117]. First Order Site-specific Conservation Objectives Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2022d) Conservation objectives for Wicklow Mountains SPA [004040]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.

NPWS (2022e) Conservation objectives for Lambay Island SPA [004069]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.

NPWS (2023) Conservation Objectives: North-west Irish Sea SPA 004236. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

NRA (2008) Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes.

NRA (2008) Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes.

NRA. (2009) *Guidelines for Assessment of Ecological Impacts of National Roads Schemes. Revisions 2, 1st June 2009*. National Roads Authority, Dublin.

NatureScot<sup>18</sup> 2016 *Assessing Connectivity with Special Protection Areas (SPAs)* Guidance Document, Version 3 – June 2016.

OPR (2021) Appropriate Assessment Screening for Development Management. Office of the Planning Regulator.

Scottish Environmental Protection Agency (SEPA) (2014). Land-use Planning System SEPA Guidance Note 4. Planning guidance on on-shore windfarm developments. Scottish Environmental Protection Agency.

Scott Cawley (2017). Natura Impact Statement- Information for Stage 2 Appropriate Assessment. Proposed Residential Development, St. Paul's College, Sybil Hill Road, Raheny, Dublin 5.

Whitfield, D. P., Ruddock, M., & Bullman, R. (2008) Expert opinion as a tool for quantifying bird tolerance to human disturbance. *Biological Conservation*, 141(11), 2708-2717.

---

<sup>18</sup> Formally known as Scottish Natural Heritage (SNH)