



An
Bord
Pleanála

Inspector's Report

ABP-314567-22

Development

Underground 110kV transmission line connections between the permitted Kishoge 110kV GIS substation and the permitted Aungierstown - Castlebaggot underground 110kV transmission line.

Location

Ballymakailly, Lucan to Grange Castle Business Park, Baldonnell, County Dublin.

Planning Authority

South Dublin County Council

Applicant

EdgeConneX Ireland Limited

Type of Application

Application for approval under Section 182A of the Planning and Development Act, 2000, as amended

Prescribed Bodies

1. South Dublin County Council
2. Transport Infrastructure Ireland
3. Geological Survey Ireland

Observers

None

Date of Site Inspection

20th February 2023

Inspector

Alaine Clarke

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1.0 Introduction

- 1.1. An application under the provisions of Section 182A of the Planning and Development Act, 2000, as amended, was received by An Bord Pleanála from EdgeConneX Ireland Limited for the development of underground 110kV transmission line connections between the permitted Kishoge 110kV GIS substation and the permitted Aungierstown - Castlebaggot underground 110kV transmission line.
- 1.2. Following pre-application consultation, the Board determined (ABP 311907-21) that the proposed development falls within the scope of section 182A of the Planning and Development Act, 2000 (as amended) and that the application should be made directly to the Board.

2.0 Site Location and Description

- 2.1. The 3.78 hectare site is in the administrative area of South County Dublin at Grange South Business Park, Baldonnell, Dublin 22 in the townlands off Ballymakailly, Clutterland, Grange, Ballybane, Kilmactalway, Milltown, and Aungierstown and Ballybane. The Grand Canal is c. 100m to the north of red line boundary. Much of the lands to the east have been developed as part of the wider Business Park development with green fields to the south and west. Further green fields and Lucan Sarsfields GAA club are located to the north. The Griffeen River is located to the southwest of the Grange Castle Business Park Site.
- 2.2. The proposed 110kV underground transmission line connections will originate from the Kishoge 110kV GIS substation. The proposed 110kV underground transmission line connections extend northwards from the Kishoge 110kV substation, before proceeding east and then to the south and continuing alongside the R120 before continuing to the south and crossing the R134 New Nangor Road. The route then proceeds further southward and to the southeast to cross the R120, continues to the south and then to the east (adjacent to the Old Nangor Road), crossing underneath the Griffeen River and proceeding eastwards and then south before crossing the Baldonnell Road and proceeding eastward within lands to the south of the Grange Castle South Business Park access road, before reaching and connecting to the Aungierstown – Castlebaggot underground transmission line. The eastern side of the

R120 opposite the subject landholding is defined by several detached houses, behind which is an existing data storage facility.

- 2.3. The extant permission for the Aungierstown substation (under construction) also provides for connection with the existing Castlebaggot substation, comprising of an underground 110kV double circuit transmission line, which the current proposed transmission line will break into and provide a loop-in to one circuit of (the Aungierstown-Castlebaggot circuit). The permitted underground 110kV transmission line connection between the Aungierstown and Castlebaggot substations crosses the estate road separating the two substations, linking to the GIS substation buildings within each of the two substation compounds.

3.0 Proposed Development

- 3.1. Permission is sought for the following:

- Provision of underground 110kV transmission line (loop-in) connections between the permitted Kishoge 110kv Gas Insulated switchgear (GIS) substation on a site within the townland of Ballymakailly, west of Newcastle Road (R120), Lucan, Co. Dublin, and the permitted Aungierstown – Castlebaggot underground 110kV transmission line located at Grange Castle South Business Park, Baldonnell, Dublin 22.
- The Kishoge to Aungierstown transmission line circuit will include 4 no. joint bays, while the Kishoge to Castlebaggot transmission line circuit will include 5 no. joint bays. The proposed 110kV underground transmission line connections will cover a distance of c. 2.2 kilometres.
- The development includes enabling works, services diversions, joint bays, connections to the Kishoge substation and the Aungierstown – Castlebaggot transmission line, provision of a medium voltage electricity connection to serve the Kishoge substation from an existing ESB substation to the east of the R120, landscaping, services, all associated construction works, and all ancillary works.

- 3.1.1. Once energised, the Kishoge 110kV Substation and underground 110kV transmission lines loop-in connection will form part of ESB Networks infrastructure.

3.1.2. The applicant states that the Kishoge 110kV transmission cable installation will be designed to support the power demand of the EdgeconnecX Datacentres and the future growth within the Grangecastle area.

3.1.3. The application includes the following documentation:

- planning application form;
- letters of consent (attached to the application form);
- site notice;
- newspaper notices;
- cover letter;
- Planning Report
- Engineering Drawings
- Construction and Environmental Management Plan
- Environmental Impact Assessment Report (EIAR)

4.0 Planning History

4.1. Associated Development

4.1.1. **ABP Ref. 311907-21:** An Bord Pleanála determined that the proposed underground 110kV transmission line connections between the Kishoge 110kV GIS substation in Ballymakailly, West of Newcastle Road, Lucan, Co. Dublin and the permitted Aungierstown-Castlebaggot underground 110kV transmission line at Grange Castle South Business Park, Baldonnell, Dublin 22 constitutes Strategic Infrastructure within the meaning of section 182A of the Act.

4.1.2. **SD19A/0004:** Permission granted for enabling works to facilitate the future development of the site.

4.1.3. **ABP Ref. 305948-19 / SD19A/0042:** Permission granted for a phased development of 4 single storey data halls all with associated plant at roof level, 32 standby generators, office and service areas, service road infrastructure, car parking, ESB substation/transformer yard. The application included an EIAR.

- 4.1.4. **SD22A/0105:** Permission granted for amendments to the electrical substation compound and structures permitted under Reg. Ref. SD19A/0042 and ABP Ref. 305948-19 comprising of amendment to the layout and extent of the permitted substation compound.
- 4.1.5. **SD21A/0042:** Permission granted for the construction of two single storey data centres with associated office areas, 3 no. gas powered generation plant buildings and associated site works, including amendments to internal access road under SDCC planning Ref. SD19A/0042/ABP Ref. 305948. The application included an EIAR.
- 4.1.6. **ABP Ref. 314646 / SD22A/0289:** Permission granted for the amendment of Condition no. 3(ii) and 3(iii) of planning reg. ref. SD21A/0042 relating to a review of the permitted gas plant.
- 4.1.7. **SD22A/0333:** Permission sought for the construction of 2 adjoined single storey data centres including amendments to internal access road under SDCC planning Ref. SD19A/0042/ABP Ref. PL06S.305948 and SD21A/0042. The application included an EIAR. Undecided.
- 4.1.8. **Aungierstown Substation: ABP Ref. 309146:** Permission granted for 2 no. 110kV transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation.
- 4.1.9. **Castlebaggot Substation: ABP Ref. VA0019:** Permission granted for a 220/110 kV Gas Insulated Switchgear (GIS) substation compound, removal of overhead lines, installation of underground cables and associated works.
- 4.1.10. There are multiple permissions relating to data centre and substation development within the Grange Castle Business park which are adjacent to but unconnected to the proposed development. Of relevance is:
- ABP 309773:** provision of 2 no. 110kV transmission lines with a gas insulated switchgear (GIS) substation compound as the permission consents to pass underneath the Griffeen River at the same point as that proposed in the subject application.

5.0 Policy Context

5.1. National Planning Framework (NPF)

- 5.1.1. The National Planning Framework provides policies, actions and investment to deliver 10 National Strategic Outcomes (NSO) and priorities of the National Development Plan. NSO 5 'A Strong Economy Supported by Enterprise, Innovation and Skills' is relevant to the proposed development, while National Policy Objective (NPO) 73C relates to the timely delivery of enabling infrastructure to deliver planned growth and development.
- 5.1.2. It is recognised that Ireland is very attractive in terms of international digital connectivity, climatic factors and current and future renewable energy sources for the development of international digital infrastructures, such as data centres. It is an objective under NSO 5 to seek the "promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities."

5.2. Climate Action Plan 2023

- 5.2.1. The Climate Action Plan 2023 (CAP23) builds on the measures and technologies set out in previous Climate Action Plans and sets out specific actions required to halve emissions by 2030 and reach net zero by 2050. CAP23 will also be the first to implement carbon budgets and sectoral emissions ceilings that were introduced under the Climate Action and Low Carbon Development (Amendment) Act 2021.
- 5.2.2. In terms of electricity demand management, it is recognised that new demand growth from large energy users, such as data centres, will have to be moderated in the short-medium term to protect security of supply and ensure consistency with the carbon budget programme. The electricity demand flexibility of large energy users will have to be increased through enhanced reporting and matching of demand with usage of lower carbon energy sources. Large Energy Users (LEUs) will be expected to make a higher proportional contribution to the target, and a review will be carried out of the gas and electricity connection policies for new LEUs.

5.3. Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy July 2022

- 5.3.1. The Statement includes a section dealing with electricity infrastructure and states:

"A consistent and supportive whole of government approach will be brought to the realisation of the transmission and distribution assets required to support the level of data centre ambition that we adopt."

5.4. Regional Spatial & Economic Strategy for the Eastern & Midland Region, 2019-2031

- 5.4.1. This document is a 12-year strategic regional development framework that will facilitate the delivery of the NPF. It is a guiding principle of the Strategy for enterprise development to align to the national strategy and approach for data centres in terms of the right location for use and energy demand. Regional Policy Objective (RPO) 10.20 states: *"Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy...."*

5.5. South Dublin County Council Development Plan, 2022-2028

- 5.5.1. The South Dublin County Development Plan 2022-2028 is the operative plan, and it came into effect on 3rd August 2022.
- 5.5.2. The subject site is zoned 'EE' where the objective is *"to provide for enterprise and employment related uses."* Enterprise centres, industry and public services are among the uses permitted in principle under this zoning objective. Data centres are open for consideration. Table 12.27 sets out the key principles for development within enterprise and employment zones.
- 5.5.3. It is recognised in Section 11.5 of the Development Plan that *"...the development of energy networks in a safe and secure way to meet projected demand levels and to ensure a long-term, sustainable and competitive energy future for Ireland will be critical to our economy and to enabling the relevant grid connections for renewable energy."*

- 5.5.4. Policy IE6 seeks to “*protect the existing electricity infrastructure and support the development of a safe, secure and reliable supply of electricity and the development of enhanced electricity networks as well as new transmission infrastructure projects subject to the relevant environmental assessments.*” Policy IE6 Objective 2 seeks “*to support the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission / distribution of a renewable energy focused generation in line with RPO 10.22.*”
- 5.5.5. Appendix 6 of the Development Plan includes a definition of Public Services, which is defined as including “*all service installations necessarily required by electricity, gas, telephone, radio, telecommunications, television, drainage and other statutory undertakers...*”.

5.6. **Natural Heritage Designations**

- 5.6.1. The Grand Canal proposed Natural Heritage Area is located approximately c.100m north of the subject site. The Rye Water Valley/ Carton SAC (Site code: 001398) is the nearest European Site located approximately c. 4.3km north-west of the subject site. The River Griffeen is a tributary of the River Liffey which flows into Dublin Bay c. 16km east of the development site.

6.0 **Consultations**

- 6.1. Details of the application were circulated to the following prescribed bodies:
- Minister for Housing, Local Government and Heritage
 - Minister for the Environment, Climate and Communications
 - Transport Infrastructure Ireland (TII)
 - South Dublin County Council (SDCC)
 - Irish Water
 - Irish Aviation Authority
 - Commission for Regulation of Utilities, Water and Energy
- 6.2. Responses were received from South Dublin County Council, TII and GSI which are summarised below.

6.3. Prescribed Bodies

6.3.1. South Dublin County Council (SDCC)

6.3.2. The relevant planning issues in relation to the proposed development and supporting development plan objectives are set out. Most of the site is zoned 'EE' to provide for enterprise and employment. The roads are not subject to any zoning and are 'transitional areas' noting that it appears that the site crosses into an element of 'RU' (rural and agriculture) zoned land to the south of the canal.

6.3.3. The key points are:

- Notes the applicant states that the Kishogue 110kV transmission cable installation will be designed to support the power demand of the EdgeConneX Datacentres and the future growth within the Grangeacate area.
- Notes that the substantive part of the proposal would be located immediately adjacent to the existing roads infrastructure.
- Consider that further information is required with respect to:
 - Relationship with existing surface water sewers;
 - Relationship between river crossing detail in relation to the stream at the north end of the site;
 - Requirement for a section 50 licence;
 - Relationship with existing watermains and foul sewers;
 - Obtaining a confirmation of feasibility from Irish Water.
- A small element of the site surrounding the Griffeen River is subject to flood risk. There are no objections in terms of flood risk, subject to conditions.
- Given the proposal is underground, there would be no long-term visual impacts; conditions are recommended requiring details where existing green infrastructure is impacted.
- The Roads Section consider the proposal is acceptable subject to conditions.
- Regarding environmental carrying capacity of the route: the route is considered appropriate;

- Regarding biodiversity – satisfied that the relevant surveys have been undertaken.
- Regarding residential amenity – mitigation measures should be adhered to.
- Regarding archaeology – a programme of licenced archaeological monitoring will be agreed with the National Monuments Service for areas not previously subject to archaeological testing.
- Conditions are recommended in the event of a grant of permission.

6.3.4. The submission includes Appendices 1--5 copies of internal technical reports.

- Appendix 1: Water Services – request additional information, including, submission of drawings showing cross sections of existing surface water sewers and attenuation tanks along and adjacent to proposed cable route, show horizontal and vertical distances between proposed cables and existing surface water sewer adjacent to same; submission of a drawing showing the river crossing detail in relation to the culverted stream at the north of the site; clarify if a section 50 licence from the OPW is required for the river crossing.
- Appendix 2: Irish Water – request additional information relating to drawings showing cross sections of existing watermains and sewer adjacent to proposed cable route, indicating horizontal and vertical distances between proposed cables and watermains and sewers; obtain a Confirmation Letter of Feasibility.
- Appendix 3: Public Realm – no objection subject to conditions.
- Appendix 4: Roads – no objection subject to conditions.
- Appendix 5: IFI – no objection subject to Horizontal Directional Drilling (HDD) beneath the Griffeen River; that development is carried out in accordance with the submitted method statement.

6.3.5. Transport Infrastructure Ireland (TII)

- TII have no observations to make.

6.3.6. Geological Survey of Ireland (GSI)

6.3.7. Reference is made to available GSI resources which may be useful.

6.3.8. County Geological Sites (CGS) in the vicinity are indicated to be Belgard Quarry and Newcastle Buried Channel. There are no envisaged impacts on the integrity of current CGSs by the proposed development;

6.3.9. Notes that an aquifer classed as 'Locally Important Aquifer - bedrock which is Moderately Productive only in Local Zones', underlies the site. The groundwater vulnerability at the site is classed as high to extreme vulnerability.

6.4. Public Submissions

6.4.1. No public submissions were received.

6.5. Applicant Response to Submissions

6.5.1. The applicant prepared a response to the submissions received by the Board on 3rd March 2023 and contained a detailed responses to submissions made. The significant points of the response are summarised as follows:

- The applicant would be willing to accept a condition requiring (a) the submission of detailed drawings showing cross sections of existing Surface water Sewers and attenuation tanks along and adjacent to the proposed cable route and (b) crossing details for the culverted stream to the north of the site.
- The project does not give rise to a requirement for either a connection agreement with Irish Water, or a Confirmation of Feasibility.
- The applicant is willing to accept the conditions as suggested by the Parks and Public Realm Department and the Roads Section as set out in the SDCC report.

7.0 Oral Hearing

7.1. The Board directed on the 8th February 2023 that an Oral Hearing in respect of the application should not be held.

8.0 Assessment

8.1. Introduction

8.1.1. Having examined the application details and all other documentation on file, including all of the submissions received in relation to the application, and inspected the site, and having regard to relevant local/regional/national policies and guidance, I consider that the main issues in the planning assessment are as follows:

- Principle of development
- Drainage and flooding impacts
- Impact on archaeology
- Impact on biodiversity
- Environmental Impact Assessment (see section 9.0)
- Appropriate Assessment (see Section 10.0).

The following assessment is dealt with under these headings.

8.2. Principle of Development and Planning Policy

8.2.1. Zoning

8.2.2. The majority of the site is zoned 'EE' where the objective is "*to provide for enterprise and employment related uses.*" Enterprise centres, industry and public services are among the uses permitted in principle under this zoning objective. 'Public services' include.... "*all service installations necessarily required by electricity....and other statutory undertakers...*"

8.2.3. A small portion of the site, to the north, extends into lands zoned 'RU' where the objective is to protect and improve rural amenity and to provide for the development of agriculture. 'Public services' are among the uses permitted in principle under this zoning objective.

8.2.4. South Dublin County Council in its submission notes that the (public) roads are not subject to a zoning provision and in these instances the adjacent zoning objectives should be taken into consideration. I note that the adjoining zoning objectives to the

public roads where the cable route is proposed to run is zoned 'EE' and in this regard the relevant objective of public roads should be considered as zoned for enterprise and employment use. South Dublin County Council further notes in its submission that 'public services' are 'permitted in principle' in 'EE' zoned lands and 'RU' zoned lands.

- 8.2.5. The proposed development is also in accordance with the Policy IE6 of the South Dublin County Development Plan 2022-2028 which seeks to *"protect the existing electricity infrastructure and support the development of a safe, secure and reliable supply of electricity and the development of enhanced electricity networks as well as new transmission infrastructure projects subject to the relevant environmental assessments."* Section 11.5 of the Development Plan recognises that *"...the development of energy networks in a safe and secure way to meet projected demand levels and to ensure a long-term, sustainable and competitive energy future for Ireland will be critical to our economy and to enabling the relevant grid connections for renewable energy."*
- 8.2.6. It is an objective of the National Planning Framework to seek the *"promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities."* Furthermore, it is a regional policy objective as set out in the Regional Spatial and Economic Strategy to support the national objective to promote Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities at appropriate locations. The grid connection will facilitate the permitted data centre development in a cluster of existing data centres in Grange Castle Business Park where the necessary electricity infrastructure can be put in place to support the power demands of these developments.
- 8.2.7. I note the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy (July 2022) which seeks a supportive whole of government approach to realise the transmission and distribution assets required to support data centre ambition.
- 8.2.8. I note that the principle of the data centre is not under determination as part of this planning application. The principle of a data centre has already been accepted and it follows that the principle of any development required to enable the permitted

development should also be acceptable in principle subject to an assessment under any other relevant criteria, as covered below.

- 8.2.9. Finally, significant precedent exists for the establishment of this use on EE zoned lands in the surrounding area, and overall, I consider that the proposed development is generally in accordance with the policies and objectives of local, regional and national land use planning policy.

8.3. Drainage and Flooding Impacts

- 8.3.1. The Griffeen River is located to the southeast of the permitted Kishoge substation and will be intersected by the proposed gridline route. The Griffeen River rises in the townland of Greenogue, approximately 3.5 km south of the proposed development. It flows in a northerly direction where it is culverted beneath the Grand Canal and from there it flows north through Lucan. The Griffeen River enters the River Liffey just north of Lucan town. According to application documentation, a section of the Griffeen River was realigned during the construction of the Business Park and associated access roads and it now runs alongside the Grange Castle Business Park internal access road in a northerly direction. It is proposed to undertake a horizontal directional drilling (HDD) of the Griffeen River crossing.
- 8.3.2. Chapter 6 of the EIAR deals with hydrology and covers matters relating to flood risk. One historical flood event in the area was identified immediately to the west of the proposed gridline route on the Peamount Road which was recorded in 2000 and was associated with a freak storm event. OPW CFRAM maps indicate that part of the site is within Flood Zone B, noting that pluvial mapping indicates that the site is not at risk from pluvial flooding. There is no evidence of groundwater flooding. The assessment identified no flood hazards for the proposed development.
- 8.3.3. During the operational phase of the proposed project, there is limited potential for site activities to impact on the hydrogeological environment of the area as the proposed project is a grid connection and the area will be backfilled and reinstated as current. There will be no impact on local or regional groundwater resources as a result of the proposed project. While the OPW Flood Risk Management Guidelines provides description for different types of development, there is no specific reference to electricity cables installation. In this regard, I concur with the EIAR wherein it

considers the substation grid connection to be 'less vulnerable' to 'water compatible' type of development, and that a Justification Test for the proposed development is not required.

8.3.4. The SDCC Water Services Dept. has stated that it has 'no objection' with regard to flood risk. With regard to surface water, it seeks further information, as follows:

- drawings showing cross sections of existing Surface Water Sewers and attenuation tanks along and adjacent to proposed cable route;
- a drawing showing river crossing details in relation to the culverted stream at the north end of the site; and
- clarify if a section 50 licence from the OPW is required and if so to obtain same.

8.3.5. Irish Water in its report, raise a similar request for further information and seeks cross sections of existing foul water sewers adjacent to the proposed cable route. It further seeks a confirmation letter of feasibility for the proposed development.

8.3.6. The applicant was invited to respond to the submissions. In its response, the applicant states that it is willing to accept conditions seeking the submission of detailed design drawings illustrating horizontal and vertical distances to services. The applicant also notes that as the project comprises an underground transmission line, it gives rise to no requirement for either a connection agreement with Irish Water, or a Confirmation of Feasibility. The applicant further notes a section 50 licence is not required as underground horizontal directional drilling will be used to cross below the watercourse.

8.3.7. In conclusion, I consider that all issues relating to impacts of the proposed development on water environments have been adequately addressed or can be dealt with by way of condition.

8.4. Impact on Archaeology

8.4.1. The Grand Canal pNHA is approx. 100m north of the redline boundary at the closest point. There are a number of protected structures adjacent to the Grand Canal. I concur with the report of SDCC wherein it is stated that having regard to the existing permissions granted and the landscaping provided as part of those, it is not

considered that the proposed development would have a significant impact in excess of that already granted permission.

8.4.2. I have reviewed the SDCC Development Plan 2022-2028, the National Monuments Service 'Historic Viewer' and considered Chapter 11, 'Archaeology, Architectural and Cultural Heritage' of the EIAR. I note that the submission from SDCC raise no concerns with respect to archaeological impact subject to a condition requiring archaeological monitoring for areas not previously subjected to archaeological testing.

8.4.3. No features of archaeological or architectural heritage were identified along the route of the proposed development, and the majority of the land required for the proposed development has been extensively and significantly developed in the past. The route traverses a number of greenfield areas. In these areas, there is the potential for previously unrecorded archaeological features to survive. Notwithstanding this, a condition can be attached to any grant of permission requiring archaeological monitoring of topsoil stripping in all areas outside the footprint of the previously excavated areas.

8.5. Impact on Biodiversity

8.5.1. The proposed development site is not located within or near to any designated wildlife conservation site. The nearest designated site, Rye Water Valley/ Carton SAC is located approximately 4.3km from the site. The next nearest designated site, Glenasmole Valley SAC, is located c. 8.4km from the site of the proposed development.

8.5.2. A habitat survey was undertaken by the Moore Group and informs Chapter 7, Biodiversity, of the EIAR. The key ecological receptors were determined from desktop review of draft plans to be potential effects on water quality of the Griffeen River species including White-clawed crayfish, salmonids and Otter. It is stated in the EIAR that while the presence of the White-clawed crayfish was recorded in the Griffeen River by the NPWS, the proposed methodology of Horizontal Directional Drilling (HDD) negated the requirement to survey the river for crayfish.

8.5.3. Having regard to the nature of the proposed development, being predominantly underground, with loss to commuting landscape features, a bat survey detector was

not considered necessary. Similarly, a breeding bird survey was considered unnecessary due to habitat conditions being dominated by mosaics of bare ground and artificial surfaces. Upstream and downstream of the Griffeen River were surveyed for mammals (excluding bats). An otter holt was recorded on the north side of the Old Nangor Road stone bridge.

- 8.5.4. To avoid potential negative effects on the otter holt located at the north bank of Griffeen river, the proposed launching and receiving pits of the HDD will be positioned min. 50m from its location. I note that the EIAR states that consultation has taken place with the NPWS, which included an on-site meeting, wherein the HDD method was discussed. I note too that the proposed HDD route will transect the permitted route of 110kV transmission line permitted under ABP ref. 309773.
- 8.5.5. The footprint habitats (of the proposed development) are considered of relatively low biodiversity value at a local level. The landscaped mixed broadleaved woodland and hedgerows are considered of high biodiversity value at a local level.
- 8.5.6. The EIAR states that there will be no direct or indirect effects on the water quality of the Griffeen River. There are no pathways from the development areas to the Griffeen River which leads to the River Liffey and Dublin Bay. There are no predicted effects from the construction phase on the Griffeen River, the River Liffey or on Dublin Bay.
- 8.5.7. I note the SDCC Parks and Public Realm Department report which sets out conditions to be attached in the event of a grant of permission. Reference is made to a “submitted Tree Protection Plan”, however no such plan was submitted with the application. SDCC’s report notes that while there is limited impact to existing trees and hedgerows, a tree and hedgerow survey, arboricultural impact and tree protection plans coupled with proposals for reinstatement and/or mitigation planting is recommended. I am satisfied that this matter can be adequately addressed by a suitable condition.
- 8.5.8. I note too that IFI has not objected to the proposal, subject to the use of the HDD of the river and that development is carried out in accordance with the submitted HDD method statement.
- 8.5.9. Overall, I am satisfied that the proposed development is acceptable in terms of biodiversity subject to the conditions recommended below.

9.0 Environmental Impact Assessment

9.1. Introduction

- 9.1.1. The proposed 110kV transmission lines and associated works on a 3.78 hectare site is required to provide a permanent power supply for a permitted data storage facility located to the north, on a site with area of 22.1 hectares.
- 9.1.2. The EIA Directives list those projects for which an EIA is mandatory (Annex I) and those projects for which an EIA may be required (Annex II). In Ireland, Part 2 of Schedule 5 of the Planning and Development Regulations, 2001 (as amended) sets out development for the purposes of EIA. The project proposed is not listed under Annex I EIA Directives. An EIAR is not mandatory for the proposed development under Section 182A of the Act. It is not an Annex I, nor is it an Annex II, type project, being an underground 110kV cable.
- 9.1.3. An EIA report has been provided as the proposed development will connect the data centres, Kishoge substation and Gas Power Generation Plant at the townland of Ballymakailly and the EIAR states that an EIA was completed for these developments. It is considered, therefore, that in order for a cumulative assessment of the whole project to be carried out by the competent authority, that an EIAR is necessary in this case.
- 9.1.4. The EIAR and this report assesses the cumulative impact of the proposed development with the Kishoge substation and data storage facility permitted under Reg. Ref: SD19A/0042 / ABP ref. 305948 and other developments in the vicinity. An EIAR accompanied this application. Subsequent applications are relevant to the 'parent' permission:
- Permission ABP Ref.: 305948 was amended under Reg. Ref.: SD22A/0105 and included amendments to the electrical substation compound and structures permitted.
 - An alteration to the permitted development and permission for further develop the site to include two single storey data centre and three gas powered generation plant buildings under Reg. Ref.: SD21A/0042. An EIAR accompanied this application.

- Permission is sought for amendments to permitted landscaping under SD22A/0333 as part of the larger development of data centres. An EIAR accompanies this application.

9.1.5. An examination has been carried out of the information presented by the applicant, including the EIAR, and the submissions made during the course of the application for approval. A summary of the results of the submissions by the Planning Authority and prescribed bodies are set out at Section 6 of this report - no specific issues relating to EIA were raised. EIAR is assessed below under the relevant headings, and as appropriate in the reasoned conclusion and recommendation including conditions.

9.2. **EIAR Content and Structure**

9.2.1. A non-technical summary has been prepared and accompanies the application. The non-technical summary gives a concise synopsis of the EIAR and is written in language that can be easily understood. In general, I consider that the content and scope of the EIAR is acceptable and in compliance with the EIAR Directive and the Planning and Development Regulations, 2001 (as amended).

9.2.2. I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality, and that the information contained in the EIAR and supplementary information provided by the applicant, adequately identifies and describes the direct and indirect effects of the proposed development on the environment, and complies with article 94 of the Planning and Development Regulations 2001 (as amended).

9.2.3. I am satisfied that the EIAR adequately describes the proposed development to include information on the site, its design and its size. The applicant has also carried out an assessment of reasonable alternatives relevant to the proposed development and its specific characteristics. The baseline scenario is presented and is assessed against a description of the factors likely to be significantly affected by the proposed development, together with any direct, indirect, secondary, cumulative, transboundary, and short-long term effects of the proposed development. A description of forecasting methods including any difficulties encountered and the main uncertainties, as well as measures envisaged to avoid, prevent, reduce or off-

set significant adverse effects and any monitoring arrangements are included for both construction and operational phases. The vulnerability to risk of major accidents is also described, along with any measures to prevent or mitigate the significant adverse effects on the environment. Details of consultations are included and there is an adequate list of experts who contributed to the EIAR.

- 9.2.4. Overall, I am satisfied that the information provided is reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the proposed development on the environment, taking into account current knowledge and methods of assessment.

9.3. **Alternatives**

- 9.3.1. The EIAR must include a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, as well as an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment.
- 9.3.2. Chapter 3 of the EIAR analyses the existing site and environmental conditions and explores the design evolution of the proposed development and the reasonable alternatives. The 'do-nothing' alternative is considered, as well as alternative locations, alternative design/ layouts and alternative processes and mitigation measures for the proposed development.
- 9.3.3. The 'do nothing' alternative would result in the permitted EdgeConneX data centre and Kishoge Substation being left without a permanent power supply. In addition, without this strategic piece of infrastructure, the future potential of the Grange Castle Business Park to facilitate further industrial activity could be limited.
- 9.3.4. As part of the planning application process for the proposed transmission connections, a number of alternative route options were generated. An assessment of the different proposed routes was undertaken between the permitted Kishoge substation and the permitted Aungierstown – Castlebaggot underground 110kV transmission line to determine the most appropriate route. The routes generally follow the same direction, i.e., south-easterly to the permitted Aungierstown – Castlebaggot underground 110kV transmission line.

- 9.3.5. A preliminary appraisal of the environmental effects of the four options was undertaken as part of the route selection process. All routes were determined as feasible with minimal temporary to short term impacts and no long-term impacts on the environment. Based on engineering assessment Option 1 was concluded as the preferred route due to volume of services within the existing roads and number of crossings and all other routes impacting exiting developed sites. The selected route is stated to be the most suitable route for the proposed transmission line from an environmental and engineering perspective, taking land access into account. It is noted that all alternative proposed routes were considered to have a neutral, imperceptible, long-term effect during the operational phase.
- 9.3.6. Alternative design options considered included an above ground transmission line. To minimise the visual impact of such a project, it was decided to design the project to deliver the required power supply below ground. Alternative process options are not available to the applicant as the transmission line must meet Eirgrid's strict specifications to become part of the national grid infrastructure. Regarding mitigation measures, the EIAR states that while alternative options were considered that the measures proposed represent best options for the site.
- 9.3.7. In general, all reasonable alternatives that are relevant to the project and its specific characteristics are clearly presented in the EIAR. The main reasons for the chosen option and the development of the design process are set out, together with the background for the chosen layout. I am satisfied that this section of the EIAR is sufficient to comply with the provisions of Paragraph 1(d) of Schedule 6 of the Planning and Development Regulations, 2001 (as amended) and Article 5(1) and Annex IV of Directive 2014/52/EU.

9.4. Likely Significant Effects on the Environment

- 9.4.1. This section of the EIA identifies, describes and assesses the potential direct and indirect effects of the project under each of the individual factors of the environment (population and human health; biodiversity; land, soil, water, air and climate; material assets, cultural heritage and the landscape; and the interactions between these factors). The EIAR uses different chapter headings (human health and population; land, soils, geology and hydrogeology; hydrology; biodiversity, flora and fauna; air

quality and climate; noise and vibration; landscape and visual, archaeology and cultural heritage; transport and transportation; waste management, and material assets; the interactions between these factors, and these are used to inform the EIA.

- 9.4.2. Baseline characteristics, cumulative information, and an evaluation of impacts on each sensitive aspect are set out, together with mitigation measures and residual impacts.

9.5. Population and Human Health

9.5.1. Introduction

- 9.5.2. Chapter 4 of the EIAR reports on the likely significant population and human health effects to arise from the construction and operation of the proposed development.

The following areas are considered: methodology, baseline conditions, likely significant effects, mitigation, residual effects, and inter-project cumulative effects. Impact on population and human health is also considered in other sections of the EIA, e.g., noise and vibration, air quality and climate, landscape and visual, and traffic and transportation.

- 9.5.3. The EIAR includes a review of the current population and employment status in the areas close to the proposed development, which in this case is the Electoral Division (ED) of Newcastle, Clondalkin-Dunawley and Clondalkin Village. The Census data 2016 indicates that the population of these EDs has grown and at greater rate than the national average over the period 2011-2016. The data shows that unemployment decreased significantly in the EDs, Local Authority areas, as well as nationally, reflecting the economic recovery in recent years.

- 9.5.4. The closest residential properties are located alongside the R120, to the east of the proposed grid connection route. The proposed route crosses the R120 c. 90 meters north of a detached rural dwelling and adjacent to the Ascot Motor Company.

- 9.5.5. With respect to community facilities, Lucan Sarsfields GAA Club and Lucan Pitch & Putt course is located c. 300m to the north of the site, north of the Grand Canal, beyond which is a Maxol petrol station. There are a number of primary and secondary schools in the vicinity of the proposed gridline including Adamstown Community College and Adamstown Educate Together, located c. 800m northwest of the permitted substation.

9.5.6. Characteristics of the Proposed Development

9.5.7. The proposed development primarily comprises the provision of underground 110kV transmission line connections between the permitted Kishoge 110kv Gas Insulated switchgear (GIS) substation and the permitted Aungierstown – Castlebaggot underground 110kV transmission line. The applicant states that the Kishoge 110kV transmission cable installation will be designed to support current power demand of the permitted EdgeConneX Datacentre and future growth within the Grangecastle area. The on-road section of the route involves the crossing of the Baldonnell Road and the R120 with a small section beneath an Old Nangor Roadway (not active) adjacent to the R120. The Griffeen River will be under-passed by means of Horizontal Directional Drilling (HDD) at the Old Nangor Road Bridge.

9.5.8. Construction work was anticipated to commence in Q4 2022 with approximately 10 months for both the construction phase and commissioning phase prior to commencement of full operations. The off-road section of the transmission line (approximately 2.2km in length) will be installed between the hours of 8am and 6pm. During installation, staff will arrive on site at approximately 7am and take circa 1 hour to mobilise before commencing works. All works requiring the closure of one or more traffic lanes will be carried out at night, between the hours of 7pm and 6am. Average construction staff is estimated to be between 10-16, with a peak staff level estimated to be 30. The 110kV transmission line does not require any full-time staff to operate it daily. However, maintenance works will take place annually. This will require up to 4 ESB staff to conduct testing over a period of 15 days.

9.5.9. Other associated permitted development is expected to occur simultaneously: the construction of the permitted Kishoge Substation is expected to commence in Q4 of 2022. The connection between the Aungierstown and Castlebaggot Substations was expected to be completed in 2022. Construction commenced in Q4 of 2022 for the datacentre permitted under Planning Reg. SD19A/0042 /ABP ref. 305948-19. The datacentre and gas-powered generation plant permitted under SD21A/0042, SD22A/0105 and SD22A/0289 is due to commence in Q1 of 2023.

9.5.10. Potential Impact of the Proposed Development

9.5.11. The potential impacts of the proposed development on population and human health are summarised as follows:

- At some point in the future there may be an impact in terms of increased available electricity supply to facilitate future potential industrial activities which could have an imperceptible effect in terms of increased housing/accommodation demand for potential future workers who wish to locate in the area.
- Dust generation as a result of construction activities and potential for emissions from maintenance vehicles.
- The predicted impact from additional traffic on human beings and in particular road users will be temporary, negative and not significant for the construction phase and long-term, neutral and imperceptible for the operational phase. Any significant construction works will take place outside of main commuter hours and at worst case a single lane carriageway will remain operational.
- There is little potential impact on the receiving environment as a result of minor accidents/leaks of fuel/oils during the construction phase as no bulk fuel storage is required.
- There will be an indirect temporary, limited and positive effect on local business with the presence of a very small number of construction workers using local facilities during the construction phase.
- During construction, there is potential for cumulative impact with nearby permitted developments in terms of air quality, noise, traffic or landscape.
- Visual impacts due to the removal of vegetation and the introduction of trenching, stockpiling, temporary structures, access roads, machinery, materials storage, associated earthworks, car parking, lighting and hoarding.

9.5.12. Mitigation Measures

- Potential impacts on population and human health are mitigated by the measures outlined below under air quality & climate, noise, traffic or landscape post construction.
- Any significant construction works will take place outside of main commuter hours and at worst case a single lane carriageway will remain operational.
- The implementation of mitigation measures for management of localised construction equipment leaks set out in the EIA Report will ensure the risk of a

minor/accident is low and that the residual effect on the environment is imperceptible.

9.5.13. Residual Impacts

9.5.14. It is expected that the proposed transmission cable development will have a positive and long-term effect on the immediate area by contributing to future employment opportunities. There are no predicted adverse residual effects primarily due to the development being underground.

9.5.15. Conclusions on Population and Human Health

9.5.16. Impacts on population and human health will be short-term and imperceptible or not significant/ slight during the construction phase, and long-term, imperceptible and not significant during the operational phase. I am satisfied that any impacts identified would be avoided, managed or mitigated by measures forming part of the proposed development, proposed mitigation measures and measures within suitable conditions, and that no significant direct, indirect or cumulative adverse effects on population and human health are likely to arise. The proposed development will provide a permanent power supply to the permitted development and will support the potential for future growth outside the site, which in turn can generate employment.

9.6. **Biodiversity**

9.6.1. Introduction

9.6.2. Chapter 7 of the EIAR sets out the methodology for evaluating effects on ecology, including identification of ecological receptors that could potentially be affected by the proposed development. The habitat survey was carried out in two stages, comprising desk-top survey and field surveys. Habitats were surveyed on 10 February, 3 March and 5 July 2022 by conducting a study area walkover covering the main ecological areas identified in the desktop assessment.

9.6.3. The development area is comprised of fields of improved grassland, recolonising bare ground, arable crops and buildings and artificial surfaces. There is a landscaped planted/ mixed broad leaved woodland embankment downstream of the Old Nangor Road to the north and east of the proposed crossing of the river. This

woodland is considered to be of high biodiversity value at a local level. No works are proposed to this woodland area.

- 9.6.4. The Grand Canal pNHA is located c.100m north of the subject site. The Rye Water Valley/ Carton SAC (Site code: 001398) is the nearest European Site located approximately 4.3km north-west of the subject site. The River Griffeen is a tributary of the River Liffey which flows into Dublin Bay c. 15km (c.27km hydrologically) east of the development site.
- 9.6.5. The presence of the White-clawed crayfish is recorded in the Griffeen River by the NPWS. The EIAR states that the proposed methodology of Horizontal Directional Drilling (HDD) negated the requirement to survey the river for crayfish. An otter holt was recorded along the Griffeen River, proximate to and downstream of the site.
- 9.6.6. Regarding bats, there will be no loss or interruption to commuting landscape features such as hedgerows and a bat detector survey was not considered necessary to inform the assessment process. There are no mature trees to be removed and no bat roosts to be disturbed.
- 9.6.7. Regarding birds, field surveys carried out in the proposed development area deemed the lands to be unsuitable feeding and/or roosting sites for wintering birds, due to habitat conditions being dominated by mosaics of bare ground and artificial surfaces and/or subject to high levels of disturbance.
- 9.6.8. Characteristics of the Proposed Development
- 9.6.9. The proposal comprises the development of underground 110kV transmission line on a 3.78 ha part-greenfield / part-brownfield site in an area characterised by a variety of energy, industrial and technology sector uses. The site is in an area of low ecological value and therefore no sensitive habitat will be removed during construction.
- 9.6.10. The Griffeen River will be under-passed by means of HDD at the Old Nangor Road Bridge. The proposed launching and receiving pits of the HDD will be positioned a minimum of 50m from the location of the otter holt.
- 9.6.11. Potential Impact of the Proposed Development
- 9.6.12. The potential impacts of the proposed development on key ecological receptors are summarised as follows:

- There will be a permanent minor loss of improved grassland and recolonised ground.
- There will be no direct or indirect effects on the water quality of the Griffeen River. There are no pathways from the development areas to the Griffeen River which leads to the River Liffey and Dublin Bay.
- The HDD methodology statement includes design measures which will avoid habitat disturbance or surface water runoff to the Griffeen River, as result, there is no potential for effects on otters.
- There will be no loss of bat roosts or bat commuting habitat.
- Potential effects on nesting birds may occur as a result of vegetation cutting. The potential effects on local bird populations is not significant and can be avoided.
- There are no potential impacts on ecological receptors during the operational phase.

9.6.13. Mitigation Measures

- Retain existing hedgerows where feasible;
- Planting along site boundaries and on disturbed ground helps create belts of native woodland spaces which act as native habitat and ecological corridors;
- Specific local mitigation measures include the avoidance of cutting of vegetation during the bird nesting season.

9.6.14. Residual Impacts

9.6.15. Implementing the specified mitigation measures will ensure that the proposed development will have a neutral, imperceptible and long-term effect on biodiversity.

9.6.16. Conclusions on Biodiversity

9.6.17. The proposed development will be located in an area of low ecological value and within a business park setting where existing development is taking place. Any species on site would therefore be habituated to a certain level of human disturbance. There are no designated sites in proximity to the site and no potential pathway to any downstream designated sites.

- 9.6.18. Overall, I consider that the EIAR has adequately assessed the impact of the proposed development on biodiversity and the cumulative impacts of the adjoining permitted development. I am satisfied that with proper implementation of mitigation and best practice measures, together with implementation of environmental commitments under the submitted Outline Construction and Environmental Management Plan, no significant direct, indirect or cumulative adverse effects on biodiversity are likely to arise.

9.7. Land, Soil, Water, Air and Climate

9.7.1. Introduction

- 9.7.2. This assessment deals separately with the above environmental factors as they appear in the EIAR. Chapter 5 of the EIAR addresses land and soils, geology and hydrogeology. Chapter 6 deals with hydrology, Chapter 8 deals with air quality and climate. Noise and vibration are covered in Chapter 9.
- 9.7.3. The current land use is greenfield and public roadway. The land is currently zoned Enterprise and Employment and is due for development. Much of the lands surrounding the site have recently been developed for data centres and other industrial development.
- 9.7.4. The soils are comprised primarily of deep well drained mineral soil derived from limestones with areas of poorly drained mineral soils. The subsoil type across the site is limestone till. Bedrock consists of dark grey and black limestone and shale, aquifers are classified as locally important with extreme and high vulnerability. The land use cover of the eastern area of the Business Park is primarily industrial with agricultural land to the south and west. Presently, the groundwater body in the region of the site (Dublin GWB) is classified 'under review' as per the WFD Risk Score system. The flow direction in the overburden generally follows no fixed pattern or trend. Regional groundwater flows are in an easterly direction, towards Dublin Bay.
- 9.7.5. Site investigations and environmental soil testing will be undertaken prior to the removal of any material from the site. Due to the nature of the project and the long distance that it covers, it is not currently possible to undertake site investigations without causing disruptions.

- 9.7.6. The noise survey carried out by AWN Consulting in the preparation of the planning application for the nearby DUB05 Data Centre provides information on existing noise levels in the area and is used for the purposes of baseline noise. Data provided by other sources was deemed to be adequate and representative of the site conditions for other environmental factors. The dominant noise sources in the surrounding area are road traffic noise, existing plant noise from adjacent facility, construction noise, water running in nearby canal (lock) in absence of traffic, running river water, vehicular noises.
- 9.7.7. Local air quality monitoring data was obtained from EPA and cumulative air quality impact from nearby permitted development was considered. With respect to climate, construction traffic would be expected to be the dominant source of greenhouse gas emissions as a result of the proposed development.
- 9.7.8. The proposed development site is within the sub-catchment of the Griffeen River and Baldonnell Stream which are tributaries of the River Liffey. The Griffeen River is located to the southwest of the Grange Castle Business Park Site and will be intersected by the proposed gridline route. The Griffeen River is a tributary of the Liffey and as such is in direct hydraulic connection to a number of national and European protected sites. The EPA biological assessment of surface water from the Griffeen River indicated a score of Q3 (poor) in 1991. The Griffeen's current status is currently 'under review' and is classified as 'at risk of not achieving good status'. One historical flood event in the area was identified immediately to the west of the proposed gridline route on the Peamount Road which was recorded in 2000 and was associated with a storm event. OPW CFRAM maps indicate that part of the site is within Flood Zone B, noting that pluvial mapping indicates that the site is not at risk from pluvial flooding. There is no evidence of groundwater flooding at the site.
- 9.7.9. Sensitive receptors for dust are identified as being less than 10 residential units within 100m from the proposed construction works. In respect of landscape and visual, sensitive receptors can include users of local public footpaths, cycle tracks and local roads, residents in close proximity or with long-distance views of the subject lands, employers working close to the subject lands and users of local amenity space. A review of the hydrogeology and geology in the surrounding region indicates that there are no sensitive receptors which could be impacted by this

development. Sensitive receptors for water impacts includes surface water features (Griffeen River), flood risk and groundwater.

9.7.10. Characteristics of the Proposed Development

9.7.11. The activities associated with the construction phase of the proposed development on land, soils, water, air and climate are groundworks and earthworks including cut and fill, excavations, subsoil stripping and stockpiling; import and export of materials; fuel and chemical handling; crossing of the Griffeen River, increase in hard-standing area etc.

9.7.12. Potential Impact of the Proposed Development on Land, Soil and Water

9.7.13. The following potential impacts are applicable to land, soil and water:

- There is potential for water (rainfall and/or groundwater) to become contaminated with pollutants associated with construction activity.
- There will be a limited local loss of agricultural soil.
- Stockpiles have the potential to cause negative impacts on water quality.
- Potentially contaminated excavated materials may impact negatively on workers as well as on water and soil environments, both on and off-site.
- Surface water run-off during the construction phase may contain increased silt levels or otherwise become polluted from construction activities.
- There is a risk of accidental pollution incidences from spillage or leakage of oils and fuels, and from run-off from the use of wet concrete and cement.
- The main environmental risk regarding a HDD operation is hydro fracture i.e. an unintentional return of drilling fluids to the surface during HDD. In most circumstances, drilling fluid is a non-toxic, benign fluid.
- There is the potential for a slight run-off due to the introduction of impermeable surfaces and the compaction of soils. This will reduce the infiltration capacity and increase the rate and volume of direct surface run-off.

9.7.14. Mitigation Measures for Land, Soil and Water

- The Contractor will be required to operate in compliance with a CEMP and the mitigation measures included in the relevant EIAR.

- The proposed project will incorporate the 'reduce, reuse and recycle' approach in terms of soil excavations on-site.
- Excavation works will be monitored to ensure any potentially contaminated soil is identified and segregated from clean / inert soil. If any potentially contaminated soils are encountered, they should be tested and classified as hazardous or non-hazardous in accordance with the recommended methods.
- The effects of soil stripping and stockpiling will be mitigated against through the implementation of an appropriate earthworks handling protocol.
- All fill and aggregate for the proposed development will be sourced from reputable suppliers.
- Fuel and chemical handling measures.
- Measures for controlling use of concrete, including no wash-down or wash out of ready-mix concrete vehicles will be carried out within 10m of a surface water drainage point; all ready-mix concrete will be brought on site by truck; a risk assessment for wet concreting will be completed prior to works being carried out.
- Earthwork operations will be carried out such that surfaces shall be designed to control run-off and prevent ponding and to minimise erosion. All run-off will be prevented from directly entering into any water courses / drainage ditches.
- A horizontal directional drill (HDD) methodology has been developed and requires approval by IFI and SDCC prior to commencement of construction of crossing.
- A launch pit for underwater crossing will be excavated over the entry point (or close by) using a mechanical excavator to facilitate the containment of drill fluids/solids.
- The HDD launching & reception pits to be of sufficient size to hold excess amount of water/drilling fluid to prevent run off during drilling, if necessary, these will be bunded or sand bagged.
- With respect to limiting a frac-out, geological bores have to be designed to create as large a radius of curvature as possible within the limits of the site,

pipe, and equipment. The correct viscosity of drilling fluid will remove cuttings from the borehole and reduce the risk of frac-out.

- Silt reduction measures on site will include a combination of silt fencing, settlement measures (silt traps, silt sacks and settlement tanks / ponds).
- Stockpiles will be tightly compacted to reduce run-off and graded to aid in run-off collection, and materials will be stored away from any surface water drains.
- Any stockpiled material designated for removal will be removed off-site as soon as possible.
- Surface water drain gratings in areas near or close to where stockpiles are located will be covered by appropriate durable polyurethane covers or similar.
- Excavations will remain open for as little time as possible before the placement of fill.
- Weather conditions will be considered when to minimise the risk of run-off from the site and the suitable distance during construction.

9.7.15. Residual Impacts for Land, Soil and Water

9.7.16. Following implementation of mitigation measures, residual impacts during construction and operational phases will be imperceptible / neutral.

9.7.17. Potential Impact of the Proposed Development on Air and Climate

9.7.18. The following potential impacts are applicable to air and climate:

- The greatest potential impact on air quality during the construction phase of the proposed development is from construction dust emissions and the potential for nuisance dust.
- The main activities during construction with potential to cause dust emissions are earthworks, construction and the movement of heavy vehicles.
- Construction traffic is expected to be the dominant source of greenhouse gas emissions as a result of the proposed development.

9.7.19. Mitigation Measures for Air and Climate

- Minimising movement of material to reduce the degradation of soil structure and generation of dust.

- Excavations will remain open for as little time as possible before the placement of fill.
- Siting of activities, including compounds, and storage piles will take note of the location of sensitive receptors and prevailing wind directions to minimise the potential for significant dust nuisance.
- Good site management practice to include the ability to respond to adverse weather conditions by either restricting operations on-site or implementing timely effective control measures.
- Regular watering of storage piles will take place to ensure the moisture content is high enough to increase the stability of the soil and thus suppress dust.
- Hoarding of stockpiles, where used, will prevent larger particles from impacting on nearby sensitive receptors.
- Monitoring the contractors' performance to ensure that dust impacts and nuisance are minimised.
- Monitoring, assessing and reviewing dust control methods.
- Communications to include community engagement etc.
- Keeping a complaints register to record complaints regarding dust nuisance or air quality concerns and specifying effective measures to deal with any complaints received.
- Application of speed restriction along site roads/haulage routes.
- Measures specific to track-out including cleaning of public roads, appropriate covering of vehicles, wheel washing, etc.
- The specification of a site policy on dust and the identification of the site management responsibilities for dust issues.
- The development of a documented system for managing site practices with regard to dust control.

9.7.20. Residual Impacts for Air and Climate

9.7.21. The overall effects of the construction phase of the proposed development on climate are considered to be negative and not significant. The overall effects of the

construction phase of the proposed development on air are considered to be neutral and not significant. There are no predicted impacts to air quality or climate during the operational phase of the proposed development. Therefore, the operational phase is considered neutral, long-term and imperceptible for both air quality and climate.

9.7.22. Potential Impact of the Proposed Development Noise and Vibration

9.7.23. Construction works associated with cable works will be the dominant source of noise at the nearest noise sensitive locations when they occur.

9.7.24. Other construction activity from the proposed development is at sufficient distance from a significant proportion of the proposed cable works, so that when they occur at the same time, cumulative issues will not be a material issue.

9.7.25. Additional traffic introduced onto the local road network due to the construction phase of the proposed development will not result in a significant noise impact.

9.7.26. Mitigation Measures for Noise and Vibration

9.7.27. The following measures are proposed for noise and vibration during construction works. No mitigation measures are required for operational phase.

- Limiting the hours during which site activities likely to create high levels of noise or vibration are permitted.
- Establishing channels of communication between the contractor/developer, Local Authority and residents.
- Appointing a site representative responsible for matters relating to noise and vibration.
- Monitoring levels of noise and/or vibration during critical periods and at critical sensitive locations and limiting the values set out in Guidelines for the Treatment of Noise and Vibration in National Road Schemes (TII).
- All site access roads will be kept even so as to mitigate the potential for vibration from lorries.
- Selection of plant with low inherent potential for generation of noise and/ or vibration.

- Erection of barriers around items such as generators or high duty compressors.
- Situate any noisy plant as far away from sensitive properties as permitted by site constraints and the use of vibration isolated support structures where necessary.
- Implementation of a noise and vibration management plan of the day-to-day operation of the site. This will focus on opening and maintaining lines of communication with the local community to address issues in relation to noise and/or vibration and to advise the community of periods where specific activities take place that have an increased potential in giving rise to issues off site.

9.7.28. Residual Impact for Noise and Vibration

9.7.29. Ambient noise levels are, and will continue to be, dictated by road traffic noise in the area while a low level of plant noise is expected to be audible during lulls in other sources (e.g. distant traffic noise). With regard to vehicle movements associated with construction activities for the proposed development the effect is stated to be imperceptible and neutral. There is no operational operation noise or vibration impact associated with the proposed development.

9.7.30. Conclusions on Land, Soil and Water, Air and Climate

9.7.31. The main activities associated with the construction phase of the proposed development that can give rise to potential impacts include run-off percolating to ground, contaminants in surface water, earthworks, excavations, subsoil stripping and stockpiling, storage of hazardous materials and import and export of materials. The Outline CEMP sets out requirements and standards that must be met during the construction stage and the relevant mitigation measures are outlined in the EIAR.

9.7.32. The CEMP will set out an overarching vision of how the construction of the proposed development will be managed in a safe and organised manner by the contractor, including the application of measures to deal with nuisance and construction impacts,

9.7.33. Due to the short duration and nature of the construction activities, CO₂ and N₂O emissions from construction vehicles and machinery will have a short-term and imperceptible impact on climate.

9.7.34. Overall, I consider that the impacts on land, soil, water, air and climate would be avoided, managed and/ or mitigated by the design and measures that form part of the proposed development. Taken with other developments in the wider area, the cumulative effects of the proposal are not likely to be significant to an extent that might warrant a refusal of the proposed development.

9.8. Cultural Heritage and the Landscape

9.8.1. Chapter 10 of the EIAR deals with landscape and visual impacts. Chapter 11 deals with archaeology and cultural heritage. The subject lands are located in Grange Castle Business Park in an area that has been developed both industrially and commercially in recent years.

9.8.2. The existing views of the subject lands are not considered to have any inherent visual quality or landscape value. The only visible elements of any relevance are existing roadside hedgerows, meadow verges and trees of the surrounding fields along the route of the proposed transmission line connections.

9.8.3. Within the South County Dublin Development Plan 2022-2028 there are no specific landscape objectives that apply to the subject lands. There are a number of objectives that apply to the general environs of the site most notably to the Grand Canal (proposed Natural Heritage Area).

9.8.4. In the Landscape Character Assessment of South Dublin County (Appendix 9, South County Dublin Development Plan 2022-2028), the subject lands are designated as being in the 'Urban Fringe/ Peri urban Character Area'. This area is listed as being low/none in terms of landscape sensitivity.

9.8.5. The assessment of the impact on cultural heritage indicated that there are no recorded archaeological sites or monuments within the proposed development lands, as listed in the Record of Monuments and Places for Co. Dublin. There are three recorded archaeological sites within the study area. None of these sites will be impacted, either directly or indirectly, by the proposed development works. There are no architectural heritage structures within the site boundary. There are nine within the wider study area, recorded in the National Inventory of Architectural Heritage. None of these will be impacted on by the proposed development.

9.8.6. Characteristics of the Proposed Development

9.8.7. The proposed 110kV 2.2km transmission line runs underground from the permitted Kishoge 110kV substation to the permitted Aungierstown – Castlebaggot underground 110kV transmission line. Associated construction works include hoarding, stockpiling, increased traffic and heavy machinery, car parking and removal of vegetation.

9.8.8. The extent of existing vegetation along the route is minimal. Much of the vegetation is associated with the agricultural fields in the local landscape and would be in the form of hedgerow boundaries and scrub vegetation, however there are also a small number of trees located along the route.

9.8.9. Hard landscaping within the site will comprise of asphalt roads, gravel and concrete footpaths.

9.8.10. Potential Impact of the Proposed Development on the Landscape

9.8.11. The potential landscape and visual impacts are summarised as follows:

- Visual impacts due to the removal of trees and vegetation.
- Visual impacts resulting from the introduction of trenching, stockpiling, temporary structures, access roads, machinery, materials storage, associated earthworks, car parking, lighting and hoarding.

9.8.12. Mitigation Measures for the Landscape

- Reinstatement of any disturbed grassland, meadow, verges, roadside vegetation and green buffers which have been disturbed due to the proposed works;
- Implementation and monitoring of a well-managed and organised construction site, with control of construction activity, traffic, materials storage and lighting with due consideration for neighbouring residences.
- Where feasible, hoarding will be erected around site boundaries to reduce visual impact of storage piles.

9.8.13. Residual Impacts on the Landscape

9.8.14. The impact of the removal of vegetation during construction would be negative, not significant, and long-term. There would be a temporary, negative slight change of landscape type during construction work.

9.8.15. During operational phase, the proposed cabling will run underground and will therefore cause no impact on landscape character. The impact of any removal of vegetation to accommodate the cable route would be considered negative but would however have no significant effect during the operational phase. The overall impact on the landscape character would therefore be considered neutral. As there are no above ground structures, the visual impact of the proposed development is neutral.

9.8.16. Potential Impacts of the Proposed Development on Cultural Heritage

9.8.17. The potential impacts on cultural heritage are summarised as follows:

- The results of archaeological excavation in the area indicate prehistoric and medieval settlement and activity in the area.
- Most of the site of the proposed development has been extensively and significantly impacted by previous development. During construction, there will be no impact on previously recorded archaeological remains, but there is potential for previously unknown sub-surface archaeological features to be encountered during monitoring. If such features exist, they could be impacted on by the proposed development.

9.8.18. Mitigation Measures for Cultural Heritage

- a programme of archaeological monitoring by a suitably qualified archaeologist under license to the National Monuments Service.

9.8.19. Residual Impacts for Cultural Heritage

9.8.20. There would be a long-term, imperceptible and positive effect through the knowledge gained from the excavation of features found during monitoring (should they be encountered) of this and other developments in the wide area.

9.8.21. Conclusions on Cultural Heritage and the Landscape

9.8.22. Construction phase visual impacts on the landscape will include the creation of compounds, use of machinery, clearing of vegetation and topsoil, reinstatement, etc. There are no operational phase impacts associated with the proposed underground transmission line. The surrounding landscape has no inherent aesthetic qualities of note and can be described as a transitional landscape, with the proposed development representing a continuation of recent trends in the local area.

- 9.8.23. There are no recorded archaeological sites or monuments within the proposed development lands, however, there is a potential for previously unknown sub-surface archaeological features to be impacted during construction. A programme of archaeological monitoring by a suitably qualified archaeologist under license to the National Monuments Service is therefore recommended.
- 9.8.24. I am satisfied that with proper implementation of all mitigation measures, no significant direct, indirect or cumulative adverse effects on cultural heritage and the landscape are likely to arise.

9.9. Material Assets

- 9.9.1. Material Assets are addressed in Chapter 14 of the EIAR. Waste is addressed in Chapter 13, while Chapter 12 on Traffic and Accessibility also contains elements relating to material assets and are covered under this section.
- 9.9.2. Classified junction turning counts were undertaken as part of the Traffic Impact Assessment (TIA) undertaken for permitted data centre development under planning registry SDCC Planning Reg. Ref. SD20A/0121. The surveys were carried out in December 2019. Subject to planning, construction works for this proposal are expected to commence in Q3 2023 and finalised in Q3 2024.
- 9.9.3. Existing traffic flows on the surrounding road network, have been adjusted through application of appropriate growth factors to determine Year of Operation (2024) and Year of Operation +15 (2039) traffic flows. Approved planning permission in the vicinity (and not in place at the time of the survey) have been taken into account in the Assessment.
- 9.9.4. Estimates of waste generation during the construction and operational phases of the proposed development have been calculated for the purposes of assessment and to inform the site-specific Construction and Demolition Resource Waste Management Plan which accompanies the EIAR.
- 9.9.5. Characteristics of the Proposed Development
- 9.9.6. Subject to planning, construction works for this proposal are expected to commence in Q3 2023 and finalised in Q3 2024. The off-road section of the proposal will be installed between the hours of 8am and 6pm. The on-road section of the route

involves the crossing of the Baldonnell Road and the R120 with a small section beneath the Old Nangor Roadway adjacent to the R120. Traffic management measures will be put in place such that one lane will remain open during this element of work. If relevant all works requiring the closure of one or more traffic lanes will be carried out at night, between the hours of 7:00 pm and 6:00 am. Peak construction staff is estimated to be 30. With peak HGVs entering/exiting the site estimated to be 10. The traffic associated with relevant permitted developments in the vicinity was examined and considered in the traffic assessment. The percentage increase in traffic through the junctions is below 0.5%.

- 9.9.7. Once operational, the 110kV transmission line does not require any full-time staff to operate it. Maintenance works will take place annually and will require up to 4 no. staff to conduct testing over a period of 15 days. This represents the worst-case scenario for traffic generation related to the proposal during the operational phase. Based on this, it is estimated that up to 2 no. vehicles trips are estimated to be generated by the proposal on critical time periods.
- 9.9.8. A construction compound at the EdgeConneX site at Ballymakailly West of Newcastle Road (R120), Lucan, Co. Dublin will be used for the duration of the works.
- 9.9.9. During construction, contractors will require power for their onsite accommodation which will be sourced from the power supply at the permitted site when construction is completed. In addition, some on-site equipment/plant and on-site lighting will require power supply which will be delivered through temporary on-site generators.
- 9.9.10. Water supply will not be required for construction works along the route. During the construction phase welfare facilities (canteens, toilets etc.) will be required for the construction crew at the construction compound. Portable toilets may be provided onsite for construction staff. The construction of the cable installation will have no impact on existing surface water drainage along the route.
- 9.9.11. Potential Impact of the Proposed Development on Waste
- 9.9.12. The following impacts are applicable to waste:
- The proposed development will generate a range of non-hazardous and hazardous waste materials. General housekeeping and packaging will also

generate waste materials, as well as municipal wastes generated by construction employees.

- If waste material is not managed and stored correctly, it is likely to lead to litter or pollution issues which can indirectly attract vermin.
- It is anticipated that c. 7,000 m³ of excavated material will need to be removed off-site. The use of non-permitted waste contractors or unauthorised waste facilities could give rise to inappropriate management of waste, resulting in indirect negative environmental impacts, including pollution.
- No waste generated during the operational phase.

9.9.13. Mitigation Measures for Waste

- Implementation of the site-specific Construction & Demolition Resource and Waste Management Plan.
- The appointed Contractor(s) will be required to refine / update the C&D RWMP or submit an addendum to the C&D RWMP detailing specific measures to minimise waste generation and resource consumption and provide details of the proposed waste contractors and destinations of each waste stream.
- Correct classification and segregation of the excavated material.
- A Waste Manager will be appointed by the main Contractor(s) to ensure effective management of waste during the excavation and construction works.
- All construction staff will be provided with training regarding the waste management procedures.
- All waste leaving the site will be recorded and transported by suitably permitted contractors and taken to suitably registered, permitted or licenced facilities.

9.9.14. Residual Impact for Waste

9.9.15. Residual impacts arising from waste during construction and decommissioning will be imperceptible and neutral. There will be no residual impacts as there is no operational waste being generated.

9.9.16. Potential Impact of the Proposed Development on Material Assets

9.9.17. The impacts of the traffic associated with the construction of the proposed 110kV transmission line are minimum. Given the short-term nature of the peak construction phase, the overall impact of the construction phase involving the proposal is considered not significant and shall not affect the performance of the surrounding road network.

9.9.18. Construction works will require electricity either via mains or onsite generators. There are no potential impacts on telecommunications, water supply, foul drainage or surface water infrastructure during the construction or operation phase.

9.9.19. Mitigation Measures for Material Assets

- The contractor will be required to provide wheel cleaning facilities, and regular cleaning of the main access road.
- Temporary car parking facilities for the construction workforce will be provided within the EdgeConneX site at Ballymakailly West of Newcastle Road (R120) and the surface of the car park will be prepared and finished to a standard sufficient to avoid mud spillage onto adjoining roads.
- Monitoring and control of construction traffic will be ongoing during construction works. Construction traffic will minimise movements during peak hours.
- Construction traffic routes shall be use strategically by construction vehicles to minimise traffic impact to surrounding properties.
- Ongoing consultation with ESB Networks, Eirgrid, SDCC, Irish Water, Inland Fisheries Ireland and other relevant utility providers within the locality and compliance with any requirements or guidelines they may have will ensure a smooth construction schedule without disruption to the local and business community.

9.9.20. Residual Impacts on Material Assets

9.9.21. Due to the low number of vehicles trip generation associated with proposed 110kV transmission line, the traffic flows through the junctions shall remain similar as existing.. The implementation of mitigation measures will ensure that the predicted

impacts on the material assets will be long-term, neutral and imperceptible. The residual impacts will be neutral and imperceptible.

9.9.22. Conclusions on Material Assets

9.9.23. Waste management facilities in the Eastern Midlands Region have sufficient capacity to take C&D waste from the proposed development. There are no sensitive receptors in the surrounding area. A carefully planned approach to waste management and adherence to the C&D RWMP (which include mitigation) during the construction phase, and any decommissioning phase, will ensure that the predicted effect on the environment will be short-term, imperceptible and neutral. During operation, there will be no residual impacts as there is no operational waste being generated.

9.9.24. The proposed development will not generate traffic levels during construction and operational phases that will give rise to a significant impact.

9.9.25. There will be ongoing consultation with EirGrid, ESB Networks, South Dublin County Council, Irish Water and other relevant utility providers, and compliance will take place with any requirements or guidelines they may have.

9.9.26. I am satisfied that with proper implementation of mitigation and best practice measures, together with implementation of environmental commitments under the Construction and Environmental Management Plan, no significant direct, indirect or cumulative adverse effects on material assets are likely to arise.

9.10. **Vulnerability of the Project to Major Accident and/ or Natural Disaster**

9.10.1. Consideration has been given to the vulnerability of the project to major accidents and/or natural disasters in Chapter 5, Land, Soils, Geology and Hydrogeology and Chapter 6 Hydrology.

9.10.2. The proposed development will not be a Seveso/COMAH facility. The only substance stored on site controlled under Seveso/COMAH will be diesel for temporary generators and the amounts proposed do not exceed the relevant thresholds of the Seveso directive. No bulk fuel storage is required. The implementation of the CEMP and mitigation measures will ensure risk of minor accident/ spillage is low.

- 9.10.3. The site is not located in an area that has historically been subject to natural disasters. A Stage 1 Flood Risk Assessment was carried out and it was concluded that the development is not at risk of flooding and has no potential impact on flood risk for other neighbouring properties.
- 9.10.4. I am satisfied that given the nature of the proposed development, and the mitigation measures proposed, together with the low probability of a major accident/ natural disaster, it is not likely that significant effects on the environment would arise in this regard.

9.11. Cumulative Impacts & Environmental Interactions

- 9.11.1. Chapter 15 of the EIAR sets out the various interactions between the environmental factors insofar as the effect of one environmental factor causes an indirect effect on another environmental factor. Throughout the EIAR, the cumulative assessment of the proposed development is carried out along with the permitted data centres, associated substations and other developments in the area.
- 9.11.2. There are no interactions of note between population and human health and any of the other environmental factors. It is considered that there will be a positive interaction between population and human health in respect of employment and business in the Clondalkin/Lucan areas. There will only be imperceptible, insignificant or neutral interactions between other environmental factors.
- 9.11.3. Many of the interactions will take place during the construction phase of the proposed development and will therefore be short term. Mitigation measures are set out in each of the relevant chapters and can also be applicable to other environmental factors.
- 9.11.4. The potential cumulative impact of the proposed 110kV transmission lines is assessed in each chapter throughout the EIAR with other existing, planned and permitted development. This includes SD19A/0004 which granted permission for enabling works to facilitate future development of the site and the adjacent data centre and substation development permitted under ABP Ref. 309548 where there would be construction overlap and cumulative effects would therefore be likely. This permission has been the subject of a number of amendment permissions, including

SD22A/0105 and SA21A/0042. Other amendment applications are currently undecided and include ABP 314646 and SD22A/0333.

- 9.11.5. Other developments in the surrounding area that would give rise to likely cumulative effects are enabling works permitted under ABP Ref. 309146 relating to the Aungierstown Substation and ABP Ref. 309773 for the provision of 2 no. 110kV transmission lines and a 110kV gas insulated switchgear (GIS) substation compound, and which includes HDD underneath the River Griffeen.

9.12. Reasoned Conclusion

- 9.12.1. Having regard to the examination of environmental information contained above, and in particular to the EIAR and supplementary information provided by the developer, and the submission from the planning authority and prescribed bodies in the course of the application it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:

- Positive short-term impacts on Population and Human Health in terms of the local economy from employment during the construction period.
- Potential short-term negative impacts on Population and Human Health due to emissions and impact on air quality, noise and visual effects during the construction stage and will be mitigated by a range of measures and implementation of the CEMP.
- Potential negative impacts on Water as a result of sediment loading and accidental pollution spillages into the local drainage system during the construction phase. These impacts will be mitigated through implementation of the CEMP, the HDD methodology and measures in the EIAR.
- Potential negative impacts to Land, Soil and Hydrogeology relating to accidental spillages of chemicals, hydrocarbons or other contaminants. These impacts will be mitigated through implementation of the CEMP and the measures specified in the EIAR.
- Potential impacts on Cultural Heritage will be mitigated during the construction stage through archaeological monitoring of ground works.

- Regarding Waste, a planned and mitigated approach to waste management will ensure that the impact on the environment will be short-term, neutral and imperceptible.

9.12.2. There are no significant impacts on landscape, biodiversity, traffic and transport, and material assets and there are no significant effects on any environmental factor associated with the operational phase of the proposed underground transmission line.

9.12.3. The EIAR has considered that the main direct and indirect effects of any significance arising from the proposed development on the environment would be primarily mitigated by environmental management measures, as appropriate. I am satisfied based on the submitted information that impacts can be adequately mitigated and that no residual significant negative impacts on the environment would remain as a result of the proposed scheme. I am, therefore, of the view that the potential for unacceptable direct or indirect effects on the environment can be excluded on the basis of the submitted information.

10.0 **Appropriate Assessment**

10.1. The areas addressed in this section are as follows:

- Compliance with Articles 6(3) of the EU Habitats Directive
- Geographical Scope and Main Characteristics
- Screening the need for Appropriate Assessment
- Identification of Likely Effects
- Screening Determination

10.2. **Compliance with Articles 6(3) of the EU Habitats Directive:** The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that 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. The competent

authority must be satisfied that the proposal will not adversely affect the integrity of the European site.

- 10.3. The proposed development comprises the provision of an underground 110kV transmission line connections between the Kishoge 110kV Gas Insulated switchgear (GIS) substation on a site within the townland of Ballymakaily, West of Newcastle Road (R120), Lucan, Co. Dublin, and the permitted Aungierstown – Castlebaggot underground 110kV transmission line located at Grange Castle South Business Park, Baldonnell, Dublin 22. The proposal is not directly connected with or necessary to the management of any European site and is therefore subject to the provisions of Article 6(3).

10.4. Appropriate Assessment Screening Report and Associated Documents

- 10.4.1. The application for the proposed substation and grid connections is accompanied by an Appropriate Assessment Screening Report dated 31st July 2022, prepared by Moore Group – Environmental Services. This report sets out the methodology for Appropriate Assessment screening based on relevant guidance and is informed by the description of the proposed development, an overview of the receiving environment, a desktop data review and an assessment of the effects on European Sites. Other documents that accompany the planning application include an Environmental Impact Assessment Report, an Outline Construction and Environmental Management Plan and a HDD Methodology statement.
- 10.4.2. The AA Screening Report was prepared in line with current best practice guidance and provides a description of the proposed development and identifies any European Sites within a possible zone of influence of the development. It is concluded within the AA Screening Report that the possibility of any significant effects on any European Sites, whether arising from the project alone or in combination with other plans or projects, can be excluded. In reaching this conclusion, the author of the AA Screening Report has fully considered the nature of the project and its potential relationship with all European Sites within the zone of influence. I note that section 6 'Conclusion' of the Appropriate Assessment Screening Report erroneously refers to a connection to the existing public sewer network for the treatment of wastewater. Section 3 'Description of Proposed Development' accurately reflects the proposed

development as described in the application, and against which the appropriate assessment screening is based. For this reason, I am satisfied that the reference to the wastewater connection in the conclusion section of the screening report is a typographical error.

10.4.3. Having reviewed the documents and submission on the application, I am satisfied that the information allows for a complete examination and identification of any likely significant effects of the development, alone or in combination with other plans or projects, on European Sites.

10.4.4. The AA Screening Report was informed by the following studies, surveys and consultations:

- Desk based studies including the following:
 - National Parks & Wildlife Service (NPWS) natural heritage database for Natura 2000 sites within the wider Potential Zone of Influence of the proposed development;
 - A review of the National Planning Application Database of application granted permission within 500m of the site within the last three years.
- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (Department of Environment, Heritage and Local Government, 2010 rev.)
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 1/10 & PSSP 2/10.
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (EC, 2018).
- Guidance document on the strict protection of animal species of Community interest under the Habitats Directive (EC, 2021).
- Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC (EC, 2021).
- Office of the Planning Regulator (OPR) Practice Note PN01 Appropriate Assessment Screening for Development Management (OPR, 2021)

- The South Dublin Development Plan.

10.5. Geographical Scope and Main Characteristics

- 10.5.1. The 3.78 hectare site is located at Grange South Business Park, Baldonnell, Dublin 22. The Grand Canal is c. 100m to the north of red line boundary. Much of the lands to the east have been developed as part of the wider Business Park development with green fields to the south and west. Further green fields and Lucan Sarsfields GAA club are located to the north. The R120 (Baldonnell Road) bounds the path of the proposed transmission line for a significant portion of the site. The eastern side of the R120 at this location is defined by a number of detached houses, behind which is an existing and permitted data storage facility development.
- 10.5.2. The proposed 110kV underground transmission line connections will originate from the permitted Kishoge 110kV GIS substation. The proposed 110kV underground transmission line connections extend northwards from the Kishoge 110kV substation, before proceeding to the east and then to the south and continuing alongside the R120 before continuing to the south and crossing the R134 New Nangor Road. The route then proceeds further southward and to the southeast to cross the R120, continues to the south and then to the east (adjacent to the Old Nangor Road), crossing underneath the Griffeen River, by horizontal directional drilling, and proceeding eastwards and then south before crossing the Baldonnell Road and proceeding eastward within lands to the south of the Grange Castle South Business Park access road, before reaching and connecting to the Aungierstown – Castlebaggot underground transmission line.
- 10.5.3. The main characteristics of the proposed development are as follows:
- Removal of vegetation.
 - Installation of construction compounds, temporary car parking, storage and welfare facilities.
 - Shallow excavations are required for the ducting for the 110kV transmission lines.

- Possible discharge of collected clean rainwater which currently goes to ground during excavation works and groundworks (the extent of which is dependent on the time of year development works are carried out).
- Construction activities will necessitate storage of cement and concrete materials, on site. Small localised accidental releases of contaminating substances including hydrocarbons have the potential to occur from construction traffic and vehicles operating on site.
- The Griffeen River will be under-passed by means of Horizontal Directional Drilling (HDD) at the Old Nangor Road Bridge.
- A variety of items of plant will be in use for the purposes of site preparation, construction and site works. There will be vehicular movements to and from the site that will make use of existing roads.

10.6. Submissions and Observations

10.6.1. SDCC note that An Bord Pleanála is the competent authority for the purposes of appropriate assessment.

10.6.2. No other observations or submissions raised issues relevant to appropriate assessment.

10.7. Screening for Appropriate Assessment

10.7.1. The proposed development site is not located in or immediately adjacent to a European Site. The closest European Site is the Rye Water Valley/ Carton SAC, which is approximately 4.3km north-west of the subject site.

10.7.2. Having regard to the information and submissions available, the nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, the source pathway receptor principle and sensitivities of the ecological receptors, the European Sites set out in Table 1 below are considered relevant to include for the purposes of initial screening for the requirement for Stage 2 appropriate assessment on the basis of likely significant effects. A c.15km study area from the proposed development is applied for this purpose, wherein a total of seven European Sites are included.

10.7.3. European sites considered for Stage 1 screening:

European site (SAC/SPA) 9Site code)	Distance to subject site	Qualifying Interest	Connections (source, pathway, receptor)	Considered further in Screening (Y/N)
Rye Water Valley/Carton SAC (001398)	c. 4.3km	Petrifying springs with tufa formation (Cratoneurion) [7220] Vertigo angustior (Narrow- mouthed Whorl Snail) [1014] Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]	A potential hydrological connection exists via the Griffeen River which flows into the Liffey River. The Rye Water River also flows into the River Liffey. The Rye Water is upstream of the site and any potential impact can therefore be excluded. The projected HDD will not interfere the groundwater regime on a local or regional scale.	N
Glenasmole Valley SAC (001209)	c. 8.4km	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco- Brometalia) (* important orchid sites) [6210] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinia caerulea) [6410] Petrifying springs with tufa formation (Cratoneurion) [7220]	No potential connections	N
Wicklow Mountains SAC (002122)	c. 10km	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Natural dystrophic lakes and ponds [3160] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Alpine and Boreal heaths [4060] Calaminarian grasslands of the Violetalia calaminariae [6130] Species-rich Nardus grasslands, on siliceous substrates in mountain	No potential connections	N

European site (SAC/SPA) 9Site code)	Distance to subject site	Qualifying Interest	Connections (source, pathway, receptor)	Considered further in Screening (Y/N)
		areas (and submountain areas, in Continental Europe) [6230] Blanket bogs (* if active bog) [7130] Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) [8110] Calcareous rocky slopes with chasmophytic vegetation [8210] Siliceous rocky slopes with chasmophytic vegetation [8220] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] <i>Lutra lutra</i> (Otter) [1355]		
Red Bog, Kildare SAC (000397)	c. 14km	Transition mires and quaking bogs [7140]	No potential connections	N
South Dublin Bay SAC (000210)	c. 16km	Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] <i>Salicornia</i> and other annuals colonising mud and sand [1310] Embryonic shifting dunes [2110]	The proposed development is located within the hydrological catchment of the River Liffey, and involves drilling below the Griffeen River, a tributary of the River Liffey. Downstream, the waters of the River Liffey enters Dublin Bay with its European sites. By virtue of the proposed drilling method, which will avoid interaction with the Griffeen River, any possible connection to South Dublin Bay SAC is removed	N
Wicklow Mountains SPA (004040)	c.13.3km	Merlin (<i>Falco columbarius</i>) [A098] Peregrine (<i>Falco peregrinus</i>) [A103]	No potential connections	N

European site (SAC/SPA) 9Site code)	Distance to subject site	Qualifying Interest	Connections (source, pathway, receptor)	Considered further in Screening (Y/N)
South Dublin Bay and River Tolka SPA (004024)	c.15.6km	Light-bellied Brent Goose (Branta bernicla hrota) [A046] Oystercatcher (Haematopus ostralegus) [A130] Ringed Plover (Charadrius hiaticula) [A137] Grey Plover (Pluvialis squatarola) [A141] Knot (Calidris canutus) [A143] Sanderling (Calidris alba) [A144] Dunlin (Calidris alpina) [A149] Bar-tailed Godwit (Limosa lapponica) [A157] Redshank (Tringa totanus) [A162] Black-headed Gull (Chroicocephalus ridibundus) [A179] Roseate Tern (Sterna dougallii) [A192] Common Tern (Sterna hirundo) [A193] Arctic Tern (Sterna paradisaea) [A194] Wetland and Waterbirds [A999]	The proposed development is located within the hydrological catchment of the River Liffey, and involves drilling below the Griffeen River, a tributary of the River Liffey. Downstream, the waters of the River Liffey enters Dublin Bay with its European sites. By virtue of the proposed drilling method, which will avoid interaction with the Griffeen River, any possible connection to South Dublin Bay and River Tolka SPA is removed.	N

Table 1 – Summary Table of European Sites considered in Screening for Appropriate Assessment

10.8. Identification of Likely Effects

10.8.1. The proposed development as outlined above will comprise the installation of a transmission line and associated works largely within an existing business park. Taking account of the characteristics of the proposed development in terms of its location and the scale of works, the following issues are considered for examination in terms of implications for likely significant effects on European sites:

- Construction & operation related

- uncontrolled surface water/silt/ construction related pollution/spillage of fuels.
- Frac-out/hydro-fracture - the unintentional return of drilling fluids to the surface during HDD. Drilling fluid is comprised primarily of water and approximately 1 to 3% bentonite, a naturally occurring clay mineral, so it is, in most circumstances, a non-toxic, benign fluid (except when suspended within a water body and it can harm ecology).

10.8.2. It is important to note at this juncture that all the above sites are significantly removed from the proposed development site. There is a hydrological pathway via the River Griffeen within the development site that discharges to Dublin Bay via the River Liffey. The closest site to the development is the Rye Water Valley / Carton SAC which has no impactful connection to the site being located upstream of the development. Dublin Bay is connected via the River Liffey but is hydrologically significantly removed from the development by in excess of c.27km. Notwithstanding these connections, no direct works are proposed to the Griffeen River. It is proposed to cross underneath the river by horizontal directional drilling (HDD). A 'HDD methodology under Griffeen River', prepared by Clifton Scannell Emerson Associated Limited, dated July 2022, accompanies the application. While the river protection measures outlined in the HDD Methodology are referenced in the Outline CEMP, I am satisfied that these measures (e.g., bores have to be designed to create as large a radius of curvature as possible within the limits of the site, pipe, and equipment; a requirement for the correct viscosity of drilling fluid; launching & reception pits to be of sufficient size to hold excess amount of water/drilling fluid) are standard environmental construction management controls. For the purposes of clarity, in my opinion these measures cannot be deemed to be mitigation measures in respect of AA in this instance because the likelihood of any impacts to a European site related to drilling fluid release (a non-toxic, benign fluid except when suspended within a water body) based on the work proposed would be extremely low i.e., a hypothetical risk and would not pose a significant risk to the South Dublin Bay and River Tolka SPA or to the South Dublin Bay SAC. With respect to Rye Water Valley / Carton SAC, which is designated for groundwater dependent species, the EIAR notes that regional groundwater flows are in an easterly direction, towards Dublin Bay (i.e. away from the SAC). Furthermore, the site is almost 5km from the SAC.

- 10.8.3. Notwithstanding that an otter holt has been identified along the River Griffeen, c. 50m from the proposed HDD location and outside the proposed development boundary, I am satisfied that *Lutra lutra* (Otter) is not a qualifying interest of any hydrologically connected European Site, i.e. South Dublin Bay SAC or Rye Water Valley/Carton SAC. As the proposed development does not support populations of any qualifying interest species associated with these European Sites, there will be no disturbance and displacement impacts associated with the mammals that are QI of these European Sites.
- 10.8.4. In-combination impacts have been considered. Any permitted or future developments in the area are likely to be enterprise and employment in nature on fully serviced lands. The proposed development itself will not have any effects on the qualifying interests/ special conservation interests or conservation objectives of any European Sites and there is no potential for any other plan or project to act in combination with it to result in significant effects on any European Site. Furthermore, policies and objectives are contained within the relevant statutory plans affecting the Greater Dublin Area that will protect European Sites and water quality.
- 10.8.5. No measures designed or intended to avoid or reduce any harmful effects of the project on a European Site have been relied upon in this screening exercise.

10.9. Screening Determination

- 10.9.1. Having carried out Screening for Appropriate Assessment of the project, it has been concluded that the project individually or in combination with other plans or projects would not be likely to give rise to significant effects on any of the above listed European Sites, or any other European site, in view of the sites' Conservation Objectives, and Appropriate Assessment is not therefore required. This determination is based on the following:
- The distance of the proposed development from European Sites and demonstrated lack of any ecological connections.
 - Unsuitability of habitats at application site for supporting mobile species associated with any European Site.

- The scale and location of the proposed development and the relatively low volumes of surface water run-off and discharge events.

11.0 Recommendation

- 11.1. I recommend that planning permission for the proposed development should be approved, subject to conditions, for the reasons and considerations as set out below.

12.0 Reasons and Considerations

- 12.1. In coming to its decision, the Board had regard to the following:

a) EU legislation including in particular:

- The relevant provisions of EU Directive 2014/52/EU amending Directive 2011/92/EU (EIA Directive) on the assessment of the effects of certain public and private projects on the environment,
- Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directives) which set the requirements for Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union.

b) National Legislation including in particular:

- Section 182A of the Planning and Development Act 2000 (as amended)

c) Regional Policy including in particular:

- The Regional Spatial and Economic Strategy for the Eastern and Midlands Region

d) Local Planning Policy including in particular:

- The provisions of the South Dublin County Development Plan, 2022-2028

e) The following matters:

- The location of the site in an emerging industrial area and within a large bank of land zoned for enterprise and employment uses,

- the nature, scale and design of the proposed works as set out in the application for approval,
- the submissions and observations made to An Bord Pleanála in connection with the application.
- the Environmental Impact Assessment Report and associated documentation submitted with the application, and the range of mitigation and monitoring measures proposed,
- the alternatives considered and the rationale for the proposed development,
- other relevant guidance documents,
- the likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely significant effects of the proposed development on European sites, and
- the report and recommendation of the inspector including the examination, analysis and evaluation undertaken in relation to appropriate assessment screening and environmental impact assessment.

12.2. Proper Planning and Sustainable Development

12.2.1. It is considered that subject to compliance with the conditions set out below, the proposed development would accord with European, national, regional and local planning and related policy, it would not have an unacceptable impact on landscape, cultural heritage or ecology, it would not seriously injure the visual or landscape amenities of the area or of property in the vicinity, and it would be acceptable in terms of water and drainage impacts. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

12.3. Environmental Impact Assessment

The Board completed an environmental impact assessment of the proposed development, taking into account:

- (a) the nature, scale and extent of the proposed development,
- (b) the Environmental Impact Assessment Report and other associated documentation submitted in support of the application,
- (c) the submissions from the applicant, the observers/ prescribed bodies in the course of the application, and
- (d) the Inspector's report.

The Board considered that the Environmental Impact Assessment Report, supported by the information submitted by the applicant, identifies and describes adequately the direct, indirect and cumulative effects of the proposed development on the environment. The Board is satisfied that the information contained in the EIAR complies with the provisions of EU Directive 2014/52/EU amending Directive 2011/92/EU.

The Board agreed with the summary and examination, set out in the Inspector's report, of the information contained in the Environmental Impact Assessment Report and associated documentation submitted by the applicant, and the submissions made in the course of the application as set out in the Inspector's report. The Board was satisfied that the Inspector's report sets out how these various environmental issues were addressed in the examination and recommendation which are incorporated into the Board's decision.

Reasoned Conclusion of the Significant Effects:

The Board considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the applicant, provided information which is reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the proposed development on the environment, taking into account current knowledge and methods of assessment. The Board is satisfied that the information contained in the Environmental Impact Assessment Report is up to date and complies with the provisions of EU Directive 2014/52/EU amending Directive 2011/92/EU. The Board considered that the main significant direct and indirect effects of the proposed development on the environment are those arising from the impacts listed below.

The Board completed an environmental impact assessment in relation to the proposed development and concluded that, subject to the implementation of the mitigation measures proposed, as set out in the EIAR ‘Remedial and Mitigation Measures’ of the various chapters and, subject to compliance with the conditions set out herein, the effects on the environment of the proposed development by itself and cumulatively with other development in the vicinity would be acceptable. In doing so, the Board adopted the report and conclusions of the reporting inspector.

The Board considered that the main significant direct and indirect effects of the proposed development on the environment are, and will be mitigated as follows:

- Positive short-term impacts on Population and Human Health in terms of the local economy from employment during the construction period.
- Potential short-term negative impacts on Population and Human Health due to emissions and impact on air quality, noise and visual effects during the construction stage and will be mitigated by a range of measures and implementation of the CEMP.
- Potential negative impacts on Water as a result of sediment loading and accidental pollution spillages into the local drainage system during the construction phase. These impacts will be mitigated through implementation of the CEMP, the HDD methodology and measures in the EIAR.
- Potential negative impacts to Land, Soil and Hydrogeology relating to accidental spillages of chemicals, hydrocarbons or other contaminants. These impacts will be mitigated through implementation of the CEMP and the measures specified in the EIAR.
- Potential impacts on Cultural Heritage will be mitigated during the construction stage through archaeological monitoring of ground works.
- Regarding Waste, a planned and mitigated approach to waste management will ensure that the impact on the environment will be short-term, neutral and imperceptible.

The Board is satisfied that the reasoned conclusion is up to date at the time of making the decision.

12.4. Appropriate Assessment Screening

In conducting a screening exercise for appropriate assessment, the Board considered the nature, scale and context of the proposed development, the documentation on file, in particular the Appropriate Assessment Screening Report submitted in support of the proposed development, the submissions on file and the assessment of the Inspector in relation to the potential for significant effects on European Sites. In undertaking the screening exercise, the Board accepted the analysis and conclusions of the Inspector. The Board concluded that, by itself and in combination with other development in the vicinity, the proposed development would not be likely to have significant effects on any European Site in view of the Sites' Conservation Objectives. In reaching this conclusion, the Board took no account of mitigation measures intended to avoid or reduce the potentially harmful effects of the project on any European Sites.

13.0 Conditions

1.	The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars. Reason: In the interest of clarity.
2.	The mitigation measures identified in the EIAR and other plans and particulars submitted with the planning application, shall be implemented in full by the developer in conjunction with the timelines set out therein, except as may otherwise be required in order to comply with the conditions of this permission.

	Reason: In the interest of clarity and protection of the environment during the construction and operational phases of the proposed development.
3.	Prior to commencement of development, the developer shall submit for written agreement with the Planning Authority the following: (a) Drawings showing cross sections of existing foul water sewers adjacent to the cable route hereby permitted, including horizontal and vertical distances between proposed cables and existing watermains adjacent to same; (b) Drawings showing cross sections of existing foul water sewers adjacent to the cable route hereby permitted, including horizontal and vertical distances between proposed cables and existing foul water sewers adjacent to same; (c) Drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the Planning Authority for such works in respect of both the construction and operational phases of the proposed development. Reason: In the interest of environmental protection and public health.
4.	The permitted crossing beneath the Griffeen River with the underground 110kV transmission line shall be completed using the Horizontal Directional Drilling Method and shall be carried out in accordance with the method statement submitted with the application. Reason: In the interest of environmental protection.
5.	Prior to commencement of development, the developer shall submit for the written agreement of the Planning Authority the following: (a) a tree and hedgerow survey of the site; (b) an arboricultural impact report; (c) a landscaping plan to include tree protection plans coupled with proposal for reinstatement and/or mitigation planting. Landscaping, to replace felled trees and hedging, shall be carried out within the first planting season following commencement of construction of the

	proposed development. Any trees or shrubs planted in accordance with this condition which are removed, die, become seriously damaged or diseased within two years of planting shall be replaced by trees or shrubs of similar size and species to those originally required to be planted. The landscaping and screening shall be maintained at regular intervals. All tree and shrub removal and the demolition of buildings shall be undertaken outside the bird nesting season. Reason: In the interests of orderly development and the protection of birds.
6.	Prior to commencement of development, a detailed Construction Environmental Management Plan (CEMP) for the construction phase shall be submitted to and agreed in writing with the local authority, generally in accordance with the Outline CEMP included in the Environmental Impact Assessment Report. The CEMP shall incorporate the following: (a) a detailed plan for the construction phase incorporating, inter alia, the construction programme, supervisory measures, noise, dust and surface water management measures, including appointment of a site noise liaison officer, construction hours and the management, transport and disposal of construction waste, (b) a comprehensive programme for the implementation of all monitoring commitments made in the planning application and supporting documentation during the construction period, (c) an emergency response plan, and (d) proposals in relation to public information and communication. A record of daily checks that the works are being undertaken in accordance with the Construction Environmental Management Plan shall be kept for inspection by the local authority. Reason: In the interest of environmental protection and orderly development.

7.	The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the undertaker shall – (a) notify the local authority in writing at least four weeks prior to the commencement of any site operations (including hydrological and geotechnical investigations) relating to the proposed development, (b) employ a suitably qualified archaeologist who shall monitor all site investigations and other excavation works, and (c) provide arrangements, acceptable to the local authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove. In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination. Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.
8.	The construction of the development shall be managed in accordance with a Construction Management Plan, a Traffic Management Plan and a Waste Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. Reason: In the interest of orderly development and the protection of the environment

Alaine Clarke
Senior Planning Inspector

27th March 2023