



An  
Bord  
Pleanála

# Inspector's Report

## ABP-312793-22

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<b>Development</b>	110kV gas insulated switchgear (GIS) substation and 110kV transmission lines along with associated ancillary works.
<b>Location</b>	Within Profile Park and partly within Grange Castle South Business Park, Dublin 22
<b>Planning Authority</b>	South Dublin County Council
<b>Applicant(s)</b>	Vantage Data Centres DUB11 Limited.
<b>Type of Application</b>	Application under provisions of Section 182A of the Planning and Development Act, 2000 (as amended)
<b>Observers/ Submissions</b>	<ol style="list-style-type: none"><li>1. South Dublin County Council</li><li>2. Irish Aviation Authority</li><li>3. Transport Infrastructure Ireland</li></ol>
<b>Date of Site Inspection</b>	5 <sup>th</sup> January 2023
<b>Inspector</b>	Donal Donnelly

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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) has been received by the Board from Vantage Data Centres DUB11 Limited seeking approval for the development of a 110kV Gas Insulated Switchgear (GIS) substation, 2 no. 110kV transmission lines and associated ancillary works at Profile Park and partly within Grange Castle South Business Park, Dublin 22.
- 1.2. The applicant entered into pre-application discussions with the Board under Section 182E of the Act on 14<sup>th</sup> October 2021. The Board issued a Direction on 24<sup>th</sup> November 2021 that the proposed 110kV GIS substation, 3 no. transformer bays, 2 no. underground 110kV transmission lines and all associated works is strategic infrastructure development (SID), and that a planning application should be made directly to the Board.
- 1.3. The purpose of the proposed development is to support the power demand for the 2 no. 2-storey data centre buildings permitted under Reg. Reg: SD21A/0241. The proposed development will be known as Kilcarbery Substation.

## 2.0 Site Location and Description

- 2.1. The subject site is located mostly within Profile Park and partly within Grange Castle South Business Park. The site extends from east to west across the boundary between Kilbride and Aungierstown and Ballybane townlands in western Co. Dublin approximately 3.5km north-west of Newcastle and 3.8km west of Clondalkin.
- 2.2. Profile Park and Grange Castle Business Park are situated on the periphery of Dublin between the N4 and the N7. Grange Castle Golf Club and the R136 form the eastern boundary of the business parks and this road connects the N4 and N7. Profile Park is accessed off the R134 to the north and Grange Castle South Business Park is accessed off Baldonnel Road to the west. Other features in the area include Casement Aerodrome to the south and the Grand Canal to the north.
- 2.3. The main part of the subject site is located to the south of Falcon Avenue in Profile Park and to the south of the recently permitted data centre development that the proposed development will serve. The proposed substation will be situated on an

existing greenfield/ brownfield site bounded to the west by Casement Road, to the east and south by undeveloped lands and partly by the Digital Reality complex to the south-east. The Google data centre development is situated to the west of the proposed substation. The proposed underground transmission lines will continue west along Falcon Road firstly to the existing Barnakyle Substation, and then into Grange Castle South Business Park, passing through lands in the control and ownership of Google Ireland Ltd., South Dublin County Council and ESB Networks, and onto the existing 110kV underground Castlebaggot - Barnakyle circuit to the south of Castlebaggot substation.

- 2.4. In terms of existing electricity infrastructure affecting the proposed development, the Castlebaggot 220kV and 110kV substations are located to the north-west of the current application site on the opposite side of the business park access road. Other infrastructure includes the Barnakyle 110kV substation serving the Google Data Centre; the Corkagh 110kV substation to the north of the Microsoft Complex; the Kilmahud 110kV substation to the north of the Microsoft Data Centre to the east of Adamstown Road; the Grange Castle 110kV substation to the west of the Interxion Data Centre; and the Nangor 110 kV substation within the Pfizer complex.

### **3.0 Proposed Development**

- 3.1. Planning permission is sought for the development a 110kV Gas Insulated Switchgear (GIS) substation, 2 no. 110kV transmission lines and associated works on a 3.19 hectare site to the south of the data centre development permitted under Reg. Reg: SD21A/0241. The proposed development will comprise of the following:
- 110kV GIS substation compound that includes a 2-storey 1,477 sq.m. GIS substation building, three transformers with associated ancillary equipment and enclosures, a single storey 51.5 sq.m. client control building, lightning masts, car parking, associated underground services and roads within a 2.6m high fenced compound and all associated construction and ancillary works.
  - An underground single circuit 110kV transmission line connecting the proposed substation over a distance of approximately 247m to the existing 110kV Barnakyle substation to the west.

- An underground single circuit 110kV transmission line connecting the proposed substation over a distance of 492m to the existing 110kV underground Castlebaggot - Barnakyle circuit to the west within the Grange Castle South Business Park.

## 4.0 Planning History

### Associated Development

South Dublin County Council Reg. Ref: SD21A/0241 (ABP-313787-22)

- 4.1. Permission granted on 19<sup>th</sup> July 2022 on an 8.7 hectare site within the townlands of Ballybane and Kilbride within Profile Park, Clondalkin, Dublin 22 for demolition of the abandoned single storey dwelling and associated outbuilding and the construction of 2 no. two storey data centres and associated ancillary development with gross floor area of 40,589 sq.m. consisting of the following:
- 2-storey data centre (Building 11) which will be located to the south of the site and will have a gross floor area of 24,667sq.m. including 22 emergency generators located at ground floor level within a compound to the western side of the data centre with associated flues that will be 22.3m in height;
  - 2-two storey data centre (Building 12) which will be located to the north of the site, and to the immediate north of Building 11 and will have a gross floor area of 12,915 sq.m. including 11 emergency generators located at ground floor level within a compound to the western side of the data centre with associated flues that will be 22.3m in height.
- 4.2. Each of the two data centres will include data storage rooms, associated electrical and mechanical plant rooms, loading bays, maintenance and storage spaces, office administration areas, and plant including PV panels at roof level as well as a separate house generator for each facility which will provide emergency power to the admin and ancillary spaces. Each generator will include a diesel tank and there will be a refuelling area to serve the proposed emergency generators. The overall height of each data centre apart from the flues and plant at roof level is c. 14.23m
- 4.3. The development also includes a single storey step-up substation (38 sq.m.), 2 single storey switch substations (121sq.m); AGI Gas Regulator compound that

includes 3 single storey buildings (134sq.m); and construction of a gas powered generation plant in the form of a 13m high single storey building with a gross floor area of 2,714sq.m.

4.4. Ancillary site development works will include reorientation of the Baldonnel Stream; biodiversity management initiatives; attenuation ponds and the installation and connection to the underground foul and storm water drainage network; installation of utility ducts and cables; hard and soft landscaping, lighting, fencing, signage, services road, entrance gates, sprinkler tanks and pump room; a temporary gas powered generation plant within a fenced yard containing 21 generator units in containers; 12 transformers and 10 containers of controls that will be required for a period of up to 2 years if connection to the national grid is delayed (this temporary plant will not be built if the connection to the national grid is in place prior to the operation of Building 11).

4.5. A first party appeal against Condition 2 (revised plans showing reduction of flue height) of the Council's notification of decision was withdrawn.

South Dublin County Council Reg. Ref: SD22A/0420 (ABP-317446-23)

4.6. A notification of decision to refuse permission for a data centre (Building 13 - 12,893 sq.m.) on a 3.79 hectare site to the north-east of Profile Park was issued to Vantage Data Centres. Reasons for refusal related to insufficient capacity on the electricity network grid; the lack of fixed connection agreement to connect to the grid; the lack of significant on-site renewable energy to power the proposed development; the lack of evidence of Power Purchase Agreements; reliance on predominantly gas powered plant to provide energy for the development; and failure to submit an updated EIAR.

4.7. A first party appeal was lodged against the Council's decision and the Board has yet to reach a decision in this case.

South Dublin County Council Reg. Ref: SD23A/0035

4.8. Permission granted for amendment and modification of SD21A/0241 including the replacement of the permitted 2 sprinkler tanks and pump room with a two storey battery energy storage system (435.56 sq.m.) over a single level basement that will contain a sprinkler system, water tanks and pump room that will serve the overall permitted development as granted under Ref. SD21A/0241.

- 4.9. A single additional car parking space will be provided adjacent to the new building that will be accessed via permitted access road from Falcon Avenue within Profile Park that was granted under Ref. SD21A/0241.
- 4.10. Two new transformers are to be located to the north of the permitted switch rooms and a life safety generator is to be located adjacent to the permitted step up transformer compound within the site.

**Other cases nearby**

An Bord Pleanála Ref: 06S.VA0019

- 4.11. Permission granted in June 2016 for the Castlebaggot 220/ 110 kV GIS substation and associated works.

South Dublin County Council Reg. Ref: SD14A/0023

- 4.12. Google Ireland Ltd. was granted permission in April 2014 on a site to the east for construction of a 2-storey data storage facility (30,361sq.m.), a double height warehouse building (1,670 sq.m.) and a HV substation area with two buildings; 1 no. 2 storey building (968 sq.m.) and 1 no. single storey building (190 sq.m.) and associated site development works.

South Dublin County Council Reg. Ref: SD21A/0217 (ABP-314461-22)

- 4.13. Ten year permission sought on a site to the east within Profile Park for the erection of two data centre buildings, gas powered energy generation compound, and all other associated ancillary buildings and works.

- 4.14. The Board has yet to decide on this case.

South Dublin County Council Reg. Ref: SD18A/0134 (ABP-302813-18)

- 4.15. Permission granted on a site to the east for the construction of a two storey data centre and delivery bays with associated three storey office block and services with gross floor area of 35,426 sq.m. on an overall site of 9.2 hectares. The development also included a new substation with associated transformer yard and single storey transformer building (125 sq.m.) located to the north-east of the site.

An Bord Pleanála Ref: ABP-309146-21

- 4.16. Permission approved on a site to the west for 2 no. 110kV transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation.



- 4.17. Approval sought for an underground 110kV transmission line connections between the permitted Kishoge 110kV GIS substation and the permitted Aungierstown - Castlebaggot underground 110kV transmission line.
- 4.18. The Board has yet to decide on this case.

## **5.0 Legislative and Policy Context**

### **5.1. Climate Action Plan, 2023**

- 5.1.1. The Climate Action Plan (CAP23) sets out a roadmap 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.
- 5.1.2. Citizen engagement and a strengthened social contract between the Government and the Irish people will be required around climate action. Some sectors and communities will be impacted more than others. A just transition is embedded in CAP23 to equip people with the skills to benefit from change and to acknowledge that costs need to be shared. Large investment will be necessary through public and private sectors to meet CAP23 targets and objectives.
- 5.1.3. The electricity sector whilst helping to decarbonise the transport, heating and industry sectors, will face a huge challenge to meet requirements under its own sectoral emissions ceiling. The proportion of renewable energy generation will need to increase to 80% by 2030 and this will require a major step up in how we accelerate the deployment of renewable energy to replace fossil fuels, deliver a flexible system to support renewables, and manage electricity demand.
- 5.1.4. 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 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.

## 5.2. National Planning Framework, 2018

- 5.2.1. The National Planning Framework provides policies, actions and investment to deliver 10 National Strategic Outcomes (NSO) and priorities of the National Development Plan. A strong economy supported by enterprise, innovation and skills is the main NSO that pertains to the proposed development.
- 5.2.2. 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 this NSO to seek the *“promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities.”*

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

- 5.3.1. 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 8.25 relating to communications networks and digital infrastructure states that local authorities shall 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.

## 5.4. South Dublin County Council Development Plan, 2022-2028

- 5.4.1. 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.
- 5.4.2. 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.”*

5.4.3. 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.”*

5.4.4. EDE1 Objective 5 seeks *“to support the implementation of the Metropolitan Area Strategic Plan to support the objectives for the South - West Corridor and the area within the M50 by the:*

- *Promotion of high tech, manufacturing and research and development in Grange Castle Business Park and Citywest;*
- *Intensification of industrial lands and mixed-use development at the City Edge / City Edge Strategic Framework area and in Tallaght Town Centre / Cookstown while ensuring, to the greatest extent possible, the sustainability of existing businesses and employment.”*

5.4.5. EDE5 Objective 1 seeks *“to prioritise hi-tech manufacturing, research and development and associated uses in the established Business and Technology clusters to the west of the County (Grange Castle and Citywest areas) maximising the value of higher order infrastructure and services that are required to support large scale strategic investment.”*

5.4.6. EDE7 Objective 2 seeks *“to require that space extensive enterprise demonstrates the following:*

- *The appropriateness of the site for the proposed use having regard to EDE7 Objective 1 (space intensive enterprises located on lands outside M50);*
- *Strong energy efficiency measures to reduce their carbon footprint in support of national targets towards a net zero carbon economy, including renewable energy generation;*
- *Maximise on site renewable energy generation to ensure as far as possible 100% powered by renewable energy, where on site demand cannot be met in this way,*

*provide evidence of engagement with power purchase agreements in Ireland (PPA);*

- *Sufficient capacity within the relevant water, wastewater and electricity network to accommodate the use proposed;*
- *Measures to support the just transition to a circular economy;*
- *Measures to facilitate district heating or heat networks where excess heat is produced;*
- *A high-quality design approach to buildings which reduces the massing and visual impact;*
- *A comprehensive understanding of employment once operational;*
- *A comprehensive understanding of levels of traffic to and from the site at construction and operation stage;*
- *Provide evidence of sign up to the Climate Neutral Data Centre Pact.”*

5.4.7. The subject site is within a location in which developments of up to 30m in height above ground are unlikely to have significance in relation to aviation.

## 5.5. **Statement on the Role of Data Centres in Ireland’s Enterprise Strategy, July 2022**

5.5.1. This Statement sets out how digital and climate change policies can be achieved in respect to data centres, recognising the capacity constraints within the electricity system and the significantly large loads required by data centres. Reference is made to the “*CRU Direction to the System Operators related to Data Centre grid connection processing*” (CRU/21/124), which allows the data centre industry to continue to connect to the electricity grid, subject to certain conditions. New data centre connections are required to have on-site generation (and/or battery storage) that is sufficient to meet their own demand. To assist in full decarbonisation of the power system, this generation should also be capable of running on renewably sourced fuels (such as renewable gas or hydrogen) when supplies become more readily available.

5.5.2. The Government has agreed the following set of principles to inform and guide decisions on future data centre development:

- Economic Impact – The Government has a preference for data centre developments associated with strong economic activity and employment.
- Grid Capacity and Efficiency - The Government has a preference for data centre developments that make efficient use of our electricity grid, using available capacity and alleviating constraints.
- Renewables and Additionality - The Government has a preference for data centre developments that can demonstrate the additionality of their renewable energy use in Ireland.
- Co-location or Proximity with Future-Proof Energy Supply - The Government has a preference for data centre developments in locations where there is potential to co-locate a renewable generation facility or advanced storage with the data centre, supported by CPPA, private wire or other arrangement.
- Decarbonised Data Centre by Design - The Government has a preference for data centre developments that can demonstrate a clear pathway to decarbonise and ultimately provide net zero data services.
- SME Access and Community Benefits - The Government has a preference for data centre developments that provide opportunities for community engagement and assist SMEs, both at a construction phase and throughout the data centre life cycle.

## 5.6. Natural Heritage Designations

5.6.1. The Grand Canal proposed Natural Heritage Area is located approximately 2km north of the subject site. The Liffey Valley proposed Natural Heritage Area is c. 4.3km to the north. The Rye Water Valley/ Carton SAC (Site code: 001398) is the nearest European Site located approximately 5.9km north-west of the subject site.

## 6.0 Submissions

### 6.1. Planning Authority

6.1.1. A submission on the application was received from the Planning Authority dated 14<sup>th</sup> April 2022. Appended to this submission are reports from the Water Services Department, Irish Water, Parks and Landscape Services, the Roads Section, and the Public Lighting Section. The main points raised in the Planning Authority's submission can be summarised as follows:

- Main *Development Plan* provisions relating to the site from the 2016-2022 Plan are outlined – the emerging plan had no weight at the time of the Planning Authority's assessment. The relevant policies and considerations from the 2016-2022 Plan pertaining to the site are the EE – Enterprise and Employment zoning; the Department of Defence Inner Zone and conical surface; SFRA A designation (to the south) and patches of the site designated SFRA B; Section 10.2.9 (provision of transmission and energy infrastructure); Energy (E) Policy 11 (Service providers and energy facilities); ET3 Objective 2 (business and technology cluster at Grange Castle and Citywest); Policy ET3 Objective 5 (building height in Department of Defence Inner Zone); Policy G2 (green infrastructure network); G2 Objective 6 (hedgerow network); and Policy G3 – Green Infrastructure (G) Policy 3 - Watercourse Network.
- *Principle of the proposed development:* Public services are permitted in principle in EE zoned lands – for unzoned lands (roads), which are transitional, the adjacent zoning objectives should be taken into consideration.
- Proposed SID constitutes the provision of transmission infrastructure required to provide electricity for development within Grange Castle South Business Park, including three permitted data centres (SD20A/0058 & SD20A/0324).
- Planning Authority agrees with the applicant's assessment that with very limited hydrological connections to designated sites, and embedded pollution prevention/mitigation measures, it is unlikely that qualifying habitat or species would be affected by the proposed development.

- Programme of licenced archaeological monitoring will be agreed with the National Monuments Service for areas not previously subject to archaeological testing.
- Water Services Department requests a swale in area of proposed landscaping to north and west of the site to attenuate surface water from adjacent asphalt and tarmac areas.
- Parks and Public Realm Department has requested conditions and stated that SuDS is not shown and SDCC does not approve the use of underground tanks where the full potential of natural drainage features has not been explored.
- Conditions recommended in relation to flood risk – ensure that no property adversely affected by flooding; ensure complete separation of foul and surface water drainage; and comply with Greater Dublin Regional Code of Practice for Drainage Works.
- Irish Water has no objections subject to conditions.
- Having regard to zoning and central location within Profile Park, it is likely there would be limited visual impact on the wider area in the long term. Planning Authority satisfied that subject to suitable landscaping scheme, the visual impact of the proposal would be acceptable. No additional conditions regarding landscaping from Parks and Public Realm Department.
- Roads Section considers that Autotrack drawing of HGV movements around the site is satisfactory. Footpath and road sections have been provided and trench reinstatement details have been submitted. However, clarification of amount of car parking and bicycle parking is requested.
- Route of proposed grid connection generally follows an existing road, and this is considered acceptable.
- Noted that the area is sub-optimal for bat foraging and there is no evidence of breeding birds. Loss of grassland habitat in the area would not be significant due to its abundance in the area. EIAR sets out mitigation measures and these should be secured via condition.
- Noted that proposed buildings are below the required 20m maximum height within the Department of Defence inner zone.

- No residential properties in immediate vicinity.
- Appropriate Assessment screening found that there is no ecological or ornithological connectivity and limited hydrological connectivity between the proposed development and any Natura 2000 site. The Board is the competent authority in this regard.
- EIAR has been produced and the Board is the competent authority in this regard.

6.1.2. The Planning Authority notes that the substantive part of the proposal would be located within existing roads and the substation, client control buildings and transformers would take place on EE zoned lands. It is also stated that the proposal is necessary to serve existing and planned development. In the event that the Board grants permission, conditions are recommended in relation to environmental health, aviation, water services, Irish Water compliance, parks and public realm, roads, and public lighting. The Council's overriding view is that the proposed development will have a positive benefit for the sustainable development and growth of the County having regard to the location of the proposal in an area with numerous data centres, potential future data centres and a permitted power generation facility.

## 6.2. Other submissions

### *Irish Aviation Authority*

6.2.1. The Authority made the observation that the applicant should be required to engage with the Property Management Branch of the Department of Defence to undertake a preliminary screening assessment to confirm that the proposed development and any associated crane that would be utilised during its construction would have no impact on the safety of flight operations at Casement Aerodrome.

### *Transport Infrastructure Ireland*

6.2.2. No specific observations.

## 6.3. Applicant's Response to Submissions

6.4. The applicant's agent responded to the submission with the following points of note:

### *Response to South Dublin County Council:*



- Proposal complies with Development Plan Policy IE6 by aiding and supporting the development of the area in providing required electricity infrastructure that will enable the creation of enhanced electricity networks.
- Application will facilitate the consolidation and growth of high tech and other businesses in the Grange Castle Business Park and surrounding area fully in accordance with EDE1 Objective 5.
- Application should be exempt from Green Space Factor under the Development Plan – applicant would be willing to accept a condition to provide additional bat and bird boxes on their adjacent site to the north.
- Notwithstanding that the power strategy for the applicant’s campus is already established, Vantage Data Centres continues to pursue its commitment to reaching net zero provision of data centres, including as a signatory of the Climate Neutral Data Centre Pact.
- Government issued a revised “Statement on the Role of Data Centres in Ireland’s Enterprise Strategy” on 22<sup>nd</sup> July 2022, which sets out six principles for future data centre development:
  - **Economic Impact** - Both the permitted development and the adjoining appealed development will support future investment by the applicant in Ireland, creating resilient IT infrastructure and will support the attractiveness of Ireland as a location for ongoing foreign direct investment. Both developments are reliant on the infrastructure proposed under the SID application.
  - Proposed SID is aligned with the policies of the RSES and NPF.
  - Global cloud service providers employ thousands of highly qualified professionals in Ireland – proposed development would contribute to maintaining Ireland’s position as a leading exporter of cloud-based IT services, as recognised within Government strategy.
  - **Grid capacity & efficiency** - Permitted and appealed developments are subject to an existing connection agreement with EirGrid via the substation and infrastructure proposed – there is also a current modification to enable export of electricity from the permitted development site to directly support the grid and alleviate constraints via the previously permitted Multi-Fuel Generation Plant.

- Applicant is committed to the delivery of a new high voltage substation and grid connection, representing a direct contribution to, and development of, the national high voltage electricity grid in the area that is submit of this SID application.
- **Renewables Additionality** – applicant willing to accept condition on concurrent appeal requiring that details be submitted and agreed with the Planning Authority prior to operation of that data centre and to demonstrate engagement with Purchase Power Agreements (PPA) for renewable energy use. Previously permitted MFGP has been designed to allow generation from HVO and to accommodate biogas and hydrogen as fuel sources.
- **Co-location or proximity with future proofing energy supply** – Permitted BESS facility (SD23A/0035) will mitigate the risk of electricity shortage and will therefore provides potential for the injection of stored energy during periods of low renewable generation. The BESS will also provide for voltage and frequency controls.
- **Decarbonise data centres by design** – applicant committed to clear pathway to achieving net zero carbon emissions for operations by 2030 and to pursuing PPAs to offset energy usage of their data centre campus.
- **SME access and community benefits** – applicant has engaged with local community groups including Newcastle Tidy Towns Initiative, Round Tower GAA Club, and Clondalkin and St. Francis FC.
- Simple fact is that the applicant’s facility campus to north of SID site already has a connection agreement that will be facilitated by a connection from the transmission lines and substation that are subject of this SID application. This was the situation when the permitted development (SD21A/0241) was granted, and remains so, and no substantive policy changes relating to data centre connections have occurred in the interim.
- Applicant confirms that high voltage ducting limits the landscaping permissible in some areas close to the substation. Welcomes that Parks and Public Realm Department have not requested any additional conditions regarding landscaping.

Applicant confirms that swale cannot be created outside the periphery of the site to the north and west as there are existing services in these areas.

- Many conditions suggested by the Planning Authority are relatively standard and relate to construction noise, dust/ odour and contaminated land and will be addressed under the Construction & Demolition Waste Management Plan.
- Level of noise from the sub-station during the operational phase will be minimal and there is no need for a noise condition.
- Applicant would welcome a condition that requires a revised layout to indicate car parking within each aspect of the proposed development.
- Questions the need for a condition that requires an aviation bird and wildlife risk assessment; management of wildlife; and an Aviation Impact Assessment. Suggests that if negative effects of bird activity on Irish Air Corps operations arise, the site owner shall mitigate these effects to a level acceptable to the Air Corps.
- Drainage, flood risk and water connection conditions acceptable to applicant. Wastewater and water requirements are minor in nature.
- Above ground SuDS measures as conditioned not feasible due to underground services, restrictive layout and abnormal loads using the roadway - proposed development forms the “exceptional circumstance” in which an underground attenuation tank would be acceptable. Soft landscaping to boundaries to north and west will grassed and will aid above ground attenuation.
- Proposed substation and client control building will not have any permanent staff – no requirement for a report on staff numbers and a revised layout indicating car or bicycle parking numbers as a condition of any grant of permission. No road opening licence required as roads remain in private ownership, as Construction Traffic Management Plan and Construction & Demolition Waste Management Plan will be submitted for the written agreement of the Planning Authority.
- No lighting columns will be affected by the proposed development and profile park is a private business park.

*Transport Infrastructure Ireland*

- Applicant has no response to make to the TII submission.

### *Irish Aviation Authority (IAA)*

- Ongoing site of the applicant's (SD21A/0241), included a condition that regulated the use of cranes on the site to the immediate north of the substation site, stating that the operation of cranes during construction should be coordinated with Military Air Traffic Services, no later than 28 days before use. Such a condition could be attached to any grant of permission.

### *Conclusion*

- Proposed development is designed to support current power demand and future growth within the area inclusive but not limited to the power requirements of Reg. Ref: SD21A/0241 within the same landholding in a location well-suited and serviced to accommodate such as use.
- Applicant acknowledges that the SID application is associated with ABP.317446-23 but that the SID case can and should be determined separately from the appeal and there is no requirement for both cases to be considered and determined concurrently – SID application is fundamental and linked to the already permitted development (SD21A/0241).

## **7.0 Assessment**

- 7.1. Having regard to the requirements of the Planning and Development Act, 2000 (as amended), this assessment is divided into three main parts; the planning assessment, environmental impact assessment and appropriate assessment (screening). In each assessment, where necessary, reference is made to issues raised by all parties. There is inevitable overlap between the assessments, for example, with matters raised falling within both the planning assessment and the environmental impact assessment. In the interest of brevity, matters are not repeated but such overlaps are indicated in subsequent sections of the report.

## **8.0 Planning Assessment**

- 8.1. In my opinion, the main issues to be addressed under this assessment are as follows:
- Development principle,

- Design, layout and visual impacts,
- Drainage and flooding,
- Impact on archaeology

## 8.2. Development Principle

- 8.2.1. 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.
- 8.2.2. The purpose of the proposed development is to support the power demand of the data centre development permitted under Reg. Ref: SD21A/0241 in May 2022. The principle of the permitted development has already been accepted by South Dublin County Council and the proposed development is ancillary in nature to the permitted development. The permitted and proposed developments would also fall under the uses that are open for consideration/ permitted in principle under the enterprise and employment zoning for the site. There is a live appeal (Reg. Ref: SD22A/0420/ ABP-317446-23) for another data centre development within the site immediately to the east of the data centre development permitted under Reg. Ref: SD21A/0241. The current proposal would also support the power demand of the data centre development under appeal; however, I agree with the applicant that the SID application is fundamental to and linked to the already permitted development.
- 8.2.3. 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.”*

- 8.2.4. It is an objective within 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 proposed substation and grid connection will facilitate the permitted data centre development in a cluster of existing data centres in Profile Park/ Grange Castle Business Park where the necessary electricity infrastructure can be put in place to support the power demands of these developments.
- 8.2.5. Since the submission of the application for this substation and transmission lines in February 2022, the Government has released the “*Statement on the Role of Data Centres in Ireland’s Enterprise Strategy*” (July 2022). This Statement sets out how digital and climate change policies can be achieved in respect to data centres, recognising the capacity constraints within the electricity system and the significantly large loads required by data centres. The Statement refers to the “*CRU Direction to the System Operators related to Data Centre grid connection processing*” (CRU/21/124), which allows the data centre industry to continue to connect to the electricity grid, subject to certain conditions. New data centre connections are required to have on-site generation (and/or battery storage) that is sufficient to meet their own demand.
- 8.2.6. As noted in Section 4 above, permission was granted under SD23A/0035 for amendment and modification of SD21A/0241 to include a battery energy storage system. The permitted development also includes a multi-fuel generation plant, and a flexible demand connection agreement is in place with EirGrid, which requires the applicant to reduce net consumption from the wider national grid when requested to do so in times of system constraint, meaning that power will be dispatched from the permitted multi fuel generation plant to the national grid. Furthermore, the applicant for the permitted development is in receipt on a connection offer from EirGrid to the proposed Kilcarbery substation.
- 8.2.7. Having regard to the above, and to the fact that the proposed substation and grid connection is essentially enabling infrastructure for a permitted data centre development, I consider that it is acceptable in principle. I do not consider that a

grant of permission for the substation is premature pending a decision of the data centre development current on appeal. The application for the substation was made to support the power demand for the permitted data centre. Furthermore, the applicant submits that the proposal is designed to support future growth within the area inclusive but not limited to the power requirements of Reg. Ref: SD21A/0241 in a location that it well suited and serviced to accommodate such a use within Profile Park.

- 8.2.8. Finally, South Dublin County Council consider that the proposed development will be of positive benefit for the sustainable development and economic growth of the County having regard to the location of the proposal in an area with numerous data centres, potential future data centres and a permitted power generation facility. Significant precedent exists for the establishment of this use on EE zoned lands in the surrounding area, and overall, I would be in agreement that the proposed development is generally in accordance with the policies and objectives of local, regional and national land use planning policy.

### **8.3. Design, Layout and Visual Impacts**

- 8.3.1. Table 12.27 of the 2022-2028 Development Plan sets out key principles for development within enterprise and employment zones. This includes measures for open space and landscaping, green infrastructure and built form and corporate identity. It is stated that a detailed landscaping plan shall be provided, incorporating green infrastructure elements. A parkland setting shall be promoted, and natural buffers and defensive planting shall be used to define private space. Building heights shall respond to the surrounding context, with taller buildings located along key movement corridors. Various treatments, finishes and colours should be employed to reduce bulk, massing and scale of larger buildings, and layout and design should maximise frontages onto the public realm.
- 8.3.2. Most of the surrounding area now comprises buildings and artificial surfaces, with former agricultural lands now being used as part of the construction site for the adjacent data centre development. Any natural features on site have therefore been cleared. Landscaping is proposed along the northern and western boundaries to comprise of grass, native groundcover and trees. This will provide the necessary

natural buffer between public and private space and the promotion of a parkland setting.

- 8.3.3. In visual terms, the proposed development will be dominated by the proposed 2-storey substation building. This structure will be 51m long and 16m deep and will be aligned parallel to the business park road. The height of the substation will be approximately 15m above ground level and external finishes will consist of powder coated profiled metal cladding panelling. Transformers, MV enclosures and a client control building will be situated to the front of the compound, which will be enclosed by a 2.6m high fence.
- 8.3.4. Notwithstanding the scale and appearance of the proposed substation building, I consider that it will be easily integrated with its surroundings. Adjacent buildings will be of larger scale and there is already substantial electricity infrastructure in the immediate vicinity. It should also be noted that the substation building will front onto a business park access road rather than the more heavily trafficked surrounding road network.
- 8.3.5. I note the Planning Authority's view that there would be limited visual impact on the wider area in the long term having regard to the zoning and central location within Profile Park and subject to implementation of a suitable landscaping scheme. In the event that the Board grants permission, I agree that relevant conditions should be attached in relation to environmental health, aviation, water services, Irish Water compliance, parks and public realm, roads, public lighting, etc.

#### **8.4. Water and Drainage Impacts**

- 8.4.1. It was deemed within the Flood Risk Assessment that the proposed development does not give rise to any significant risk of flooding. There are no records of historical flooding on site and water is unlikely to pond at the locations where there is some probability of flooding.
- 8.4.2. The proposed surface water drainage system will be designed, constructed and tested in accordance with the Greater Dublin Drainage Strategic Study, Greater Dublin Regional Code of Practice for Drainage Works v6 and the CIRIA SuDS Manual V6. This will mitigate any risk of pluvial flooding.



- 8.4.3. Notwithstanding this, Water Services and the Parks and Public Realm Department have suggested that conditions be attached to any grant of permission relating to SuDS. Water Services has requested revised drawings showing a swale in the area of proposed landscaping to the north and west of the site and the Parks and Public Realm Department highlight that the full potential of natural drainage should be explored. Conditions are also recommended on flood risk to ensure that no other property is adversely affected.
- 8.4.4. In the response to South Dublin County Council's submission, the applicant confirms that the introduction of a swale to the north and west of the site and other SuDS measures are not feasible due to a number of reasons, such as the presence of underground services. It is stated in the Development Plan that *"in some exceptional cases and at the discretion of the Planning Authority, where it is demonstrated that SuDS devices are not feasible, approval may be given to install underground attenuation tanks or enlarged pipes in conjunction with other devices to achieve the required water quality. Such alternative measures will only be considered as a last resort."* I consider that the applicant has presented a reasonable argument in favour of the drainage infrastructure as proposed. It is submitted that above ground SuDS measures as conditioned are not feasible due to the presence of underground services, the restrictive site layout and the abnormal loads using the roadway.

## 8.5. **Archaeology**

- 8.5.1. A Cultural Heritage Assessment has been prepared as part of the EIAR. Test trenching excavations undertaken in June 2021 revealed the remains of an oval/circular enclosure and two linear ditches on site. It is noted that other similar enclosures have been fully excavated in the study area and are considered to be of medieval origin.
- 8.5.2. The proposed works will have an impact on any unknown below ground archaeological remains, as well as having direct construction effects on the oval/circular enclosure and linear ditches. Excavation of an area measuring 50m by 50m will take place in order to preserve by record the identified oval/circular enclosure in advance of construction works commencing.

- 8.5.3. Most of the presently undisturbed sections of the proposed grid connection to the west of the site continue through amenity grounds and roads associated with the business park and would have gone through ground disturbance at the time of construction of roads and associated verges. 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.

## 9.0 Environmental Impact Assessment

### 9.1. Introduction

- 9.1.1. The proposed 110kV GIS substation, underground single circuit 110kV transmission lines and associated works on a 3.19 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 8.7 hectares.
- 9.1.2. Part 2 of Schedule 5 of the Planning and Development Regulations, 2001 (as amended) sets out development for the purposes of Part 10 and includes “*industrial estate development projects, where the area would exceed 15 hectares.*” The proposed development and the associated permitted data centre development are below the 15 hectare threshold. However, it is noted that the proposed development constitutes a strategic infrastructure development (SID) application under Section 182A of the Planning & Development Act 2000 (as amended) as the development includes high voltage (110kV or more) electricity transmission lines and interconnectors. Therefore, it is considered by the applicant that the development provides the potential for significant effects on the environment, and it was decided to undertake an EIAR on this basis.
- 9.1.3. Directive 2014/52/EU amending the 2011 EIA Directive was transposed into Irish legislation on 1<sup>st</sup> September 2018 under the European Union (Planning and Development) (Environmental Impact Assessment) Regulations, 2018. The EIAR was submitted to the Board in February 2022 and is therefore assessed under the provisions of the new Directive. This report assesses the cumulative impact of the proposed development with the data storage facility permitted under Reg. Ref: SD21A/0241 (ABP-313787-22), and with other developments in the vicinity.

9.1.4. 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. The main issues raised specific to EIA can be summarised as follows:

- Impacts both positive and negative on population and human health;
- Impacts on land in terms of change of use;
- Impacts on soils and water bodies;
- Cultural heritage and landscape impacts.

9.1.5. These issues are addressed below under the relevant headings, and as appropriate in the reasoned conclusion and recommendation including conditions. 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 2000, as amended.

## 9.2. **EIAR Content and Structure**

9.2.1. The EIAR is presented in three volumes comprising Volume 1: The Main Environmental Impact Assessment Report; Volume 2: Landscape, Visual and Heritage Impact Assessment; and Volume 3: Technical Appendices. A non-technical summary has also been prepared. 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. The non-technical summary gives a concise synopsis of the EIAR and is written in language that can be easily understood. 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. A baseline scenario with and without the proposed development is assessed and a description of the factors likely to be significantly affected by the proposed

development are set out, 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 offset 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.

- 9.2.3. 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. Reasonable 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 and uses, and alternative design/ layouts for the proposed development.
- 9.3.3. The 'do nothing' alternative would result in the permitted data centre being left without a permanent power supply. The land would therefore remain undeveloped and there would be loss of investment in infrastructure; loss of opportunity to maximise productive use of the site; loss of further economic and employment growth; and loss of opportunity to further establish Profile Park as a data centre hub.
- 9.3.4. No alternative sites for the proposed development were considered because EirGrid specified that the transformer compound must sit next to the EirGrid GIS substation that was identified for this site. In addition, the site is located so that it can be used

by potential future customers and in suitably zoned land without any issue of contamination.

- 9.3.5. A series of concept options were examined throughout the development and design process that included a 'test-fit' exercise to assess the layout of the transformer compound and substation and the design of the grid route.
- 9.3.6. Due to their smaller footprint and visual similarity to data centres, a 110kV eight-bay GIS substation was deemed to be more suitable than an AIS substation. The initial concept for the substation was based on the standard GIS layout incorporating the transformer compound. The substation compound was refined to provide access to the site and adjacent land.
- 9.3.7. The test-fit exercise for the grid route looked at three initial options. Option 3 was discounted due to land ownership constraints. Further information was obtained from ground investigations, as built services information, and internal discussions within the design team and EirGrid to refine the remaining two options. Following refinement of connection points to Castlebaggot and Barnakyle substations, the chosen route was agreed.
- 9.3.8. In general, the scope for significant design evolution is limited by requirements to comply with EirGrid standard specifications. The main area of evolution was the site layout and access arrangements. The chosen proposal allows for segregated access for construction works and site maintenance to the transformer compound and to the GIS substation for EirGrid.
- 9.3.9. 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 would be 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 (population and human health; transport and accessibility; air quality; noise and vibration; water resources and flood risk; ecology; ground conditions; climate change; waste; material assets; landscape and visual; cultural heritage; and 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. Chapter 6 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 policy context with respect to population and human health is set out, together with 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 transport and accessibility.
- 9.5.2. A desktop study from the Census of Population for the South Dublin County Council area, Clondalkin Village Electoral Division, and the Clondalkin Village small area was carried out. The populations of these three areas were 276,767, 9,152 and 257 respectively. The surrounding area of the subject site, however, is largely industrial and agricultural. There are some residential properties nearby but a large proportion of these are no longer in residential use due to the expansion of Grange Castle Business Park. The closest occupied residential dwelling is approximately 280m to the south.
- 9.5.3. In terms of health, the Clondalkin Village small area has a significantly higher percentage of those stating that their health is fair compared to Clondalkin Village ED and South Dublin County. There was a higher proportion in the small area employed in the agriculture, forestry and fishing category and the building and construction industry compared to the ED and County as a whole. Only 21% of

employed individuals within Clondalkin Village SA work within the commerce and trade industry compared with the 27.94% in South Dublin County.

- 9.5.4. With respect to community facilities, there is a creche situated 580m south-west of the site and there are a number of primary schools in the wider area. Deansrath Health Centre is approximately 1.6km to the north-west. Overall, the main sensitive receptor is the Clondalkin Village SA where the proposed development is to be located and including local residents, the local economy, pedestrians, cyclists and drivers, and vulnerable groups.

#### Characteristics of the Proposed Development

- 9.5.5. The proposed development comprises the construction of a 110kV GIS substation, and underground 110kV transmission lines to the existing 110kV Barnakyle substation to the west and to the existing 110kV underground Castlebaggot - Barnakyle circuit to the south of Castlebaggot substation. The purpose of the proposed development is to support the power demand for the 2 no. 2-storey data centre buildings permitted under Reg. Reg: SD21A/0241. A third data centre is proposed on the adjoining site to east, which is currently on appeal (ABP-317446-23).
- 9.5.6. The construction period was expected to take from Q3 2022 to Q2/Q3 2023 and it is anticipated that there will be an average of 30 workers on site from construction commencement. Normal working hours will be 08:00 to 19:00 hours Monday to Friday and 08:00 to 14:00 hours on Saturdays. Construction works for the 110kV substation will involve site enabling works (site preparation, levelling/ cut and fill, site offices/ welfare facilities and general site access); excavation works; temporary works; substructure works; superstructure works and fit out; landscaping works; and utilities and service installation which will involve drilling and laying of ducts and cables under the site, and connecting the GIS substation to the existing substations via two underground cable feeders.
- 9.5.7. When operational, the proposed substation will not require full time staffing. It is anticipated that there will be weekly maintenance visits by up to two staff.

### Potential Impact of the Proposed Development

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

- Increased employment opportunities with positive influence on health through increasing social contact, involvement in a collective effort or activity and by forming social relationships.
- Construction jobs often have a related multiplier effect, creating additional indirect employment in business, which in turn benefit from increased spending by local construction workers
- Potential cross factor effects to human health reported from topic chapters relating to air quality, noise, transport and accessibility, and local amenity.
- Dust generation as a result of construction activities and potential for emissions from maintenance vehicles.
- Noise assessment reports that noise associated construction stage traffic would not exceed the construction noise limit of 65dB LAeg.
- There would be a maximum additional 140 vehicle movements per day (of which 20 would be HGV movements – would have no discernible environmental effect in relation to pedestrian severance, delay, amenity, fear, and intimidation, driver delay and accidents and safety.
- Area has undergone a period of change, transitioning from an agricultural to an industrial and commercial area - nearby residents would be considered to be less susceptible to change.
- Landscape and Visual Impact Assessment reports that on completion, the proposed development would be a new feature within the landscape, relatively small in size compared to the scale of surrounding developments although of a similar commercial and industrial character.

### Mitigation Measures

9.5.9. Potential impacts on population and human health are mitigated by the measures outlined below under air quality & climate, noise & vibration and traffic & transportation.



## Residual Impacts

- 9.5.10. The residual impacts on population and human health are considered to be imperceptible or not significant to slight.

## Conclusions on Population and Human Health

- 9.5.11. 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. Chapter 11 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. Baseline data was collected through a desk study and field surveys were conducted on 17<sup>th</sup> August 2021. A static (Wildlife Acoustics Song Meter SM4 BAT FS) bat detector was deployed on site from 17 August 2021 and collected on 17 September 2021. A species scoping survey was carried out and habitat was classified using the Guide to Habitats in Ireland (Fossitt, A., 2000).
- 9.6.2. Five bat species/groups, otter, Irish hare, West European hedgehog, two invasive mammals, one bird species (house martin) and one invasive plant species were identified within 2km of the site from a National Biodiversity Data Centre search.
- 9.6.3. The nearest European Site is the Rye Water Valley Carton SAC located c. 5.9km to the north-west and the nearest proposed Natural Heritage Area is approximately 1.5km north (Grand Canal pNHA). The site is located upstream of designated sites in Dublin Bay and in the River Liffey. Habitat types on the proposed development site comprise of improved agricultural grassland (GA1), treelines (WL2), recolonising bare ground (ED3) and buildings and artificial surfaces (BL3).

- 9.6.4. Receptors identified as sensitive are South Dublin Bay and River Tolka SPA, South Dublin Bay SAC and North Dublin Bay SAC; other habitats on site; bats; and birds.

#### Characteristics of the Proposed Development

- 9.6.5. The proposal comprises the development of a 3.19 hectare greenfield 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 site clearance operations. A combination of excavators, trucks and other soil shifting plant will commence the main site clearance and levelling aspects of the proposed development.
- 9.6.6. Security fencing will be established around the site compound and site access will be restricted. This fencing would have mammal gates or a gap of at least 10cm at the bottom to allow free movement of badgers through the site. On site lighting will be directed so that all lights are directed downwards and inwards to minimise the extent of light spill onto perimeter habitats. Construction staff will be inducted on health and safety requirements, emergency protocols and details of welfare facilities.

#### Potential Impact of the Proposed Development

- 9.6.7. The potential impacts of the proposed development on key ecological receptors are summarised as follows:
- No possibility of direct habitat loss or loss of habitat that supports QI/ SCI populations of European Sites as a result of the proposed development.
  - Given the scale of the development and the large distance between the application site and the Dublin Bay, there would be negligible impact upon the qualifying features of the SPAs and SACs.
  - Grassland habitat on site is abundant in the surrounding area and small amount of habitat loss would not be significant.
  - Habitat on site is sub-optimal for foraging bats due to limited number of prey species. Site is also subjected to high amounts of artificial light from neighbouring similar developments and streetlighting. Low levels of bat activity recorded.
  - No evidence of breeding birds noted in any trees within the survey area. However, there is potential for loss of breeding attempts in and adjacent to the site

if construction works are undertaken between the months of March and August inclusive.

- Operational stage not expected to lead to a permanent imperceptible, negative effect on species or habitats.

#### Mitigation Measures

- 9.6.8. No significant effects on biodiversity are predicted and therefore no additional mitigation measures are required. The technical appendix of the EIAR refers to mitigation to meet legal obligations and includes measures such as the cessation of works where any bird roosting or nesting is observed on site and obligations to avoid deliberate disturbance of bats during periods of breeding, rearing and hibernation. Security fencing will have mammal gates or a gap of at least 10cm at the bottom to allow free movement of badgers through the site. Operational lighting will be designed to be sensitive to the presence of bats.
- 9.6.9. The following biodiversity mitigation measures are outlined for the construction phase of the proposed development:

#### Residual Impacts

- 9.6.10. Residual impacts on birds, bats, terrestrial habitat and designated sites will be imperceptible or not significant.

#### Conclusions on Biodiversity

- 9.6.11. 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 for measurable effects on any downstream designated sites.
- 9.6.12. 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 Construction and Environmental Management Plan, no significant direct, indirect or cumulative adverse effects on water quality, habitats and species are likely to arise.

## 9.7. Land, Soil, Water, Air and Climate

- 9.7.1. This assessment deals separately with the above environmental factors as they appear in the EIAR. Chapter 12 of the EIAR addresses ground conditions and Chapter 10 deals with water resources and flood risk. Noise and vibration are covered under Chapter 9, air quality in Chapter 8 and climate change is included under Chapter 13. Waste falls under Chapter 14 and may also be included in this section.
- 9.7.2. An intrusive ground investigation was undertaken in June 2021 to characterise the ground, groundwater and ground gas conditions of the site and the potential contamination risks. Baseline noise surveys were undertaken to quantify the prevailing ambient and background noise levels during the daytime and night-time periods. Data provided by other sources was deemed to be adequate and representative of the site conditions for other environmental factors.
- 9.7.3. The site has been in agricultural use up until recent years. Ground conditions consist of topsoil of brown slightly sandy silty clay/ silt with occasional rootlets. Glacial till is also the common soil cover in the region. Bedrock consists of dark grey and black limestone with thin horizons of fissile shale or mudstone and aquifers are classified as locally important with high vulnerability. Local groundwater flow is expected to be to the north and groundwater was reported at a depth of 2.3m below ground level. The groundwater body underlying the site is of 'good status' and 'not at risk'.
- 9.7.4. In terms of land take, there will be a loss of agricultural land resulting from the proposed development; however, the site is zoned for 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. The risk of contaminated soils being present on site is low.
- 9.7.5. The site is within the sub-catchment of the Griffeen River and Baldonnell Stream, which are tributaries of the River Liffey. Baldonnell Stream runs approximately east to west 150m north of the site and a classification of 'moderate status' was recorded for this stream within the review of the WFD waterbody status (2013-2018). This stream has been culverted in some sections. The EPA biological assessment of surface water from the Griffeen River indicated a score of Q3 (poor) in 1991. Areas

of the site are shown in OPW mapping to have a low fluvial flooding probability (1 in 1000 year annual exceedance probability) and an area to the south-west of the site is shown to have medium fluvial flood probability (1 in 100 years).

- 9.7.6. Sensitive receptors for ground condition impacts include construction workers, adjacent site users, future site users, the water environment (Balldonnel Stream) and groundwater beneath the site. The sensitivity of waste relates to availability of landfill void capacity, which is recognised as an unsustainable and increasingly scarce option for managing waste. Sensitive receptors for water impacts includes surface water features (Balldonnel Stream), flood risk and groundwater. The dominant noise sources in the surrounding area are road traffic noise, aeroplanes and helicopters and more distant noise from other industrial land uses.
- 9.7.7. Local air quality monitoring data was obtained from EPA and cumulative air quality assessments have been extracted from other EIARs. The closest human receptors to construction phase works are located within 350m of the site and therefore a detailed dust assessment was required. There are no designated ecological sites within 350 m of the site.
- 9.7.8. With respect to climate, the likely significant effects of the proposed development on the environment resulting from the climate change resilience assessment, in-combination climate impacts assessment, and GHG assessment are examined. GHG emissions include embodied emissions (emitted during manufacture, transport and construction of materials), waste disposal GHG emissions, on-site GHG emissions, transport GHG emissions and operational energy demand and GHG emissions. Total GHG emissions associated with the proposed development have been compared to the carbon budgets for Ireland to provide a national context.

#### Characteristics of the Proposed Development

- 9.7.9. The activities associated with the construction phase of the proposed development on land, soils, water, air and climate include loss of agricultural land; groundworks and earthworks including cut and fill, excavations, subsoil stripping and stockpiling; import and export of materials; fuel and chemical handling; etc.
- 9.7.10. Surface water drainage is designed in accordance with the Greater Dublin Strategic Drainage Study and will include measures such as slit traps, separation filters and oil separators to provide extensive treatment of surface water prior to discharge from

the site. The proposed connection point for drainage serving the 110kV GIS substation would be to manholes on Falcon Avenue via an underground attenuation tank.

Potential Impact of the Proposed Development on Land, Soil and Geology (ground conditions)

9.7.11. The following impacts are applicable to **land, soils and geology**:

- There will be loss of agricultural soil; however, the land has not been used for agriculture for a number of years.
- Construction stage activities represent the greatest risk of potential impact on the geological environment - site preparation, excavation, levelling and infilling, and ancillary services.
- Subsoil would be excavated to facilitate construction of foundations, access and internal roads, expansion of drainage connections, cable transmission routes and other ancillary works – potential for rainfall and/ or groundwater to become contaminated with pollutants associated with construction activity.
- Majority of the cut material generated during site preparation/levelling (2,829 m<sup>3</sup>) would be disposed off-site (mainly topsoil material). Approximately 10,800m<sup>3</sup> of fill would be required to facilitate construction of the proposed roads, car parks, buildings and landscaping berms.
- Potential for unknown contaminated soils within excavations.
- Potential for stockpiles to cause negative impacts on air and water quality.
- Potential for spillage of fuels to ground and resulting soil and/ or groundwater quality impacts during construction.
- Potential for accidental spillages and leaks of oil, petrol or diesel to soil/ groundwater contamination if the spillages and leaks are unmitigated during operational phase.
- In the event of an on-site fire, firewater would also need to be contained or it may contaminate soils and/or groundwater.

### Mitigation Measures for on Land, Soil and Geology

- CEMP established and maintained by the contractors during the construction stage which would cover all potentially polluting activities and emergency response procedures.
- Proposed development would incorporate the reduction, reuse and recycle approach in terms of on-site soil excavations as much as possible.
- The proposed works would be carefully planned to ensure only material required to be excavated, with as much material left in situ as possible.
- Excavation works would be carefully monitored by a suitably qualified person to ensure any potentially contaminated soil is identified and segregated from clean/inert soil.
- Implementation of an appropriate earthworks handling protocol during construction to mitigate against the effects of soil stripping and stockpiling.
- Stockpiles would be formed within the boundary of the site with no direct link or pathway to any surface water body.
- Dust suppression measures would be put in place (e.g. damping down during dry periods, vehicle wheel washes, road sweeping, and general housekeeping).
- Fuel and chemical handling measures, e.g. bunded refuelling areas, spill kits, procedures for use of mobile bowsers, and procedures for drummed fuel and other potentially polluting substances.
- Earthworks carried out with adequate drainage, falls and profile to control run-off and prevent ponding and flowing.
- Pre-treatment and silt reduction measures on site would include a combination of silt fencing, settlement measures and use of hydrocarbon interceptors.
- Environmental Safety and Health Management System for the proposed development - prior to operation of the proposed development, a comprehensive set of operational procedures would be established which would include site-specific mitigation measures and emergency response measures.

### Residual Impacts for on Land, Soil and Geology

9.7.12. Following implementation of mitigation measures, residual impacts during construction and operational phases will be imperceptible/ not significant.

### Potential Impact of the Proposed Development on Waste

9.7.13. The following impacts are applicable to **waste**:

- There are 106 authorised facilities in the Eastern and Midlands Region for soil and stone acceptance.
- Waste arising from infrastructure and earthworks is expected to comprise of topsoil, clay/ silt material, gravel and mudstone.
- Site preparation, excavations and levelling works for foundations, access roads and installation of services and transmission cables would generate approximately 4,225m<sup>3</sup> of material.
- Most cut material generated during site preparation/ levelling (2,829m<sup>3</sup>) would be disposed off-site. C. 10,800 m<sup>3</sup> of fill would be required to facilitate construction of the proposed roads, car parks, buildings and landscaping berms.
- Wastes generated from other construction activities, such as from construction workers, would be imperceptible and not significant.
- Estimated in EIAR that c. 4,370 tonnes of C&D waste would be generated and of this volume only 12.5 tonnes would be disposed to landfill – would have negligible impact on capacity in waste management facilities and landfill sites.
- Small quantities of waste would be generated from the proposed substation site with no waste generated from the operation of the transmission and cable lines during the operational phase.

### Mitigation measures for Waste

- Site Waste Management Plan (SWMP) would ensure suitable management of construction and excavation waste, prevention (where practicable) and minimisation of waste arising and maximisation of waste re-use and recycling.
- All excavations would be carefully monitored by a suitably qualified person to ensure that potentially contaminated soil is identified and segregated.



- Waste materials generated at the site compound would be stored in suitable receptacles in designated areas.
- Construction wastes would be taken to suitably registered/permited/licenced waste facilities for processing and segregation, recycling, recover and/or disposal.
- All waste leaving site would either be reused, recycled, or recovered; transported by suitable permitted contractors and taken to suitably registered, permitted, or licenced facilities; and recorded and copies of relevant documentation maintained.
- Waste manager would be appointed, and construction staff would be trained on waste management procedures.
- Wastes arising from the C&D phases of the development will be dealt with in compliance with the provisions of appropriate legislation. Soils/ stones imported from another construction site as a by-product would be carried out in accordance with the relevant legislation.

#### Residual Impacts for Waste

9.7.14. Residual impacts on waste management facilities (effect on capacity) during construction and operation will be imperceptible/ not significant.

#### Potential Impact of the Proposed Development on Water

9.7.15. The following impacts are applicable to **water**:

- Potential for contamination of surface water as a result of silt-laden runoff across the construction site and from stockpiles, polluting substances (e.g. fuels and chemicals) from accidental spillages and other wastes during general construction activity.
- Disruption of groundwater during construction excavations - unlikely to lead to a significant change to hydrogeological conditions outside of the site boundary.
- Changes to flood risk – site located in Flood Zone C and therefore not at significant risk of flooding and would not be expected to directly affect areas of fluvial floodplain during construction.
- Water supply and foul drainage during construction. Understood that the foul water drainage network has sufficient available capacity for the wastewater

discharges for the short-term construction stage and there is adequate capacity within the existing watermain network.

- Potential for operational stage impacts from increased surface water run-off volumes leading to flood risk off site; alteration of local groundwater flow paths and levels; increase in water demand; and increase in effluent discharges.

#### Mitigation Measures for Water

- CEMP would cover all potentially polluting activities and emergency response procedures and procedures as above for refuelling.
- Excavation works would be carefully monitored to ensure any potentially contaminated soil is identified and segregated from clean/inert soil.
- Stockpiles would be formed within the site boundary and there would be no direct link or pathway to any surface water body.
- Earthwork operations would be carried out with adequate drainage, falls and profile to control runoff and prevent ponding and flowing. All run-off would be prevented from directly entering into any watercourses or drainage ditches.
- Any discharge of construction related water would be to foul sewer and pre-treatment and silt reduction measures would be employed on site.
- Surface water drainage network is designed such that run-off would be attenuated to a greenfield rate upon completion of the construction phase.
- Flood Risk Assessment states that the proposed substation facility's surface water drainage system would mitigate any risk from surface water flooding.
- Foundations for the precast concrete or structural steel frames would require moderate scale excavations and the method of foundations would take account of the ground conditions and environmental considerations.
- Proposed development includes measures to manage surface water run-off (a reduction to a greenfield rate whilst also taking account of climate change), which would result in improvements in terms of flood risk as the current rates of runoff would be expected to increase with climate change, although the scale of such benefit is likely to be negligible.

### Residual Impacts for Water

9.7.16. Residual impacts on water will be imperceptible or not significant/ slight.

### Potential Impact of the Proposed Development on noise and vibration

9.7.17. The potential impacts on **noise and vibration** are summarised as follows:

- Potential for construction noise from enabling works, substructure, superstructure, internal fit out and external works - noise levels at the identified noise sensitive receptors are not predicted to exceed the threshold criteria.
- Based on a (80dBA at 10m) 44t lorry travelling at 34 kph, the peak permissible number of HGV vehicle movements passing a receptor at 5m has been assessed in the EIAR as 8 per hour, or 4 return journeys per hour. On this basis, the predicted construction traffic noise level would be calculated as 64.7dB LAeq, giving rise to a short-term slight negative effect.
- Potential that construction induced vibration may be perceptible mainly from earthwork activities.
- 3 no. transformers would be located in the northern compound - sound power of 106dB Lw has been assumed per transformer.
- FG Wilson P50-3\_50Hz emergency generator, with CAL Modular Acoustic Enclosure 30 – 220KVA, or equivalent, would be located inside the GIS substation with sound power of 83dB Lw (this is considered conservative, as the noise level at the louvre would be lower due to distance and louvre attenuation losses).
- Worst case modelled noise levels for normal operations at noise sensitive receptors are within required limited and would have a slight negative effect. For an emergency condition, predicted noise rating levels constitute a direct temporary imperceptible, negative effect.

### Mitigation Measures for Noise and Vibration

- Standard best practice controls and measures, as detailed below, would be adopted to ensure that noise management forms an integral part of the contractor's scope of works.

- CEMP includes construction mitigation measures to be adopted to minimise noise and vibration emissions at surrounding sensitive receptors (e.g. work hours, plant, construction traffic, monitoring, etc).
- Undertaking of appropriate community awareness campaign to inform people residing in the vicinity of construction works (nature and duration of works, mitigation, contact details, etc.).
- CEMP would include provision for monitoring to see that construction phase noise levels do not exceed thresholds above which significant effects may occur. Any complaints would be recorded and addressed with additional mitigation considered as appropriate.

#### Residual Impacts for Noise and Vibration

- 9.7.18. The residual construction effects would be short term, and slight negative. During the operation phase, there would be direct permanent slight and negative effects for normal operation and temporary imperceptible, negative and not significant impacts with emergency kit running.

#### Potential Impact of the Proposed Development on Air Quality

- 9.7.19. The potential impacts on **Air Quality** are summarised as follows:
- Main activities during construction with potential to cause dust emissions are earthworks and site preparation; construction of building structures, including foundations; materials handling such as storage of materials in stockpiles and spillage; construction of on and off-site highway improvements; and hard and soft landscaping.
  - Potential exists for dust deposition and increased particulate matter concentrations to occur during the construction stage, as well as increased air emissions resulting from the operational phases of the proposed development.
  - EIAR notes that main air pollutants of concern are dust and particulate matter with an aerodynamic diameter of less than 10 µm (PM10), typically generated during construction activities, and nitrogen oxides (NOx) represented as nitrogen dioxide (NO2), typically generated by combustion engine emissions and road traffic.

- Effects of construction related traffic emissions would be temporary, negative in nature, and not significant to slight in relation to human health. Effects of operation stage related traffic emissions would be long-term, neutral, and not significant in relation to human health.
- Theoretical potential for air quality impacts during the operation phase from combustion backup generator engine.
- Main potential air quality impacts during construction would be dust annoyance and locally elevated concentrations of PM<sub>10</sub>. Separation distance and weather are important factors.
- Backup generator would only operate for a short period, with a maximum of 1-hour testing done annually to confirm its functionality - unlikely that any emissions associated with the backup generator would cause significant impact on air quality.
- Overall risk of dust impacts in the absence of mitigation has been assessed in EIAR as medium risk in the range from none to slight.

#### Mitigation measures for Air Quality and Climate

- Communications to include community engagement, name of person responsible for dust issues, etc.
- Develop and implement a Dust Management Plan as part of CEMP.
- Site management, recording of incidents and taking of appropriate measures to reduce emissions in a timely manner.
- Undertaking of daily on and off-site visual inspections.
- Planning of site layout to locate dust generating activities as far as possible from receptors and usage of appropriate screening.
- Measures for operation of vehicle/ machinery and to encourage sustainable travel.
- Undertaking of dust generating operations with suitable dust suppression equipment or techniques.
- Storage of aggregates in bunded areas and measures to reduce release of fine powders.

- Measures specific to track-out including water assisted dust sweepers, appropriate covering of vehicles, wheel washing, etc.
- Measures specific to earthworks including use of hessian, mulches or tackifiers and revegetation as soon as possible.

#### Residual Impacts for Air Quality

9.7.20. Residual air quality effects are imperceptible in terms of dust soiling and PM<sub>10</sub> due to construction work and changes in NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> levels due to vehicle emissions.

#### Potential Impact of the Proposed Development on Climate

9.7.21. The potential impacts on **Climate** are summarised as follows:

- GHG emissions resulting from construction stage activities, such as from the material supply including primary extraction, manufacturing, transportation and construction process and site works associated with the proposed development.
- GHG emissions associated with land use change.
- GHG emissions associated with the powering of data servers.
- Transport of workers to and from the site.
- Operational emissions from electricity will begin to decline due to the gradual greening of the national grid, in which the permitted data centre development is connected to via a substation.
- Increased frequency and intensity of extreme weather events affecting construction works, run-off, flooding/ overheating of underground foundations/ services, personnel, etc.
- Emissions from the construction phase are predicted to total in the region of 15,101 tCO<sub>2</sub>e. Construction and operation of the proposed development is expected to contribute 0.005% of Ireland's proposed 295 MtCO<sub>2</sub>e carbon budget for 2021-2025, 0.00009% of the 2026-2030, and 0.0001% of the 2031-2035.

#### Mitigation measures for Climate

- Drainage infrastructure has been designed with sufficient allowance to account for climate change and to withstand extreme rainfall events.

- Soft landscape features to be maintained following establishment through watering in periods of dry weather and carrying out periodic inspections to monitor the establishment of new planting.
- Maximise potential for re-using and/or refurbishing existing assets to reduce the extent of new construction required, and/or explore alternative lower carbon options to deliver the development objectives.
- Minimise resource consumption during construction, operation, and at end of life.
- Measures to further reduce carbon through on or off-site offsetting or sequestration.
- Additional mitigation not required - existing design and mitigation measures are appropriate to account for climate change/ extreme weather.
- Encouragement of staff/ workers to car share or use sustainable transport modes, operating plant at low speeds and no vehicle idling.
- Usage of high efficiency lighting and low loss transformers.
- Regular inspection of drainage infrastructure and structures has been specified to assess the condition after extreme weather events.

#### Residual Impacts for Climate

9.7.22. The overall effects of the proposed development on climate are considered to be negative and ranging from imperceptible to not significant. However, professional judgement is used on how best to contextualise a project's GHG emissions impact. The proposed development has nonetheless been designed to improve its resilience to climate change.

#### Conclusions on Land, Soil, Water, Air and Climate

9.7.23. The main potential effects to land relate to the change from former agricultural use to enterprise and employment use, which is in accordance with the zoning objective for the site and surrounding lands. The baseline assessment identified no significant sources of ground contamination in either the soil or the water environment.

9.7.24. 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 CEMP sets out requirements and standards that must be met during the construction stage and will include the relevant mitigation measures outlined in the EIAR and subsequent planning conditions. This will include measures to prevent impacts to soil/ groundwater and surface water.

- 9.7.25. Waste management facilities in the Eastern Midlands Region have sufficient capacity to take C&D waste from the proposed development and networks of waste collection, treatment, recovery, and disposal infrastructure will manage waste efficiently. There are no sensitive receptors in the surrounding area and local groundwater flow is expected to be to the north and the Dublin Groundwater Body is not at risk.
- 9.7.26. There is no evidence of pluvial drainage entering the site and the Flood Risk Assessment states that there is no evidence of groundwater flooding. The south-west of the site is shown to be within an area of medium fluvial flood probability; however, mapping suggests there is no direct topographical route from this area to the main area where the substation would be built.
- 9.7.27. 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. Various measures will be applied to control noise and dust emissions including the establishment of channels of communication, weather monitoring, limitation of construction hours and procedures for dealing with any complaints.
- 9.7.28. The proposed development's GHG emissions would be minor in comparison to the Ireland's carbon budgets. Professional judgement is nonetheless used on how best to contextualise a project's GHG emissions impact. It should be noted, however, that the proposed development will facilitate the power demand of an already permitted data centre development. The principle of this development is therefore already accepted.
- 9.7.29. 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. Volume 2 of the EIAR comprises a Landscape and Visual Impact Assessment and a Cultural Heritage Assessment. The landscape and visual impact assessment has been prepared to analyse the existing landscape and the potential visual impacts of the proposed development. The site is located within a landscape character area that transitions between urban and limestone farmland and where significant change from agriculture to industrial and commercial use has taken place. A total of nine viewpoints have been created to assess the visual impact of the proposed development. A zone of theoretical visibility has also been produced.
- 9.8.2. The assessment of the impact on cultural heritage included a desk top study, which showed that the site contains no archaeological sites, finds or monuments recorded in the SMR, RMP or RPS. However, a geophysical survey revealed a sub-circular enclosure, with an area of probable contemporary medieval field systems along with a second possible curvilinear feature in the field south of the road forming the site boundary. Test trenching undertaken in June 2021 revealed the identified enclosure approximately 40m in diameter, as well as linear boundary ditches.

### Characteristics of the Proposed Development

- 9.8.3. The proposed Kilcarbery substation is situated to the south of Falcon Avenue in Profile Park. The permitted data centre development that the proposed substation will service is to the north of this road. The substation compound will include a 2-storey GIS substation building with gross floor area of 1,477 sq.m., as well as a client control building, transformers, kiosks, lightning rods, car parking and associated underground services within a 2.6m high fenced compound. The substation building will be finished in metal cladding and will have a height of 15m above ground level.
- 9.8.4. Landscaping will be in accordance with the landscape masterplan that will include trees, native groundcover and grass along the northern and western site boundaries. Hard landscaping within the site will comprise of asphalt roads, gravel and concrete footpaths.

## Potential Landscape and Visual Impact of the Proposed Development

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

- Initial construction operations created by the clearance of the site and construction of buildings and plant will give rise to temporary impacts on landscape character.
- Appropriate material excavated during ground works would be re-used as part of earthworks as a temporary backfill where necessary.
- Landscaping would be planted upon substantial completion of construction works and topsoil would either be reused or imported to fill and shape landscaped areas.
- Proposed development would be experienced within the landscape as a continuation of current activity, limiting the magnitude of impact.
- Grand Canal is judged to experience no change/negligible magnitude of impact due to its distance from the proposed development and the current existence of similar activity.
- Newcastle Lowlands LCA and Baldonnel Stream are judged to experience a low (negative) magnitude of impact.
- During operational phase, the building would be a new feature within the landscape, similar in visual appearance to surrounding developments.
- Visual impacts have been assessed against baseline using photomontages of the operational building as follows:
  - VP-01: Grand Canal looking south-east – proposed structures of similar height to surrounding buildings and would not be visible from this location.
  - VP-02: New Nangor Road at the roundabout junction with Baldonnel Road looking south-east – proposed development not expected to be visible from this location following construction on adjacent land.
  - VP-03: Baldonnel Road junction with Profile Park Road looking east – proposed building not expected to be visible from this location following construction of associated data centre.

- VP-04: Baldonnell Road near the entrance to the Casement Aerodrome looking north – proposed building is proportionate to other buildings of similar scale and materiality within the view.
- VP-05: New Nangor Road to the north-west corner of the site looking south-east – associated data centre will screen the proposed development from view.
- VP-06: New Nangor Road looking south towards the site – approved data centre development will mean that proposed development is not visible from this location.
- VP-07: New Nangor Road and Profile Park Road roundabout junctions looking south-west – proposed structures not visible from this location.
- VP-08: Profile Park Road roundabout at the site entrance looking north-west – within surrounding context, visual magnitude of impact is moderate due to scale of the building and lack of landscape amenity features.
- VP-09: Profile Park Road looking south-east across the site – building is a prominent feature within this view; however, travel and employment receptors are of low sensitivity.

#### Mitigation Measures for Landscape and Visual

- Proposed landscaping scheme includes limited tree planting and amenity grass around the perimeter of the site.
- Embedded mitigation within CEMP, including the erection of hoarding around the site and early establishment of boundary landscape features.
- Ongoing construction within business park reduces susceptibility of landscape and visual receptors to construction activities.
- No additional mitigation measures are proposed.

#### Residual Impacts for Landscape and Visual

9.8.6. There are no significant positive or significant negative residual impacts for landscape and visual.

9.8.7. There will be a moderate and long-term impact from Viewpoint 9 adjacent the site during the operational phase; however, the proposed development would be consistent with the existing and emerging trends in the area.

#### Potential Impact on Cultural Heritage

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

- Study area covers an area of 1km radius from the site boundary - 22 monuments and sites are listed in the Sites and Monuments Record data for the site and 1km radius study area, none of which fall within the site boundary.
- There are no structures included in the Register of Protected Structures within the site and no assets on the statutory Record of Monuments and Places or the Register of Historic Monuments within the study area.
- Geophysical survey revealed a previously unidentified archaeological feature on site comprising a large sub-circular enclosure (approximately 30m in diameter), with an area of probable contemporary medieval field systems along with a second possible curvilinear feature along the eastern portion of the field.
- 10 test trenches were excavated and confirmed the presence of the anomalies shown on the geophysical survey, revealing the remains of the oval/circular enclosure approximately 40m in diameter.
- Proposed development would involve groundworks which would have an impact on any below ground archaeological remains.
- There would be a direct construction effect on the oval/circular enclosure and associated linear ditches as documented in the site investigations.
- No significant effects are predicted on the archaeological resource on site during the operation stage.
- Impacts on built heritage resources in the wider area (Kilmactalway church and related features, Kilbride church and related features, Kilcarbery House, Castle Bagot House, and the buildings of heritage interest at Casement Aerodrome) would be not significant or slight significant.

### Mitigation Measures for Cultural Heritage

- Necessary to undertake an archaeological excavation of an area measuring 50m by 50m in order to preserve by record the identified oval/circular enclosure in advance of construction works commencing.
- Predicted moderate significant effect on the archaeology resource can be wholly mitigated through the aforementioned scheme of excavation and preservation by record.

### Residual Impacts for Cultural Heritage

- 9.8.9. There would be a moderately significant positive residual effect through the knowledge gained and understanding in relation to the other recorded contemporary enclosure sites in the wider landscape.

### Conclusions on Cultural Heritage and the Landscape

- 9.8.10. Construction phase visual impacts on the landscape will include the creation of compounds, use of machinery, clearing of vegetation and topsoil, reinstatement, etc. Operational phase impacts will relate mainly to above ground structures associated with the proposed substation. 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.
- 9.8.11. The site of the proposed development contains a previously unidentified archaeological feature comprising a large sub-circular enclosure, with an area of probable contemporary medieval field systems, together with a second possible curvilinear feature along the eastern portion of the field. Excavation of an area measuring 50m by 50m will take place in order to preserve by record the identified oval/circular enclosure in advance of construction works commencing.
- 9.8.12. 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 under Chapters 15 of the EIAR. Chapter 7 on Traffic and Accessibility also contains elements relating to material assets and are covered under this section. The Transport and Accessibility chapter is supported by technical appendices containing traffic flow and distribution diagrams, accident data and cumulative schemes daily traffic flow diagrams. The assessment determines existing and forecast traffic levels and characteristics; the time period suitable for assessment; the year of assessment; and the geographical boundaries of the assessment. Five junctions were assessed along Nangor Road and it has been assumed that peak construction traffic would occur in 2022 and the development would be operational in 2023. Traffic survey data contained within the recently submitted Grange Castle Business Park South, Baldonnel, Dublin 22 Traffic Impact Assessment (Ref SD20A/0121) was used for the purposes of the current assessment. Pedestrian severance, delay, amenity, fear and intimidation; driver delay; accidents and safety; and the cumulative stage have been considered in the assessment.
- 9.9.2. The Material Assets chapter assesses the potential impact on built services and infrastructure, if any, in terms of power and electricity supply; gas supply; water services (including surface water and foul drainage infrastructure and water supply); and telecommunications. The study area comprises the surrounding utility network within Profile Park and the wider area.
- 9.9.3. The main power supply to Profile Park is from the ESB EirGrid, which is known to be constrained in terms of providing electrical grid power to the area. The business park also has a natural gas supply, but a gas connection is not required as part of the proposed development. Multiple telecommunications connection service lines exist along Falcon Avenue and Concorde Drive.

### Characteristics of the Proposed Development

- 9.9.4. The proposed development site will be accessed from the service road to the west off Falcon Avenue. During the operational phase, separate accesses will be provided to the GIS substation and to the client control building to the north of the site. Access will be provided to maintenance and emergency vehicles to both parts

of the site. Very few trips are anticipated during the operational phase due to the unmanned nature of the facility.

- 9.9.5. The proposed 110kV GIS substation and 110kV cable circuits are designed to support the power demand for the proposed data centre development situated on the northern side of Falcon Avenue. A telecommunications network would be installed at the main data centre site to the north, and this would be extended to the GIS substation. A new surface water drainage network will be installed to serve the proposed development and the existing foul sewer and water supply networks are understood to have capacity.

#### Potential Impact of the Proposed Development

- 9.9.6. The potential/ predicted impacts on **traffic and transport** are summarised as follows:

- Daily peak construction traffic would consist of 30 staff (60 vehicles movements); 10 HGVs (20 movements); and 30 'other' light construction vehicles (60 movements). Results in a total of 140 vehicle movements.
- With additional traffic distributed across the network, there are no highway links with an increase over 30% in construction vehicle movements.
- Percentage increase during the construction phase is 0 or 1% and 9%/ 10% at the Profile Park junction and according to IEMA Guidelines projected changes in traffic flows of less than 10% create no discernible environmental effect.
- Effects on transport and access during the construction phase are imperceptible, negative and not significant in terms of pedestrian severance, delay, amenity, fear and intimidation; driver delay; and accidents and safety.
- There are negligible vehicle trips anticipated during the operational stage of the proposed development, with weekly site visits by two vehicles only.

#### Mitigation Measures for Traffic and Transport

- A CEMP would require construction traffic including both construction plant and material deliveries to be programmed to avoid peak traffic periods on the surrounding local and strategic road network and minimise any effect on the local

highway network and road, pedestrian and cycle users. No additional mitigation would be required for the construction stage.

- No mitigation measures necessary for the operational phase of the proposed development.

#### Remedial Impacts for Traffic and Transport

- 9.9.7. The residual impacts of the proposed development will be imperceptible, negative and not significant.

#### Potential Impacts of the Proposed development on Material Assets

- 9.9.8. The potential impacts on **Material Assets** are summarised as follows:

- Power and electrical supply receptors are of high sensitivity as the development is located in a constrained area in terms of electrical grid capacity.
- Excavation of trenches in the vicinity of existing electrical services will be carried out in consultation with ESB to ensure there will be no impact on existing users.
- Overall power demand for the construction stage would be relatively minor.
- Foul water drainage and water supply networks have sufficient available capacity for the short-term construction stage.
- A telecommunications network would be installed at the site with connection to the regional network, implemented by the statutory network operator.
- Prior to operation, a comprehensive set of operational procedures would be established which would include site-specific mitigation measures and emergency response measures.
- Flood Risk Assessment states that the proposed substation facility's surface water drainage system would mitigate risks from surface water flooding.

#### Mitigation Measures for Material Assets

- CEMP would be established and maintained by the contractors during the construction stage, which would cover all potentially polluting activities and emergency response procedures.



- All surface water works including connections would be carried out in accordance with the Code of Practice for Development Works – Drainage.
- Foul connection to the wider network in Profile Park would be undertaken in consultation with Irish Water.
- Ongoing consultation with EirGrid, ESB Networks, South Dublin County Council, Irish Water and other relevant utility providers and compliance with any requirements or guidelines they may have.
- Excavation of trenches will be carried out in consultation with ESB Networks and commissioning will be in accordance with ESB Network requirements.

### Residual Impacts

- 9.9.9. The proposed development entails minimal use of material assets (power and electrical supply, telecommunications, drainage infrastructure and water supply) during construction with no impact once operational.

### Conclusions on Material Assets

- 9.9.10. The proposed development will not generate traffic levels during construction and operational phases that will give rise to a significant impact. The impact is assessed cumulatively with the permitted development during the construction phase, and it is concluded that the increased traffic levels at peak times attributed to the proposed development are minimal. Operational traffic is limited to weekly site visits for two vehicles.
- 9.9.11. 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.
- 9.9.12. 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. It is stated in the EIAR that significant environmental effects with respect to major accidents and disasters is unlikely. Nonetheless, consideration has been given to this topic within the proposed development description; the CEMP; Chapter 10: Water Resources and Flood Risk; and Chapter 13: Climate Change.
- 9.10.2. The site is not located in an area that has historically been subject to natural disasters. In addition, the site does not lie within a consultation zone for any COMAH establishment and there are no such establishments within 2.5km of the site. A small amount of diesel will be stored on site. The implementation of the CEMP and mitigation measures will ensure risk of minor accident/ spillage is low.
- 9.10.3. A Flood Risk Assessment concludes that there is no historic flooding on site, the site is classified as Zone C, and it is not expected that the proposed development will have any significant risk of flooding.
- 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 16 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 and other developments in the area. The EIAR describes interactions between different environmental topics within the proposed development as inter-projects effects, and cumulative effects with other development schemes occurring together with the proposed development are described as inter-project effects.
- 9.11.2. There are no interactions of note between population and human health and any of the other environmental factors. Slight to moderate negative interactions will occur in terms of existing climate and off-site human health and buildings and infrastructure. There will only be slight negative interactions between existing off-site

local residents/ noise and vibration. Moderate positive interactions may occur with the knowledge gained by the population from archaeological investigations on site. All other interactions are neutral or not of note.

- 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 substation and transmission lines is assessed in each chapter throughout the EIAR with other existing, planned and permitted development. This includes the adjacent data centre development permitted under SD21A/0241 where there would be construction overlap and cumulative effects would therefore be likely. Other developments in the surrounding area that would give rise to likely cumulative effects are the proposed data centre to the north-east (SD22A/0420/ ABP-317446-23), Centrica Business Solutions (SD21A/0167) and Equinix (Ireland) Ltd. (SD21A/0186) developments in Profile Park, and the UBC Properties developments (SD20A/0121 and ABP-308585-21) and Cyrus One developments (SD18A/0134, SD20A/0295 and ABP-309146-21) in Grange Castle South Business Park. The EIAR does not assess the cumulative impact of the proposed data centre currently under appeal (ABP-317446-23). However, the cumulative effects of this proposal would be similar to other surrounding developments, and this has been considered for the purposes of the current EIA.
- 9.11.5. In terms of cumulative impacts with other developments, dust mitigation techniques will be employed within surrounding developments such that individual construction stage impacts will not be significant, alone or in combination. The applicant would also consult with neighbouring schemes on the scheduling of vehicle movements and the local effects of construction on pedestrian routes. It is likely that there would be no significant cumulative effects on designated sites or any other ecological feature in combination with any other developments.
- 9.11.6. Cumulative effects from other developments nearby are unlikely with respect to ground works, and similarly, each development site would have embedded mitigation

through their site-specific contaminated land management procedures documented in the site CEMP.

- 9.11.7. Consent would not be granted for any development which would increase off-site flood risks or where surface water discharge from a proposed development were to increase downstream flood risk. Cumulative flood risk effects would therefore be no greater than that of the proposed development in isolation.
- 9.11.8. Future baseline noise levels would be higher, irrespective of whether this development went ahead, and as such, cumulative effects are not considered significant. Significant cumulative effects are also unlikely to occur as each scheme is anticipated to employ similar dust mitigation.
- 9.11.9. On completion, the proposed development is unlikely to contribute to cumulative visual and landscape effects due to its relatively small footprint and its position within the business park. There is the potential for further negative cumulative effects on the archaeological resource of the area. A similar approach in terms of archaeological evaluation and preservation by record can be expected to be applied to these sites in order to inform and mitigate potential effects.
- 9.11.10. The appointed construction contractor(s) and applicant would consult with neighbouring schemes on the programme and local effects of the construction works on transport networks, including pedestrian routes. If works coincide with other construction activity already taking place in the vicinity, the cumulative effect of construction traffic is considered not significant and can be minimised.
- 9.11.11. It is reasonably assumed that all the cumulative developments would be developed in line with the similar policy requirements as the proposed development, including those relating to waste management. Cumulative effects during the construction and operation stages of the proposed development are considered to be unlikely for material assets.
- 9.11.12. In general, I would be satisfied with the methodology provided within the EIAR for cumulative assessment. The applicant has considered the impact of the proposed GIS substation and 110kV cable links cumulatively with the permitted data centre development and the nearby developments. Overall, this provides for a robust and complete assessment of the proposal by itself and any cumulative interactions with other relevant aspects.

## 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 applicant, and the submissions from Planning Authority and prescribed bodies in the course of the application, and the applicant's response to same, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:

- Positive impacts on **Population and Human Health** in terms of the local economy from increased spending and jobs during the construction period.
- Construction phase impacts on Population and Human Health will be mitigated by a range of measures and through implementation of the CEMP.
- Potential adverse impacts on **Biodiversity** during the construction phase from site clearance, soil-stripping and earthworks, and from surface water carrying silt, hydrocarbons or other chemicals into surface water drainage. A range of mitigation measures will be put in place for the construction phase to prevent water pollution and impacts on flora and fauna.
- Potential long-term positive impacts on **Land** through change of use from former agricultural lands to enterprise and employment lands in accordance with the land use zoning objective.
- Potential impacts on **Cultural Heritage and the Landscape** will be mitigated during the construction stage through archaeological monitoring of ground works. Excavation of an area measuring 50m by 50m will take place in order to preserve by record the identified oval/circular enclosure on site in advance of construction works commencing.

Having regard to the above, I am satisfied that the proposed development would not have any unacceptable direct or indirect effects on the environment. The Board is satisfied that the reasoned conclusion is up to date at the time of making the decision.

## 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 construction of a 110kV GIS substation and 2 no. underground transmission lines (247m and 492m in length) to the existing 110kV Barnakyle substation and to the Castlebaggot – Barnakyle circuit respectively. 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 24<sup>th</sup> November 2021. 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, baseline surveys, an ecological site visit 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 Flood Risk Assessment.

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, following an examination, analysis and evaluation of best available information, and applying the precautionary principle, 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 authors of the AA Screening Report have fully considered the nature of the project and its potential relationship with all European Sites within the zone of influence, and their conservation objectives.

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 15km of the application site;
  - NPWS site synopses, Natura 2000 Data Form and Conservation Objectives relating to each site and aerial images.
- Fossitt habitat survey undertaken in August 2021 which identified buildings and artificial surfaces (BL3); recolonising bare ground (ED3); improved agricultural grassland (GA1); and treelines (WL2). No evidence of protected species was noted on site during this survey.
- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities, 2009 (as amended).
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 1/10 & PSSP 2/10.

- Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, 2001.
- CIEEM, Guidelines for Ecological Report Writing, 2017.

## 10.5. Geographical Scope and Main Characteristics

- 10.5.1. The site is located within Profile Park and Grange Castle South Business Park on the western periphery of Dublin City in a former agricultural area that has transitioned in recent years into a setting for high-tech business. Occupants of Grange Castle Business Park to the north include Pfizer, Microsoft, Takeda and Arysza. Google are situated in the Grange Castle South Business Park to the west of the proposed development. The Microsoft and Google complexes include large data centres and there are a number of other existing and proposed data centres in the area. The business parks form part of an enterprise and employment zoning covering the wider area.
- 10.5.2. The subject site is an irregular shape and comprises an area of 3.19 hectare that includes part of a former agricultural field to the east where the proposed substation will be located. The site extends westwards to include the cul de sac at the end of Falcon Avenue and onto the access road serving Grange Castle South Business Park up to the Castlebaggot substation.
- 10.5.3. The proposed substation and grid connections are for the purposes of supplying power to an adjacent data centre development permitted under Reg. Ref: SD21A/0241. The proposed 110kV GIS substation compound will be located to the south of the permitted data centre development on Falcon Avenue. The compound will contain a 2-storey GIS substation building (1,477 sq.m.), transformers, lighting masts and client control building. Landscaping is proposed around the northern and western site boundaries.
- 10.5.4. The proposed 110kV transmission lines will continue underground along roads to connect to the existing Barnakyle GIS building and an ESB point of connection to the south of Castlebaggot substation.



**10.6. Screening the need for Appropriate Assessment**

10.6.1. 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 5.9km north-west of the subject site.

10.6.2. 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 15km study area from the proposed development is applied for this purpose, wherein a total of eight European Sites are included (5 SACs & 3 SPA).

10.6.3. European sites considered for Stage 1 screening:

European site (SAC/SPA)	Site code	Distance to subject site	Connections (source, pathway, receptor)	Considered further in Screening (Y/N)
Rye Water Valley/ Carton SAC	001398	5.9km	No potential connections	N
Glenasmole Valley SAC	001209	7.9km	No potential connections	N
Wicklow Mountains SAC	002122	9.6km	No potential connections	N
Red Bog, Kildare SAC	000397	13.9km	No potential connections	N
South Dublin Bay SAC	000210	c. 15km	Potential hydrological connection	Y
Wicklow Mountains SPA	004040	13km	No potential connections	N
Poulaphouca Reservoir SPA	004063	14.9km	No potential connections	N
South Dublin Bay and River Tolka SPA	004024	c.15km	Potential hydrological connection	Y

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

10.6.4. Table 2 below provides a screening summary matrix of the outcomes of the screening process explaining why the effects are not considered significant using objective information.

European Site	Distance to proposed development/ source, pathway receptor	Possible effect alone	In combination effects	Screening conclusions:
<p><b>Rye Water Valley/ Carton SAC</b></p> <p><b>Qualifying Interest:</b></p> <p>Petrifying springs with tufa formation (Cratoneurion) [7220]</p> <p>Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]</p> <p>Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]</p>	<p>c. 5.9km</p>	<p>Habitats at application site are not suitable for supporting any mobile species associated with the SAC.</p> <p>Narrow-mouthed Whorl Snail and Desmoulin's Whorl Snail are restricted to wetland habitats. There are no watercourses within the application site.</p> <p>Proposed development will not interact directly with the underlying groundwater and the subject site lies downgradient of the SAC.</p>	<p>Proposed development itself will not have any effects on the QIs/ SCIs or conservation objectives 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.</p>	<p>Screened out for need for AA</p>
<p><b>Glenasmole Valley SAC</b></p> <p><b>Qualifying Interests:</b></p> <p>Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210]</p> <p>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]</p> <p>Petrifying springs with tufa formation (Cratoneurion) [7220]</p>	<p>c.7.9km</p>	<p>No possibility of effects due to the distance from and lack of connections to the habitat for which this site is designated.</p>	<p>No effect</p>	<p>Screened out for need for AA</p>

<p><b>Wicklow Mountains SAC</b></p> <p><b>Qualifying Interests:</b></p> <p>Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110]</p> <p>Natural dystrophic lakes and ponds [3160]</p> <p>Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010]</p> <p>European dry heaths [4030]</p> <p>Alpine and Boreal heaths [4060]</p> <p>Calaminarian grasslands of the <i>Violetalia calaminariae</i> [6130]</p> <p>Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230]</p> <p>Blanket bogs (* if active bog) [7130]</p> <p>Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) [8110]</p> <p>Calcareous rocky slopes with chasmophytic vegetation [8210]</p> <p>Siliceous rocky slopes with chasmophytic vegetation [8220]</p> <p>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]</p> <p><i>Lutra lutra</i> (Otter) [1355]</p>	<p>c. 9.6km</p>	<p>No possibility of effects due to the distance from and lack of connections to the habitat/ species for which this site is designated. There are no watercourses on site suitable for supporting otter.</p>	<p>No effect</p>	<p>Screened out for need for AA</p>
<p><b>Red Bog, Kildare SAC</b></p> <p><b>Qualifying Interests:</b></p>	<p>c. 13.9km</p>	<p>No possibility of effects</p>	<p>No effect</p>	<p>Screened out for need for AA</p>

Transition mires and quaking bogs [7140]	Outside of water catchment area and no other ecological or hydrological connects.			
<b>South Dublin Bay SAC</b> <b>Qualifying Interests:</b> Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Embryonic shifting dunes [2110]	Existing surface water infrastructure comprises two pipes, ultimately discharging into the Griffeen River north of the site. This river discharges into the River Liffey approximately 7km from the application site and the River Liffey stretches approximately 30km before entering into the Dublin Bay.	No possibility of effects due to the scale and location of the proposed development relative to the downstream European Site; the relatively low volumes of any potential surface water run-off or discharge events from the proposed development site relative to the receiving water and marine environments; and the level of mixing, dilution and dispersion of any surface water run-off/ discharges from the proposed development site in the receiving waters, Dublin Bay and the Irish Sea.	Proposed development itself will not have any effects on the QIs/ SCIs or conservation objectives 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.	Screened out for need for AA
<b>Wicklow Mountains SPA</b> <b>Qualifying Interests:</b> Merlin (Falco columbarius) [A098] Peregrine (Falco peregrinus) [A103]	c. 13km	No possibility of effects due to the significant distance between the proposed development site and the SPA. Merlin and peregrine are associated with the upland habitats of the Wicklow Mountains SPA.	No effect	Screened out for need for AA
<b>South Dublin Bay and River Tolka SPA</b> <b>Qualifying Interests:</b>	c. 15km	There are no watercourses within the application site. Given the drainage measures in place at the site, and the large distance between the	Given the distance (approximately 30km downstream) and dilution factors, it is not anticipated that the proposed	Screened out for need for AA

<p>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]</p> <p>Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</p> <p>Ringed Plover (<i>Charadrius hiaticula</i>) [A137]</p> <p>Grey Plover (<i>Pluvialis squatarola</i>) [A141]</p> <p>Knot (<i>Calidris canutus</i>) [A143]</p> <p>Sanderling (<i>Calidris alba</i>) [A144]</p> <p>Dunlin (<i>Calidris alpina</i>) [A149]</p> <p>Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</p> <p>Redshank (<i>Tringa totanus</i>) [A162]</p> <p>Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</p> <p>Roseate Tern (<i>Sterna dougallii</i>) [A192]</p> <p>Common Tern (<i>Sterna hirundo</i>) [A193]</p> <p>Arctic Tern (<i>Sterna paradisaea</i>) [A194]</p> <p>Wetland and Waterbirds [A999]</p>		<p>application site and the SPA, the dilution factor will result in a negligible impact upon the SPA and its qualifying species.</p>	<p>development in combination with any other plans or projects, would cause any impact to any designated site or its qualifying features.</p>	
<p><b>Poulaphouca Reservoir SPA</b></p> <p><b>Qualifying Interests:</b></p> <p>Greylag Goose (<i>Anser anser</i>) [A043]</p> <p>Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183]</p>	<p>14.9km</p>	<p>No possibility of effects due to the significant distance between the proposed development site and the SPA.</p>	<p>No effect</p>	<p>Screened out for need for AA</p>

**Table 2 Screening summary matrix: European Sites for which the possibility of significant effects can be excluded**

## 10.7. Identification of Likely Effects

- 10.7.1. The proposed development is assessed in the AA Screening Report for its potential to result in significant effects on European Sites, either alone or in combination with other plans or projects. Individual elements of the project that will occur during construction and operational phases are assessed in terms of the potential for pollution entering a body of surface or groundwater in the form of poisonous, noxious or polluting matter; waste matter (including silt, cement, concrete, oil, petroleum spirit, chemicals, solvents sewage and other polluting matters); or other harmful activities detrimentally affecting the status of a waterbody.
- 10.7.2. There are no European Sites at risk of direct habitat loss or fragmentation. Furthermore, the proposed development site does not support populations of fauna species linked with the Qualifying Interests/ Special Conservation Interests populations of any European Site.
- 10.7.3. There are no watercourses within the application site. Surface water from the proposed development will enter the downstream receiving environment via the existing surface water drainage network. There is potential for hydrological connections with downstream European Sites. However, the proposed development will not have a measurable effect on water quality in Dublin Bay or the Irish Sea based on the scale and location of the proposed development; the relatively low volumes of potential surface water run-off and discharge events; and the level of mixing, dilution, and dispersion of any surface water run-off/ discharge. There will also be no possibility of the proposed development undermining the conservation objectives of any European site as a result of wastewater discharges.
- 10.7.4. The closest European Site to the proposed development site is the Rye Water Valley/ Carton SAC located approximately 5.9km to the north-west. Habitats at application site are not suitable for supporting any mobile species associated with this SAC. Furthermore, the proposed development will not interact directly with the underlying groundwater and the subject site lies downgradient of the SAC.
- 10.7.5. As the proposed development does not support populations of any qualifying interest/ special conservation interest species associated with European Sites, there

will be no disturbance and displacement impacts associated with the mammals or birds that are QI/ SCI of any European Site.

- 10.7.6. 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.
- 10.7.7. 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.

#### 10.8. **Screening Determination**

10.8.1. 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 (and submission of a NIS) 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 the 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.
- The level of mixing, dilution and dispersion of any surface water run-off/ discharge in receiving watercourses, Dublin Bay and the Irish Sea.

## 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 nature, scale and design of the proposed works as set out in the application for approval and the pattern of development in the vicinity,
- the documentation and submissions of the Local Authority, the environmental impact assessment report and associated documentation submitted with the application, and the range of mitigation and monitoring measures proposed,



- the submissions and observations made to An Bord Pleanála in connection with the application,
- 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 agreed with the summary of the results of consultations and information gathered in the course of the environmental impact assessment, and the examination of the information contained in the Environmental Impact Assessment Report and the 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 main significant effects, both positive and negative, are:

- Positive impacts on **Population and Human Health** in terms of the local economy from increased spending and jobs during the construction period.
- Construction phase impacts on Population and Human Health will be mitigated by a range of measures and through implementation of the CEMP.
- Potential adverse impacts on **Biodiversity** during the construction phase from site clearance, soil-stripping and earthworks, and from surface water carrying silt, hydrocarbons or other chemicals into surface water drainage. A range of mitigation measures will be put in place for the construction phase to prevent water pollution and impacts on flora and fauna.

- Potential long-term positive impacts on **Land** through change of use from former agricultural lands to enterprise and employment lands in accordance with the land use zoning objective.
- Potential impacts on **Cultural Heritage and the Landscape** will be mitigated during the construction stage through archaeological monitoring of ground works. Excavation of an area measuring 50m by 50m will take place in order to preserve by record the identified oval/circular enclosure on site in advance of construction works commencing.

Having regard to the above, I am satisfied that the proposed development would not have any unacceptable direct or indirect effects on the environment. The Board is satisfied that the reasoned conclusion is up to date at the time of making the decision.

### **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
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	<p>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.</p> <p><b>Reason:</b> In the interest of clarity.</p>
2.	<p>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.</p> <p><b>Reason:</b> In the interest of clarity and protection of the environment during the construction and operational phases of the proposed development.</p>
3.	<p>The proposed connection point for drainage serving the 110kV GIS substation shall be to manholes on Falcon Avenue via an underground attenuation tank. Water supply and drainage arrangements shall otherwise comply with the requirements of the Planning Authority for such works in respect of both the construction and operational phases of the proposed development.</p> <p>Prior to commencement of development, and following consultation with Irish Water, the developer shall agree with the Planning Authority proposals for all works as they affect water and drainage services, together with written commitment to undertake the proposed development in accordance with this agreement.</p> <p><b>Reason:</b> In the interest of environmental protection and public health.</p>
4.	<p>The landscaping proposals 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.</p>

	<p><b>Reason:</b> To blend it into its surroundings in the interest of visual amenity.</p>
<p>5.</p>	<p>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:</p> <ul style="list-style-type: none"> <li>(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,</li> <li>(b) a comprehensive programme for the implementation of all monitoring commitments made in the planning application and supporting documentation during the construction period,</li> <li>(c) an emergency response plan, and</li> <li>(d) proposals in relation to public information and communication.</li> </ul> <p>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.</p> <p><b>Reason:</b> In the interest of environmental protection and orderly development.</p>
<p>6.</p>	<p>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 –</p> <ul style="list-style-type: none"> <li>(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,</li> <li>(b) employ a suitably qualified archaeologist who shall monitor all site investigations and other excavation works, and</li> </ul>

	<p>(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.</p> <p><b>Reason:</b> 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.</p>
7.	<p>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.</p> <p><b>Reason:</b> In the interest of orderly development and the protection of the environment</p>
8.	<p>The applicant shall engage with the Property Management Branch of the Department of Defence to undertake a preliminary screening assessment to confirm that the proposed development and any associated cranes that would be utilised during its construction would have no impact on the safety of flight operations at Casement Aerodrome.</p> <p><b>Reason:</b> In the interests of orderly development and safety.</p>

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Donal Donnelly  
Senior Planning Inspector

20<sup>th</sup> November 2023