Inspector's Report

ABP-317446-23

Development	10-year permission for development consisting of demolition of dwelling and outbuildings and construction of a Data Center (DUB 13), emergency generators, and all other associated ancillary buildings and works. An EIAR was submitted with the application.
Location	Site within the townlands of Ballybane & Kilbride, Clondalkin, Dublin 22.
Planning Authority	South Dublin County Council
Planning Authority Reg. Ref.	SD22A/0420
Applicant(s)	Vantage Data Centers DUB11 Ltd.
Type of Application	Permission
Planning Authority Decision	Refuse Permission
Type of Appeal	First Party v. Refusal
Appellant(s)	Vantage Data Centers DUB11 Ltd.
Observer(s)	1. An Taisce 2. Friends of the Irish Environment

3. John Callaghan Sustainability 2050

Date of Site Inspection	19th June 2024.
Inspector	Susan McHugh

Contents

1.0 Site Location and Description

1.1. The subject site is located within Profile 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. Grange Castle Business Park is located to the west of Profile Park.

1.2. Profile Park is 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 park and this road connects the N4 and N7. Profile Park is accessed off the R134 New Nangor Road to the north. Other features in the area include Casement Aerodrome to the south and the Grand Canal to the north.

1.3. The northern boundary of the subject site is defined to the north by the New Nangor Road, to the east by a distributor road Falcon Avenue and to the west and south by permitted Vantage data centre development (PA Reg.Ref. D21A/0241). DUB 11 and DUB 12 are currently under construction with the immediately adjoining appeal site operating as a site compound. The existing two storey house and associated outbuildings and farm structures located on the northwestern part of the site are vacant.

1.4. A watercourse (Baldonnel Stream) runs from southeast to northwest traversing the southern part of the site along the townland boundary between Ballybane and Aungierstown and Ballybane.

1.5. There are existing trees along the roadside boundary with Falcon Avenue and along the perimeter of the eastern boundary of the site following the course of the existing watercourse.

1.6. Existing dedicated off-road shared cycle and pedestrian routes which are of a high standard and are well lit.

1.7. The site is roughly triangular in shape with a stated area of c. 3.79ha.

2.0 Proposed Development

2.1. The application was lodged with the planning authority on the 08/11/2022 with further plans and details submitted by way of additional information on 04/04/2023.

2.2. The proposed development as lodged comprises;

- Demolition of the two storey dwelling (207.35sqm) and associated outbuildings and farm structures (348.36sq.m);
- Construction of 1 two storey data center (Building 13) will have a gross floor area of 12,893sqm.

2.3. *Emergency Generators* - It will include 13 emergency back-up generators of which 12 will be double stacked and one will be single stacked within a compound to the south-western side of the data center with associated flues that each will be 22.316m in height and 7 hot-air exhaust cooling vents that each will be 20.016m In height.

2.4. The data center 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 that will provide emergency power to the admin and ancillary spaces.

2.5. Each generator will include a diesel tank and there will be a refuelling area to serve the proposed emergency generators.

2.6. The data center will have a primary parapet height of 14.246m above ground level, with plant and screen around plus a plant room above at roof level.

2.7. The plant room has an overall height of 21.571m.

2.8. *Access* - Construction of an internal road network and circulation areas, with a staff entrance off Falcon Avenue to the east, as well as a secondary vehicular access for service and delivery vehicles only across a new bridge over the Baldonnel Stream from the permitted entrance as granted under SDCC Planning Ref. SD21A/0241 from the south-west, both from within Profile Park that contains an access from the New Nangor Road (R134).

2.9. Provision of 60 car parking spaces (to include 12 EV spaces and 3 disabled spaces), and 34 cycle parking spaces.

2.10. Signage (5.7sq.m) at first floor level at the northern end of the eastern elevation of the data center building;

2.11. Ancillary site development works will include footpaths,

2.12. *Surface Water Attenuation Ponds* - attenuation ponds that will include an amendment to the permitted attenuation pond as granted to the north of the Baldonnel Stream under SDCC Planning Ref. SD21A/0241, as well as green walls and green roof.

2.13. The installation and connection to the underground foul and storm water drainage network, and installation of utility ducts and cables, that will include the drilling and laying of ducts and cables under the internal road network within Profile Park.

2.14. Other ancillary site development works will include hard and soft landscaping that will include an amendment to the permitted landscaping as granted under SDCC Planning Ref. SD21A/0241, lighting, fencing, signage, services road, entrance gates, and sprinkler tanks.

2.15. An Environmental Impact Assessment Report (EIAR) has been submitted with this application.

2.16. The proposed development would run 24 hours a day, 7 days a week.

2.17. The application for the proposed development was accompanied by the following.

- Planning Report – Marston Planning Consultancy
- Engineering Planning Report – Pinnacle Consulting Engineers
- Outline Construction Management Plan - Pinnacle Consulting Engineers
- Landscape Report and Outline Specification – Kevin Fitzpatrick Landscape Architecture
- Arboricultural Assessment Report – Treespace
- Workplace Travel Plan Statement – Ramboll
- Circular Economy Technical Note – Ramboll
- Information to Support the Property Management Branch of the Department of Defence - Ramboll
- Lighting Calculation – Burns McDonnell
- Energy Statement - Burns McDonnell
- Site-Specific Flood Risk Assessment – Kilgallen & Partners Consulting Engineers

- Design and access statement – Hyphen
- Appropriate Assessment Screening – Neo Environmental
- Biodiversity Management Plan – Neo Environmental
- Environmental Impact Assessment Report - Ramboll

2.18. Further information was lodged 04/04/2023. The application was amended to include an updated material palette, relocation of attenuation pond from northwest to west to allow for retention of existing hedgerow, introduction of new hedgerows to strengthen green infrastructure linkages, replacement of Baldonnel Stream culvert with a bridge structure and extension of the existing cycle lane along the north of New Nangor Road.

2.19. The application was accompanied by the following;

- Planning Report
- Design Statement – Hyphen Architects
- Arboricultural Assessment Report including Tree Protection Plan – Treespace
- Landscape Report and Outline Specification– Kevin Fitzpatrick
- Engineering Response on engineering issues - Pinnacle Consulting Engineers
- Engineering Drawings – Pinnacle Consulting Engineers
- Access Bridge Construction Method Statement - Pinnacle Consulting Engineers
- Energy Efficiency and Climate Change Adaptation Statement – Burns McDonnell
- Updated Workplace Travel Plan Statement – Ramboll
- Circular Economy Technical Note – Ramboll
- Biodiversity Management Plan - Neo Environmental Ltd.
- Bat, Bird, Mammal Plan Drawing – Neo Environmental
- Appropriate Assessment Screening Report – Neo Environmental
- Environmental Impact Assessment Report - Ramboll

3.0 Planning Authority Decision

3.1. Decision

The decision to **refuse** permission dated 29th May 2023 included the following reasons;

- Having regard to the existing insufficient capacity in the electricity network (grid), the lack of a 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 provided in relation to the applicant's engagement with Power Purchase Agreements (PPAs) in Ireland, and the reliance on a predominantly gas powered plant to provide energy to the development, it is considered that the applicant has failed to demonstrate that the proposed use is acceptable on EE zoned lands, in accordance with EDE7 objective 2 and section 12.9.4 of the South Dublin County Development Plan 2022-2028. In this regard the proposed development, would, therefore, be contrary to the proper planning and sustainable development of the area.
- The applicant has failed to submit an updated Chapter 15 of the Main EIAR. In the absence of this information, the Planning Authority is unable to determine whether the information contained within the EIAR allows for adequate assessment of the potential impacts of the proposed development on the receiving environment and complies with the requirements of Article 94 of the Planning and Development Regulations 2001 (as amended).

3.2. Planning Authority Reports

3.2.1. Planning Reports

The **1st Planner's Report** dated 12th January 2023 is the basis for the Planning Authority decision and recommended additional information be requested with regard to 15 no. items. These items are summarised below.

1. (a) Quantify level of office space

   (b) How the proposal is compliant with EDE1 Objective 6.

(c) In line with EDE7 objective 2, provide further information regarding renewable energy. GNI proposals to introduce renewable into their network are not considered to satisfy the policy criteria. Proposal should: - Show 100% renewable energy from the MFGP or other source at all times - Where this cannot be met, provide evidence of PPA in Ireland.

(d) Demonstrate compliance with EDE7 objective 3

(e) Provide statement in accordance with Section 12.10.1.

(f) Provide design statement that indicates compliance with QDP2 Objective 1, Policy QDP3 and objective 1, QDP4 Objective 2, QDP7 Objective 6, 7 and 8, QDP8 Objective 1, Policy QDP11 and section 12.5.2

2. (a) Reconsider elevational treatment and design along prominent frontages, and (b) Provide details of fencing / boundary treatment.
3. An acoustic assessment describing and assessing the impact of noise emissions from the proposed development to include cumulative noise impacts.
4. Revised layout showing a footpath and cycle lane along the northern boundary to match the existing further west along the R134.
5. Revised landscape strategy which meets the requirements of the Public Realm Section in terms of Green Infrastructure as required under the CDP 2022-2028.
6. Revised proposals to ensure that central hedgerow and trees are retained and protected.
7. Revised layout plan which ensures the retention and enhancement of the existing central hedgerow located in the northern portion of the site.
8. Additional Tree planting to ensure a positive net gain in terms of new trees proposed compared to those being removed.
9. A scheme for the maintenance and management of the landscape scheme.
10. (a) Demonstrate compliance with the SDCC SUDS Design Guide 2022, and Policies GI3, GI4, GI5, IE3, SM2, SM7, and sections 4.3.1, 12.7.6, 12.11.1, and 12.11.3. of the South Dublin County Development Plan 2022 - 2028 in relation to sustainable drainage systems.

(b) Plans showing how surface water shall be attenuated to greenfield run off rates and what SuDS are proposed.

(c) SUDS Management Plan and maintenance plan following implementation.

(d) Demonstrate how proposed natural SUDS features will be incorporated and work within the drainage design for the proposed development.

(e) Surface water attenuation calculations for proposed development.

11. Demonstrate how it is intended to reduce fragmentation of existing green infrastructure.

12. Provide bird boxes and bat boxes/tubes/ hedgehog passes on the site.

13. (a) Report to show the areas in m^2 of each surface type and their respective run off coefficients. Include the areas grasslands and explain why this has 0% run off if that is the case. Note that the areas of all surface types should equal the total site area.

    (b) Examine if any surface water pipes can be replaced with swales or filter drains at any location of the site.

14. (a) Replace proposed overflow pipe with an open swale or natural open channel. (b) contact water services in SDCC to discuss the issue of blockages in a culvert downstream of site and examine what solutions there are to unblock the culvert. (c) Significant in relation to the proposed culverting of the stream and it is considered that alternative design solutions should be explored to avoid the proposed culverting.

15. (a) Concerns regarding compliance with policy in relation to space extensive uses and also Green Infrastructure, further assessment of alternatives is required.

    (b) Further consideration in the EIAR of the cumulative impact of the development on Material Assets during the Operational Phase is needed, in relation to the Electricity grid and Gas networks, as well as more detail on what the energy demand for the proposed data centre is and how precisely it will be met with reference to the electricity grid connection agreement, the permitted Multi-Fuel Generation Plant, the proposed diesel generators and the interplay between these power sources and how this arrangement complies

with EDE7 Objectives 1&2 . An emergency scenario in which the proposed data centre's grid connection is temporarily suspended should also be provided for. Verification documentation around the grid connection and MFGP connection are also requested.

(c) EIAR requires amending following any changes in the scheme following additional information. Amendments should include update to the noise assessment, updates to GI plan and layout of the scheme / siting design, changes following assessment against spaces extensive policies and other policies that require further consideration. Further assessment of cumulative impacts in terms of data centres permitted close to the site should also be undertaken.

3.2.2. The **2nd Planner's Report** dated 29th May 2023 recommends that permission is refused.

3.2.3. Other Technical Reports

- **Roads Dept.**: 1st Report dated 16th December 2022 recommends further information in relation to footpath and cycle lane details along the northern boundary and includes requirements in the event of a grant of permission. 2nd Report dated 22nd March 2023 recommends no objection subject to conditions.
- **Water Services Division**: Report dated 14th December 2022 recommends no objection subject to requirements in relation to surface water attenuation calculations and flooding.
- **Parks & Landscape Services/Public Realm**: 1st Report dated 12th December 2022 recommends further information in relation to a revised landscape strategy, retention and protection of central hedgerow and mature trees, retention of central hedgerow in northern portion of the site, proposals for additional tree planting, a landscape maintenance and management scheme, SuDS proposals and management including natural SuDS features, proposals to reduce fragmentation of existing green infrastructure, proposals for bird and bat boxes and hedgehog passes. 2nd Report recommends no further comments/conditions to add.

- **EHO**: 1st Report dated 21st December 2022 recommends further information and requested an acoustic assessment be undertaken and submitted for assessment. 2nd Report dated 15th May 2023 recommends no objection subject to requirements.
- **Heritage**: No report received.

3.3. Prescribed Bodies

- **EPA:** Report dated 9th December 2022 notes the development may require an Industrial Emissions licence, however it is not possible to determine whether Class 2.1 of the EPA Act would apply from the documentation provided. The EPA confirm that no licence application was received. Notes EIAR should address potential impacts from emissions to air from the proposed development in particular the potential for cumulative impacts.
- **Irish Water**: Report dated 15th December 2022 recommends no objection.
- **TII**: Report dated 15th December 2022 recommends no objection.
- **IAA**: Report dated 4th January 2023 recommends further information and requested that a Glint and Glare study be submitted to the Property Management Branch of the defence Forces.

The application was referred to EMRA, NTA, DoD, CRU, SEI, and no reports were received.

3.4. Third Party Observations

One submission was lodged with the PA from the following party;

- Proinsias Mac Fhiannchadha

The issues raised can be summarised as follows;

- GHG Impact of the proposed development stated in the EIAR requires clarification.
- Queries Eirgrid Connection Agreement prior to permission being granted.
- Compliance with Objective EDE7 of the SDCDP 2022-2028.
- Source of fuel supply for Multi Fuel Plant.

- Disproportionate no. of Data Centres in the environs of SDCC.
- Government Strategy on the Role of Data Centres notes that not all existing demand for data centre development can be accommodated.
- No proposals to supplement significant energy demands with alternative energy.
- Absence of green walls/living walls/green roofs contrary to G15 Objective 7.
- Removal of existing Green Infrastructure contrary to Objective G12 and Objective 5 of the SDCCDP.

4.0 Planning History

Appeal Site

PA Reg.Ref.SD20A/0124: Permission **granted** 17th December 2020 for demolition of existing dwelling, construction of a Distribution Warehouse Building accessed from the existing Profile Park estate road; provision of car parking, with a total gross floor area of c.17,006sq.m. This permission was not implemented.

Adjoining Vantage Data Centre Development DUB 11 & DUB 12 – Amendments

PA Reg.Ref.SD23A/0291: Permission **granted** 1st March 2024 for application on site of c. 0.15 hectares. Proposed development comprises an alteration to planning permission Reg. Ref. SD21A/0241, as amended by Reg Ref SD23A/0035.

The proposed development (for which a temporary 3-year permission is sought) will comprise the following:

- Construction of a temporary power generation compound, comprising 24 no. generators (to be powered by hydrogenated vegetable oil), associated flues (c. 6m in height), 8 no. fuel storage tanks, a switchgear room, control room, spares containers, and ancillary structures, all within a fenced compound; The proposed generators will be enclosed within an acoustic panel enclosure c. 11m in height;
- The proposed temporary power generation compound will be located on an area for permitted car parking under Reg. Ref SD21A/0241, as amended by Reg Ref SD23A/0035, which will be constructed following the removal of the

temporary compound; The proposed development includes all associated and ancillary works.

PA Reg.Ref.SD23A/0203: Permission **granted** 9th January 2024 for amendments to planning permission Reg. Ref.: SD21A/0241 as previously amended by Reg. Ref. SD23A/0035.

The proposed amendments consist of the following the provision of a temporary, single storey, medium voltage ESB substation building (with a gross floor area of c. 39.5 sq.m), accessed from the estate road to the southeast. Associated landscaping and tree planting. All associated and ancillary works.

PA Reg.Ref.SD23A/0035: Permission **granted** 15th June 2023 for an 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 (435.56sq.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; 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; 2 new transformers to be located to the north of the permitted switch rooms; 1 life safety generator to be located adjacent to the permitted step up transformer compound within the site.

Adjoining Vantage Data Centre Development DUB 11 & DUB 12 – Parent Permission

PA Reg.Ref.SD21A/241 ABP 313787-22: Permission **granted** 19th July 2022 for Demolition of the abandoned single storey dwelling and associated outbuilding (206sqm); construction of 2 two storey data centers with plant at roof level of each facility and associated ancillary development which will have a gross floor area of 40,589sq.m consisting of

- 1 two storey data center (**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 center with associated flues that will be 22.3m in height;

- 1 two storey data center (**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 12,915sq.m including 11 emergency generators located at ground floor level within a compound to the western side of the data center with associated flues that will be 22.3m in height;
- each of the two data centers 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 center apart from the flues and plant at roof level is c. 14.23m above the finished floor level;
- single storey step-up substation (38sq.m) as well as 2 single storey switch substations (121sq.m);
- AGI Gas Regulator compound that include 3 single storey buildings (134sq.m); 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 that will contain 10 gas generators with associated flues that will be 25m in height, and grouped in pairs and threes; the Gas Plant will be located to the west of Building 11;
- ancillary site development works, that 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, and
    - installation of utility ducts and cables, that will include the drilling and laying of ducts and cables under the internal road network within Profile Park;

    - other ancillary site development works will include 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, each with associated flues (each 25m high), 12 transformers and 10 containers of controls to be located to the west of, and associated with the first phase of Building 11, and 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 at this site that includes an abandoned single storey residential property on the New Nangor Road (R134), Dublin 22; and on land within the townlands of Ballybane and Kilbride within Profile Park, Clondalkin, Dublin 22 on an overall site of 8.7 hectares.
- A revised EAIR was submitted as part of the Additional Information response to the council.
- First Party appeal against condition no.2 of grant of permission **withdrawn** 4th July 2022 under S.140(1)(a). This permission is currently being implemented on site.

Vantage Substation Site to Southwest of Appeal Site

ABP 312793-22: Permission **granted** 27th March 2024 for 110kV Gas Insulated Switchgear (GIS) Substation compound and 110kV transmission lines along with associated and ancillary works by Vantage Data Centres DUB11 Limited.

Substations Sites in the vicinity

ABP 317297-23: Permission **granted** 25th March 2024 for 110kV Gas Insulated Switchgear (GIS) Substation compound and 110kV transmission lines along with associated and ancillary works by Greener Ideas Limited.

ABP 06S.VA0019 Permission **granted** 26th June 2016 for 220/110kV substation and associated works in the Grange Castle area, to EirGrid Plc.

Site to the East

PA Reg.Ref.SD22A/0156 ABP 317936-23: Application for 10 year permission for modifications to permitted data centre granted under planning register reference

number SD21A/0186 consisting of reconfiguration and alterations to data centre building, on a site bounded to the east and south by Grange Castle Golf Club, to the north by Nangor Road (R134) and to the west by an estate road known as Falcon Avenue. The application is accompanied by a Natura Impact Statement. Decision pending.

PA Reg.Ref.SD21A/0186: Permission **granted** 5th May 2022 for construction of a 3 storey (part 4 storey) data centre known as DB8 by Equinix (Ireland) Ltd.

5.0 Policy Context

5.1. National Planning framework – Project Ireland 2040 (NPF)

National Strategic Outcome 5 'Digital and Data Innovation' states 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 connectivity such as data storage facilities.*

National Strategic Outcome 6 seeks the '*promotion of Ireland as a sustainable designation for ICT infrastructure such as data centres and economic activities*.

National Strategic Outcome 8 seeks to '*transition to a low carbon and climate resilient society'.*

5.2. Climate Action Plan 2024

The Government of Ireland's Climate Action Pan was published in June 2019 by the Department of Communications, Climate Action and Environment. The Climate Action Plan 2024 (CAP24) is the third annual update to Ireland's Climate Action Plan 2019. This plan is prepared under the Climate Action and Low Carbon Development (Amendment) Act 2021, and following the introduction, in 2022, of economy-wide carbon budgets and sectoral emissions ceilings.

5.2.1. Climate Action and Low Carbon Development (Amendment) Act 2021

This Act amends the Climate Action and Low Carbon Development Act 2015. It sets out the national objective of transitioning to a low carbon, climate resilient and environmentally sustainable economy in the period up to 2050. The Act commits us, in law, to a move to a climate resilient and climate neutral economy by 2050.

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

Chapter 7 Section 7.9 refers to Climate Change and the need to support the transition to a low carbon, circular and climate resilient region, and decarbonising the energy sector.

Regional Policy Objective (RPO) 8.25: Local authorities shall:

- Support and facilitate delivery of the National Broadband Plan.
- Facilitate enhanced international fibre communications links, including full interconnection between the fibre networks in Northern Ireland and the Republic of Ireland.
- Promote and facilitate the sustainable development of a high-quality ICT network throughout the Region in order to achieve balanced social and economic development, whilst protecting the amenities of urban and rural areas.
- 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.
- Promote Dublin as a demonstrator of 5G information and communication technology.

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

5.4.1. The appeal site is zoned **Enterprise and Employment 'EE'**: *'to provide for enterprise and employment related uses'*. Industry – general, industry-light, industry-special, and office-based industry are permitted in principle within the zoning objective. A Data Centre, offices 100sqm-1,000sqm and offices over 1,000sqm are 'Open for Consideration' within this zoning objective.

5.4.2. Ministerial Direction issued on 18/11/2022 to amend the land use zoning objectives in table 12.4, 12.8 and 12.10 to reinstate data centre use class as an 'open for consideration' use class in the REGEN, Enterprise and Employment (EE) and Major Retail Centre (MRC) zoning objectives.

5.4.3. **Chapter 2 Core Strategy**

Policy CS1: Strategic Development Areas

- **CS1 Objective 1**: To ensure a sustainable and plan led allocation of housing and employment growth within the strategic development areas of South Dublin County in line with the provisions of the MASP.

5.4.4. **Chapter 3 Natural, Cultural and Built Heritage**

Policy NCBH11: Tree Preservation Orders and Other Tree / Hedgerow Protections Review Tree Preservation Orders (TPO) within the County and maintain the conservation value of trees and groups of trees that are the subject of a Tree Preservation Order while also recognising the value of and protecting trees and hedgerows which are not subject to a TPO.

- **NCBH11 Objective 3**: To protect and retain existing trees, hedgerows, and woodlands which are of amenity and / or biodiversity and / or carbon sequestration value and / or contribute to landscape character and ensure that proper provision is made for their protection and management taking into account Living with Trees: South Dublin County Council's Tree Management Policy (2015-2020) or any superseding document and to ensure that where retention is not possible that a high value biodiversity provision is secured as part of the phasing of any development to protect the amenity of the area.

5.4.5. **Chapter 4 Green Infrastructure**

GI1 Objective 4: To require development to incorporate GI as an integral part of the design and layout concept for all development in the County including but not restricted to residential, commercial and mixed use through the explicit identification of GI as part of a landscape plan, identifying environmental assets and including proposals which protect, manage and enhance GI resources providing links to local and countywide GI networks.

GI2 Objective 2: To protect and enhance the biodiversity and ecological value of the existing GI network by protecting where feasible (and mitigating where removal is unavoidable) existing ecological features including tree stands, woodlands, hedgerows and watercourses in all new developments as an essential part of the design and construction process, such proactive approach to include provision to

inspect development sites post construction to ensure hedgerow coverage has been protected as per the plan.

5.4.6. **Chapter 5 Quality Design and Healthy Placemaking**

Policy QDP2: Overarching - Successful and Sustainable Neighbourhoods

Policy QDP3: Neighbourhood Context

Policy QDP4: Healthy Placemaking

Policy QDP7: High Quality Design – Development General

Policy QDP8: High Quality Design – Building Height and Density Guide (BHDG)

Policy QDP11: Materials, Colours and Textures

5.4.7. **Chapter 9 Economic Development and Employment**

Policy EDE1: Overarching

'Support sustainable enterprise and employment growth in South Dublin County recognising the County's role in the Dublin region as a driver of economic growth.'

- **EDE1 Objective 2**: 'To develop and support the Dublin Metropolitan Area Strategic Plan (MASP) through growth in the identified strategic development and employment areas of South Dublin County, as part of the growth of the Dublin Region to a sufficient scale and quality to compete internationally and to be drivers of national and regional growth, investment, and prosperity consistent with NSO 5 of the NPF'.
- **EDE1 Objective 6**: 'To ensure that economic and enterprise related development is provided in a manner which facilitates a reduction in greenhouse gas emissions by supporting and promoting the following measures:
    - An increase in employment densities within walkable distances of communities and on public transport routes;
    - Promotion of walking and cycling and use of public transport through increased permeability and mobility management measures within and outside employment areas;
    - The sourcing of power from district heating and renewables including wind, hydro and solar;

- Additional native tree planting and landscaping on existing and proposed enterprise zones and development sites to aid with carbon sequestration, contribute to the green infrastructure network of the County and promote quality placemaking.'

Policy EDE3: Innovative Economy Promote an Innovative Economy, fostering an environment which supports creativity and new technologies in the places we live, work and invest in, supported through orderly growth at strategic population and employment locations.

EDE4 Objective 4 To direct people intensive enterprise and employment uses such as major office developments (>1,000 sq. m gross floor area) into appropriately zoned lands subject to their location within approximately 500 metres of a high frequency urban bus service and / or within 1000 metres walking distance of high capacity transport stops (Train / Luas), and to demonstrate the required walking distance or provision of a permeability project, in accordance with the Permeability Best Practice Guide (2015), to achieve same.

EDE4 Objective 8: To support the provision of a broad diversity of employment opportunities in the County that can attract a wide range of skills, training, and educational qualifications for a resilient and inclusive economy.

Policy EDE5: Building on Clusters

Support clustering, by creating, maintaining, or upgrading economic strongholds in a favourable business ecosystem.

- **EDE5 Objective 4**: To encourage the development of initiatives to utilise sectoral clusters in the County to grow new enterprise ecosystems with layers of value, innovation and investment.

Section 9.3 Space Extensive Land Use

'Certain types of development are particularly land hungry. Typically, these land use types have lower employment opportunity although it is recognised that there may be potential to add value as promoted in objective EDE5 Objective 4 above. Space extensive enterprise should not compete for lands which are more suitable for labour intensive enterprise by reason of their location adjacent to public transport nodes or within existing built up, compact growth areas. Alongside warehousing, data centres are one of the most space extensive land use types in the County.

Dublin is one of the fastest growing data centre markets in Europe with a significant element of this growth in South Dublin County. It is recognised that the requirement for data centres is increasing with social and technology needs such as 5G, smart cities and artificial intelligence. Technology is constantly evolving with Cloud computing now shifting to Edge computing and a need for smaller data centres closer to cities and end users.

Space extensive land uses generally have a higher carbon footprint, whether because of transport related uses or the large amounts of energy demanded by them. The Development Plan will encourage, through its policies, high energy users to demonstrate ways to reduce or negate reliance on fossil fuels and to redistribute energy for other end users where such potential exists.'

Policy EDE7: Space Extensive Land Use

Recognise the need for land extensive uses and ensure that they are located within appropriate locations having regard to infrastructural, transport and environmental considerations and the need for orderly growth'.

- **EDE7 Objective 1:** To ensure that, insofar as possible, space extensive enterprise is located on lands which are outside the M50, and which do not compromise labour intensive opportunities on zoned lands adjacent to public transport.
- **EDE7 Objective 2:** To require that space extensive enterprise demonstrates the following:
- The appropriateness of the site for the proposed use having regard to EDE7 Objective 1;
- 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.

EDE7 Objective 3: To ensure that landscaping and site layout in space extensive developments provides for demonstrated biodiversity measures and that landscape and biodiversity measures integrate into the green infrastructure network, in accordance with the Green Infrastructure Strategy set out in Chapter 4 of this Plan.

The site is located within the Department of Defence Inner Zone Limit for Casement Aerodrome.

5.4.8. **Chapter 12 Implementation and Monitoring**

Section 12.10.1 Energy Performance in New Buildings

Section 12.5.2 Design Considerations and Statements

Section 12.9.4 Space Extensive Enterprises

5.4.9. **South Dublin Climate Change Action Plan 2019-2024**

The Climate Change Action Plan identifies the main climate risks facing South Dublin County and includes both the Councils' and the current levels of greenhouse gas emissions across the South Dublin County Council area. It includes four targets for the Council to reach in the coming years:

- A 33% improvement in the Council's energy efficiency by 2020,
- A 40% reduction in the Councils' greenhouse gas emissions by 2030,
- To make Dublin a climate-resilient region, by reducing the impacts of future climate change-related events,
- To actively engage and inform citizens on climate change.

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

The Grand Canal proposed Natural Heritage Area (Site code: 002104) is located c. 1.5km north of the subject site. The Liffey Valley proposed Natural Heritage Area (Site code: 000128) 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 The Appeal

6.1. Grounds of Appeal

6.1.1. A First Party appeal was lodged by Marston Planning Consultancy on behalf of the applicant Vantage Data Centres. It includes;

- A legal advice note from Eversheds Sutherland LLP is respect of the grid connection agreement with EirGrid - Appendix A
- EirGrid Confirmation of the VDC Grid Connection Agreement – Appendix B

6.1.2. The main grounds of appeal can be summarised as follows;

<u>Reason for Refusal No.1</u>

- Submit that PA conclusions reached relating to 5 of the 10 elements of Policy EDE7 Objective 2 and section 12.9.4 of the County Development Plan were both incorrect and indicate a misunderstanding of how connection agreements and PPA's work and operate.

i. Existing insufficient capacity in the electricity network (grid)

- Submit that the applicant has obtained a connection agreement from EirGrid in respect of the Facility Campus (which includes the Permitted Development and Proposed Development) – i.e. the VDC Grid Connection Agreement.

- Submit that the PA should be satisfied that EirGrid (as transmission system operator for the Irish electricity grid) is the appropriate authority on this matter.

ii. Lack of a fixed connection agreement to connect to the grid

- Submit that the General Conditions of the VDC Grid Connection Agreement allows the First Party to use the VDC Grid Connection Agreement to connect the lands comprising the DUB11, DUB12, and the DUB13 data centres to the electricity network. Refer the Board to the accompanying legal advice note.

iii. Lack of significant on-site renewable energy to power the proposed development

- Submit that the applicant can meet the second element of the requirement to '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 (PPA) in Ireland'.
- Notes permission for large-scale BESS facility within the campus (under Reg.Ref.SD23A/0035) which represents an advanced storage facility.
- Submit that the Proposed Development and the wider Facility Campus do provide for on-site generation, which is designed to accommodate renewable fuel sources, notwithstanding appeal document also sets out robust evidence of engagement with renewable PPAs in Ireland in respect of the proposed development.

iv. Lack of evidence provided in relation to the applicant's engagement with Power Purchase Agreements (PPAs) in Ireland

- Submit that the First Party has been engaging actively in the pursuit of a PPA in respect of the Proposed Development. Refer to appeal correspondence from Open Energy Market Limited (a broker for PPA's and the First Party's main partner in the sourcing of PPA's) submitted as part of the appeal.
- Contend that the design of the permitted MFGP allows for the use of HVO, biogas and hydrogen into the future, the overall campus being progressed by the First Party will also provide a direct opportunity for additional renewable energy generation on site.

- Request the Board attach a condition requiring the submission of 'details of a Corporate Power Purchase Agreement that the developer has entered into which demonstrates that the energy consumed by the development on site is offset with renewable energy generation'.

v. The reliance of on a predominantly gas-powered plant to provide energy to the development

- Submit that the First Party has provided evidence of engagement with PPA brokers and refers the Board to its responses to points 2 and 4 above.
- Submit that it has satisfied the requirement relating to on-site generation under Policy EDE7 Objective 2.

Reason for Refusal No.2

- A copy of all sections of the updated EIAR undertaken by Ramboll that should have been submitted as part of the AI response.
- The omission of an updated Chapter 15 – Material Assets as part of the AI response was due to an administrative error.
- The revised Chapter 15 considers the cumulative effect on Material Assets during the Operational Phase in relation to the Electricity Grid and Gas networks, and how it will be met with reference to the single connection agreement that is in place for overall Facility Campus is also fully detailed.

6.2. Planning Authority Response

No response received.

6.3. Observations

6.3.1. Three no. observations to the appeal were received by the Board from the following parties;

- An Taisce
- Friends of the Irish Environment
- John Callaghan Sustainability 2050

6.3.2. Issues raised in the submissions can be summarised as follows;

Reason for Refusal No. 1

- Refer to the 'Government Strategy on the Role of Data Centres in Ireland's Enterprise Strategy' of July 2022 and capacity constraints experienced by our electricity system.
- Data centres are vital for the Irish Economy, but they must be constructed and operated in a manner that is compatible with EU Climate related activities on renewable energy and energy efficiency.
- Notes large change in the ambition of Climate and Energy related objectives as set out in the EU 2030 targets and refers to the EU adopted revised 2030 Energy and Climate Targets.
- European Climate Law writes into law the goal set out in the European Green Deal for Europe's economy and society to become climate neutral by 2050. The law also sets the intermediate target of reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels.
- Renewable Generation does not operate all the time but only on a limited amount of the time. Ireland's principle renewable resources are wind and solar energy. Outlines the typical annual capacity factors for solar PV generation as 10% and wind power range from 27% to 33% and the variation in capacity factor.
- Data Centres power demand is permanent and cannot be provided by a renewable fleet based on solar and wind power generation without massive electricity storage.
- Data Centres will increase demand and consumption for Natural Gas. Natural Gas is the cheapest fuel and on-site generation can run on diesel, HVO, and Biogas. The EU recognise that the strong growth in the Irish Economy cannot be on the back of fossil fuel.
- Additional demand for energy which generates emissions, drives emissions upwards rather than being climate neutral.
- Applicant has not set out clearly the primary energy demand of the proposed facility for the various fuels proposed nor the efficiency of conversion to electricity.

- Ireland has failed generally to comply with Commission Recommendation of 18th June 2019 on the draft integrated National Energy and Climate Plan of Ireland covering the period 2021-2030.
- Ireland has failed to submit a long-term Climate Strategy to the EU as required under Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action.
- Submit the Board must determine the application in accordance with the Planning and Development Regulations, the Planning & Development Act, Planning Guidelines. RSES, the NPF, The Energy Efficiency Directive, The Renewable Energy Directive, The Waste Framework Directive, and The EU Climate Law Regulation (EU) 2021/1119.
- Note PA carried out an assessment of the potential to run a District Heating System on waste heat recovered from Data Centres and determined the potential was limited, there is no assessment of the potential waste heat from the process converting thermal energy to electricity, using either OCGT (Open Cycle Gas Turbines) or CCGT (Combined Cycle Gas Turbines).
- Submit that the Board have the power to grant permission even if the SDCDP is contravened as per Section 37(2).
- Submit that the location of the development is inconsistent with maximising the amount of renewable energy usefully used in the operation of the development.

<u>Reason for Refusal No. 2</u>

- The Board must assess the application under the Habitats Directive and the application documents must be sufficiently extensive to describe the development in its entirety. The Board are referred to Sweetman V An Bord Pleanála (No.1) (2020) IEHC 390 & Sweetman V An Bord Pleanála (2021) IEHC 662.
- The Board must assess the application under the Environmental Impact Assessment Directive.
- Notes that many of the EIAR documents on the PA website are scanned with every page upside down and are not electronically searchable.

- Refers to the definition of ‘Project’ under the revised EIA Directive.
- Submit that the application failed to provide sufficient information on alternatives as required under Article 5 of the EIA Directive. The Board are referred to the Judgement in Holohan C-461/17.
- Contend that the extent of information in the application is insufficient to determine the application in accordance with the law.
- A ten-year permission is not appropriate as it puts the development beyond the reach of rapidly changing policy and law on decarbonisation.
- The location of the development is inconsistent with maximising the amount of renewable energy usefully used in the operation of the development.

6.4. Revised Public Notices

In response to the Boards request under section 142(4) to publish a revised site notice the applicant submitted a revised notice which includes a reference to the submitted EIAR. Copy on file.

6.5. Further Responses

A copy of the revised statutory notice was circulated by the Board to the observers to the appeal and the PA for comment. No responses were received.

The Board also referred the application to the EPA for comment. No response was received at the time of writing.

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

8.1.1. Having examined the appeal details and all other documentation on file, including all of the submissions received in relation to the appeal, the reports of the local authority and inspected the site, and having regard to relevant local/regional/national policies and guidance, I consider that the substantive issues in this appeal to be considered are as follow:

- Principle of Development
- Energy Use and Contribution to Greenhouse Gas Emissions
- Other Issues

8.1.2. To avoid repetition, potential impacts of the proposed development are addressed in Section 9 below.

8.2. Introduction

8.2.1. The application site comprises a brownfield site located within the existing Profile Park business park to the west of Clondalkin in South County Dublin. There are a number of data centre developments permitted and under construction in the vicinity of the site.

8.2.2. The subject application as lodged was amended by way of further information. The principal amendments include an updated material palette, relocation of attenuation pond from northwest to west to allow for retention of existing hedgerow, introduction of new hedgerows, replacement of Baldonnel Stream culvert with a bridge structure and extension of the existing cycle lane along the north of New Nangor Road.

8.2.3. The revised EIAR submitted in response to the further information request indicates that the permanent power solution for the proposed development would be provided by the EirGrid connection and the MFGP. The revised EIAR also indicates that the MFGP permitted under the July 2022 DUB-1 permitted development would be served by the high-pressure gas network for which a connection to the GNI network has been agreed. The natural gas supply would be supplied to the proposed development through a commercial provider.

8.2.4. The grounds of appeal include an amended EIAR, and the Board subsequently sought revised public notices to reflect same.

8.3. Principle of Development

8.3.1. The proposed development, comprising a data centre, is located within an area zoned ‘EE’ (Enterprise and Employment) under the South Dublin County Development Plan 2022-2028. The zoning objective ’EE’ seeks: ‘To provide for enterprise and employment related uses”.

8.3.2. The appeal site forms part of a larger Facility Campus which includes 2 other data centers permitted under Reg.Ref.SD21A/0241 and currently under construction. The overall Facility Campus will be built in three phases. Phase 1 commenced with the North MFGP and associated substation and construction of DUB 11, Phase 2 includes the construction of DUB 12 and the South MFGP and associated step-up substation. Phase 3 of the Facility Campus proposes the construction of a third data center DUB 13.

8.3.3. The extent of the appeal site outlined in red overlaps with the approved development under Reg.Ref.SD21A/0241. The areas of overlap include along the south-western part of the site (south of the Baldonnel Stream), and the north-western part of the site (east of the Baldonnel Stream).

8.3.4. The principle of a data centre on lands zoned ‘EE’ is ‘open for consideration’, is an established use in the area and is acceptable under the current County Development Plan.

8.3.5. The proposed data centre which has a stated area of 12,893sqm constitutes a space extensive land use. Policy EDE7 refers to Space Extensive Land Use which seeks to ‘Recognise the need for land extensive uses and ensure that they are located within appropriate locations having regard to infrastructural, transport and environmental considerations and the need for orderly growth’.

8.3.6. EDE7 Objective 1 seeks ‘To ensure that, insofar as possible, space extensive enterprise is located on lands which are outside the M50, and which do not compromise labour intensive opportunities on zoned lands adjacent to public transport.’

8.3.7. In my opinion the proposed development is appropriately located on zoned lands and complies with Policy EDE7 and EDE7 Objective 1.

8.3.8. In terms of the proposed demolition of the existing house and outbuildings the principle has already been established under the earlier permission Reg.Ref.SD21A/0241.

8.3.9. In terms of office space 603sqm of office space is proposed for DUB 13. This is less that the 1,000sqm office space, which is open for consideration within the zoning. I am satisfied that the office space is ancillary to the main use and is acceptable in principle.

8.3.10. I am satisfied that the subject appeal site is an appropriate location for the proposed space extensive land use and is acceptable in principle, subject to compliance with the relevant policies, standards and requirements of the County Development Plan.

8.4. Energy Use and Contribution to Greenhouse Gas Emissions

8.4.1. Reason for refusal no. 1 concludes that the applicant has failed to demonstrate that the proposed use is acceptable on EE zoned lands, in accordance with EDE7 Objective 2 and section 12.9.4 of the South Dublin County Development Plan 2022-2028.

8.4.2. In reaching this conclusion it refers specifically to the (i) existing insufficient capacity in the electricity network (grid), (ii) lack of a fixed connection agreement to connect to the grid, and (iii) lack of significant on-site renewable energy to power the proposed development. It refers also to the (iv) lack of evidence provided in relation to the applicant's engagement with Power Purchase Agreements (PPAs) in Ireland, and (v) reliance on a predominantly gas-powered plant to provide energy to the development.

8.4.3. EDE7 Objective 2 requires that space extensive enterprise demonstrate compliance with a number of related requirements in respect of site capacity, renewable energy, energy, design and operational requirements, as outlined in Section 5.4 of this report above.

8.4.4. The first party submits that the conclusions reached by the PA relating to five of the ten elements of Policy EDE7 Objective 2 and section 12.9.4 of the County Development Plan were both incorrect and indicate a misunderstanding of how connection agreements and PPA’s work and operate.

8.4.5. The Observers to the appeal raise a number of concerns in respect of the demands for energy use and the contribution to greenhouse gas emissions resulting from data centre developments. In my opinion, the crux of the current appeal is the proposed method of powering the proposed data centre. Central to this issue is whether there is sufficient capacity in the electricity network (grid) and whether a new grid connection application will be forthcoming from EirGrid, the national grid operator.

8.4.6. I would note from the outset, that the following assessment should be considered in conjunction with permitted development immediately adjoining the site under Reg.Ref.SD21A/0241. More recently a 110kV gas insulated switchgear (GIS) substation and 110kV transmission lines along with associated and ancillary works by Vantage Data Centres DUB11 Limited was granted planning permission under ABP-312793-22 by the Board 27/03/2024. This substation is located to the south of the appeal site on the opposite side of Profile Park Road.

8.4.7. The purpose of the substation is to support the power demand for the 2 no. 2-storey data centre buildings DUB 11 and DUB 12 permitted under Reg.Ref.SD21A/0241 and subsequently amended by more recent permissions. The permitted substation is known as the Kilcarbery Substation. It is proposed to provide a power supply to the subject development via a grid connection with EiGrid to the approved Substation.

8.4.8. The applicant has stated that the permitted power generation plant under Reg.Ref.SD21A/0241 which serves DUB 11 and DUB 12 will also serve the current proposed development. The applicant has indicated that no additional power generation plant is proposed as part of the current phase.

8.4.9. It is intended that the long-term primary supply will come from National Grid Infrastructure with the on-site power plant, which is permitted as multi fuel feeding the grid. The applicant states that the permitted MFGP is sized to serve the proposed development as well as the data centres permitted under SD21A/241.

Proposed On Site Source of Energy

8.4.10. Regarding concerns over energy usage and contributions to greenhouse gas emissions, the applicant states that they have received and executed a grid connection agreement with EirGrid, and that the long-term primary supply of electricity will come from the national grid infrastructure with the on-site power plant

which is permitted as a Multi Fuel Generation Plant (MFGP), feeding the national grid.

8.4.11. The PA noted that GNI proposals to introduce renewables into their network are not considered to satisfy the policy criteria of EDE7 Objective 2.

8.4.12. The applicant also notes permission granted for a large-scale BESS facility within the campus (under Reg.Ref.SD23A/0035) which represents an advanced storage facility.

Connection Agreement to connect to the grid

8.4.13. The first party appellant submits that the applicant has obtained a connection agreement from EirGrid in respect of the Facility Campus which includes the Permitted Development and Proposed Development.

8.4.14. The first party appellant submits that the General Conditions of the Vantage Data Centre (VDC) Grid Connection Agreement allows the First Party to use the VDC Grid Connection Agreement to connect the lands comprising the DUB11, DUB12, and the DUB13 data centres to the electricity network.

8.4.15. I have had regard to the legal advice note from Eversheds Sutherland LLC undated submitted with the appeal as Appendix A. It concludes that the General Conditions allows VDC DUB11 to use the VDC Grid Connection Agreement to connect the lands comprising DUB11, DUB12 and DUB13 data centres.

8.4.16. I have had regard to the correspondence between Eirgrid and the applicant in respect of the VDC Grid Connection Agreement dated 20th June 2023 submitted with the appeal as Appendix B. It refers to the Transmission Connection Agreement between Eirgrid Plc and Vantage Data Centres DUB11 Limited which was signed on the 1st July 2022 for the campus located at Vantage Data Centers DUB1, Profile Park, Kilcarbery, Co. Dublin.

8.4.17. I would note that there are multiple stages to the consent process for data centres, with reference to (a) the requirement to secure planning permission and (b) the requirement to secure an offer of connection to the national grid. EirGrid's Data Centre Connection Offer Process and Policy (July 2020) requires planning permission to be in place before it considers an application for connection to the grid (Section 3.3).

8.4.18. While I note that the PA did not submit a response to the appeal, I am satisfied that the applicant has provided sufficient evidence from EirGrid in relation to a grid connection agreement.

Proposed Grid Connection

8.4.19. The applicant states that EirGrid have stipulated under the Data Centre Connection Offer Process and Policy 2019 that in order for the proposed and permitted development to receive a firm grid connection, it must install on-site generation to the requested firm capacity. This it is stated informed the basis for the scale and need for the MFGP under the permission granted under PA Reg.Ref. SD21A/0241.

8.4.20. It is stated in the application that the permitted MFGP is required by EirGrid, as this generation must be capable of running continuously for an extended period of time not limited by fuel reserves or the number of hours, and that this is the function of the already permitted MFGP.

8.4.21. The applicant submits that the installation of the already permitted MFGP will support the resilience of the grid through the provision of flexible and dispatchable generation into the national grid thus meeting one of the key requirements of the CRU in their connection policy for data centres referenced above.

8.4.22. The applicant states that by already permitting a MFGP available at scale at the immediate point of demand, this actually reduces the requirement for future grid reinforcements and relieves constraints in the locality.

8.4.23. The Climate Action Plan 2024 recognises in section 19.2.3 the need for local authorities to identify Decarbonizing Zones which can act as a mechanism to harness a portfolio of actions, projects and technologies to deliver national and regional climate objectives at local level.

8.4.24. I believe the MFGP previously permitted along with the storage and interconnection contribute to this solution and facilitates greater levels of renewables as a manner in which to supplement the transition to renewables. I also accept that the need for Gas Plants/ Multi-Fuel plants form part of the Government Strategy in the short term to medium term to bridge the gap to a more renewable energy supply in 2030. I concur with the applicant that it also provides much needed flexible capacity on the grid to facilitate the increased level of renewables, and which is supported in the Climate Action Plan 2024.

8.4.25. The applicant states that the permitted MFGP is designed to enable it to utilise a wholly renewable fuel source in operating continuously and solely on Hydrotreated Vegetable oil (HVO), a second-generation biofuel, in the short term and also enables HVO to provide a back up to the MFGP to be fuelled by a wholly renewable fuel source in the longer term.

8.4.26. Box 2.1 of the Climate Action Plan 2024 outlines that emissions from industry sectors covered by the Emissions Trading System (ETS) are subject to EU-wide rather than national targets and that overall emissions allowances will reduce over time, in order to ensure that required emissions reductions are achieved by 2030 (42% compared to 2005 levels).

8.4.27. Available records from the Environmental Protection Agency[1] confirm that a number of data centre facilities have been granted GHG Emission Permits in accordance with the ETS, on the basis of the facility including the following specified activity: - '*Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)*'. None however, would appear to have been granted to the applicant Vantage Data Centres DUB11 Ltd. or operators Vantage.

EPA Licence

8.4.28. The report received by the PA from the EPA dated 9th December 2021 stated that current proposal may require an Industrial Emissions Licence but that the agency had not received a licence application relating to the development or relating to the adjacent development permitted under SD21A/0241.

8.4.29. I can confirm from that an EPA Licence application P1203-01 was lodged by Vantage Data Centres DUB11 Limited with the EPA 26th July 2023. The licence application relates to an Industrial Emissions (IE) Licence in respect of DUB11 and DUB12 only. The EPA Licence application refers to the combustion of fuels in installations with a total thermal input of 50 MW or more. The EPA sought further information from the applicant and a response was received by the EPA on 4th July 2024. At the time of writing an EPA Licence has not yet been issued.

[1] Access to current permits | Environmental Protection Agency (epa.ie)

8.4.30. It is therefore unclear from the current application whether the current Industrial Emissions (IE) Licence application in respect of DUB11 and DUB12 is intended to cover DUB 13 also. The Board sought a response from the EPA on foot of the appeal, but no response was received at the time of writing.

8.4.31. The Energy Statement submitted with the application states that the primary energy infrastructure will be as part of the already approved DUB1 development and are not part of this planning application except for below ground connections to the DUB1 campus.

8.4.32. The Energy Statement refers to the already approved infrastructure which consist of two switch room buildings, a step-up substation and a Gas Regulator compound. The statement outlines that a Gas Regulator compound and a 96MW multifuel Power Generation unit will be provided on site in two buildings, - North building with a gross floor area of 1,784m^2 and South building with a gross floor area of 1,258m^2. It is stated that the Power Generation Unit will provide power to the EirGrid network and ensure a reliable and secure availability of power to the Data Centre campus. It also states that the campus is supplied with electricity from ESB via a new Network Substation to the South of Falcon Avenue to a centralised switching station on site and two alternative 20kV distribution power feeds.

8.4.33. The Statement goes on to state that the MFPG facility will generate 100MW at 11kV with a step-up transformer to 20kV on site south of this building and then distribute to the EirGrid substation and will be called upon for use on local network drops. It is stated that this power generation unit will temporarily power the Vantage Data Center site during the initial period where the initial supply has not yet ramped up to match the site demand. The fuel for this temporary scenario and period will be HVO. It is stated that the generator sets are designed to be run on natural gas or diesel. It is stated that to ensure a robust supply in accordance with EirGrid standards, the power plant includes 72-hours of fuel storage on site which is aligned with CRU requirements for power export to the national grid.

8.4.34. The proposed development incorporates 14 no. emergency backup generators (which will be double stacked) that will power the facility in the event of a power outage.

Principle of a Grid Connection

8.4.35. The Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy published in July 2022 is the latest policy in place with regards assessing planning applications for Data Centres. This includes a number of agreed principles outlined under section 5.5 of this report above.

8.4.36. The Government Statement notes that '*the capacity constraints experienced by our electricity system, and the binding carbon budgets that require rapid decarbonisation of energy use across all sectors, necessary mean that not all existing demand for data centre development can be accommodated'*.

8.4.37. I note that Section 34(2)(a) of the Act states that when making a decision in relation to an application, planning authorities shall be restricted to considering the proper planning and sustainable development of the area and, in particular, it identifies that regard shall be had to (amongst other things): -

- the provisions of the development plan,
- guidelines issued by the Minister under Section 28, and
- the policy of the Government, the Minister or any other Minister of the Government.

8.4.38. I consider there is an up-to-date policy context in place and there are relevant Government and Departmental policy statements, against which to consider and assess the proposed development. In addition, I note the Commission for Regulation of Utilities (CRU) has published a decision[2] regarding the connection policy for data centres in Ireland that requires EirGrid to now assess applications against specified criteria before a connection offer is made.

Capacity

8.4.39. Regarding potential impacts on the National Grid, in the latest All-Island Generation Capacity Statement[3] EirGrid acknowledges that long term electricity demand is forecast to increase significantly due to the expansion of large energy users, primarily data centres, and that EirGrid has set out to identify solutions. Section 5 of the Statement notes that '*offers of new connections will be contingent upon the*

[2] CRU/21/124-CRU-Direction-to-the-system-Operators-related-to-Data-Centre-grid-connectiom-processing.pdf
[3]All-Island Generation Capacity Statement 2022-2031 (EirGrid and Soni, October 2022)

ability of the data centre applicant to bring onsite dispatchable generation (and/or storage) with a capacity equivalent to or greater than their demand'.

8.4.40. Also of relevance, in November 2021 the Commission for Regulation of Utilities (CRU) published its decision regarding the connection policy for data centres in Ireland, wherein it directs EirGrid: -

'to assess applications for the connection of data centres by reference to the following assessment criteria to determine whether a connection offer can be made within the system stability and reliability needs of the electricity network:

- *The location of the data centre applicant with respect to whether they are within a constrained or unconstrained region of the electricity system.*
- *The ability of the data centre applicant to bring onsite dispatchable generation (and/or storage) equivalent to or greater than their demand, which meets appropriate availability and other technical requirements as may be specified by the relevant SO, in order to support security of supply.*
- *The ability of the data centre applicant to provide flexibility in their demand by reducing consumption when requested to do so by the relevant SO in times of system constraint through the use of dispatchable on-site generation (and/or storage) which meets appropriate availability and other technical requirements as may be specified by the relevant SO, in order to support security of supply.*
- *The ability of the data centre applicant to provide flexibility in their demand by reducing consumption when requested to do so by the relevant SO, in times of system constraint, in order to support security of supply…*

where the SO is not satisfied by reference to the assessment criteria that a connection offer can be made to an applicant consistent with the needs of the electricity system, the application will not be processed by the SO, accordingly, the application will terminate.'

8.4.41. The decision states that this criteria-based assessment of grid connection applications provides for connection offers to be made to data centre applicants in a manner which respects overall system integrity while balancing the need to have a secure and stable supply of electricity. It also provides EirGrid with a direct

instruction to terminate a grid connection, in circumstances where an offer would be inconsistent with the needs of the electricity system.

8.4.42. Furthermore, the CRU decision in respect of applications for data centre connections to the national grid now requires EirGrid to undertake a criteria-based assessment of a proposed grid connection application, which is intended to protect the stability and security of the grid, before a connection offer can be made. This provides a necessary safeguard, to ensure that the proposed development does not have any undue impact on the security or stability of the National Grid.

8.4.43. The proposed development in my opinion does broadly comply with the Agreed Principles contained in the 2022 Statement, as summarised in the following table;-

Principle	Criteria	Level of compliance
Economic Impact	Preference for DC developments associated with strong economic activity & employment.	Located within the Dublin Metropolitan area on land zoned for enterprise and employment use (EE). Provision for 67 jobs during construction (with approx. 34 additional jobs during peak construction period) and 45 jobs once operational phase. Significant concentration of large energy users.
Grid Capacity & Efficiency	Preference for DC developments that make efficient use of our electricity grid, using available capacity & alleviating constraints.	Located beside permitted 110kV Gas Insulated Switchgear (GIS) Substation compound and 110kV transmission lines. On-site MFGP, with potential to supply energy to the grid. Provision of solar panels on buildings. Provision of backup (stand-by) DC diesel generators for emergencies. Have demonstrated sufficient available capacity & connections subject to CRU / Supplier agreement.

Renewables Additionality	Preference for DC developments that can demonstrate the additionality of their renewable energy use in Ireland.	Evidence provided of ongoing negotiations with renewable energy suppliers. Proposal does propose renewable energy generations.
Co-location or Proximity with Future-proof energy supply	Preference for DC developments in locations where there is the potential to co-locate a renewable generation facility or advanced storage with the data centre, supported by a CPPA, private wire or other arrangements.	Provision of solar panels on buildings. Provision of on-site gas generator, with potential to supply energy to the grid. Evidence provided of negotiations by a broker for PPA's and the First Party's main partner in the sourcing of PPA's and willing to accept a planning condition in this regard. On-site energy storage facilities.
Decarbonised Data Centres by Design	Preference for DC developments that can demonstrate a clear pathway to decarbonise and ultimately provide net zero data services.	Construction will be in line with the current best practice in relation to energy efficiency, decarbonization & sustainability. Solar panels on buildings. Future potential for the on-site energy centre to run on HVO, biogas and hydrogen.
SME Access & Community Benefits	Preference for DC developments that provide opportunities for community engagement & assist s*mall and medium-sized enterprises* (SMEs), both at the construction phase & throughout the data centre lifecycle.	Local construction phase opportunities. Provision for over 45 jobs during operational phase. Digital support for enterprises.

Evidence of Engagement with Power Purchase Agreements (PPAs)

8.4.44. It is submitted by the applicant that they have provided evidence of engagement with power purchase agreements (PPA) in Ireland.

8.4.45. In this regard the applicant notes permission granted for a large-scale BESS facility within the campus (under Reg.Ref.SD23A/0035) which represents an advanced storage facility. I note this permission was granted in January 2024 post the PA's decision on the subject planning application on appeal. It is also submitted that the proposed development and the wider Facility Campus do provide for on-site generation, which is designed to accommodate renewable fuel sources.

8.4.46. The first party appellant submits that the applicant has been engaging actively in the pursuit of a PPA in respect of the Proposed Development. I have had regard to the correspondence from Open Energy Market Limited (a broker for PPA's and the First Party's main partner in the sourcing of PPA's) dated 21st June 2023 submitted with the appeal as Appendix D. I also note the applicants request that the Board attach a condition requiring the submission of '*details of a Corporate Power Purchase Agreement that the developer has entered into which demonstrates that the energy consumed by the development on site is offset with renewable energy generation'*.

8.4.47. I am satisfied that the correspondence demonstrates that VDC DUB11 has engaged with PPA providers in Ireland generally and specifically as regards the proposed development. I am satisfied that this adequately addresses concerns raised by the PA in the first reason for refusal. If the Board are minded granting permission, I do not recommend attaching a condition in relation to PPA to be submitted to the PA. I am of the view that this would form part of an agreement with EirGrid as part of a grid connection agreement.

Concentration of Data Centres

8.4.48. The number of data centres is raised by the observers to the appeal. It is clear that there is a significant concentration of Data Centres within Profile Park and the wider Grange Caste Business Park. The appeal site is bounded to the west by Vantage Data Centre DUB11 and DUB12. Other data centres within Grange Castle Business Park include those owned by Google, Microsoft and EdgeConnex to name but a few.

8.4.49. In this regard the Board should be aware of a recent decision to refuse planning permission by the Board under ABP-314461-22 for two data centres. Another decision by SDCC under PA Reg.Ref.SD22A/0156, is currently on appeal to the Bord under ABP 317936-23 (decision pending). The proposed data centre development reasons for refusal refer to insufficient capacity in the national grid.

8.4.50. The key difference in the current proposal is that the applicant has demonstrated that they have already made an application to Eirgrid to obtain a grid connection agreement which has the potential to serve the proposed development.

Summary

8.4.51. I have considered the merits of granting planning permission for the proposed development while fully cognisant that the permission may not be implemented on site until such time as a grid connection application to the national grid is approved by EirGid. I have also had regard to EDE7 objective 2 of the SDCDP 2022-2028 which requires that space extensive enterprise demonstrates:

- 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.

8.4.52. I am satisfied that the applicant has sufficiently demonstrated that the proposed development complies with the above requirements in the application as presented, and in the appeal.

Material Contravention

8.4.53. The Board will note that Reason Number 1, of the decision of South Dublin County Council to refuse planning permission for the proposed development states that the applicant has failed to demonstrate that the proposed use is acceptable on EE zoned lands, in accordance with EDE7 objective 2 and section 12.9.4 of the South Dublin County Development Plan 2022-2028. The PA have not explicitly stated that the proposed development materially contravenes the CDP.

8.4.54. Section 37 (2)(b) of the 2000 Planning and Development Act (as amended) states :-

(2) (b) Where a planning authority has decided to refuse permission on the grounds that a proposed development materially contravenes the development plan, the

Board may only grant permission in accordance with paragraph (a) where it considers that:

(i) the proposed development is or strategic or national importance

(ii) there are conflicting objectives in the development plan, or the objectives are not clearly stated, insofar as the proposed development is concerned, or

(iii) permission for the proposed development should be granted having regard to regional planning guidelines for the area, guidelines under section 28, policy directives under section 29, the statutory obligations of any local authority in the area, and any relevant policy of the Government, the Minister or any Minister of the Government, or

(iv) permission for the proposed development should be granted having regard to the pattern of the development, and permissions granted, in the area since the making of the development plan'.

8.4.55. Having considered the file, and the provisions of the Plans, as outlined above, I consider that the Planning Authority's conclusion that the proposed use is unacceptable on EE zoned lands, and contrary to EDE7 objective 2 and section 12.9.4 of the SDCDP 2022-2028 is unreasonable.

8.4.56. I am satisfied that the proposed sources of powering the proposed data centre development and the potential for those sources to be from renewable energy would not materially contravene the objectives of the South Dublin County Development Plan 2022-2028.

8.4.57. In the circumstances, that the Board take the view that the proposed development materially contravenes the SCDDP, the Board would have to address itself to the requirements of this section in the event that it was minded refusing a permission in this case.

Conclusion

8.4.58. I am mindful of the significant concentration of Data Centre developments in the vicinity of the appeal site / Profile Park and the Greater Grange Castle Business Park and current capacity constraints on the national grid in the Dublin metropolitan area generally.

8.4.59. If the Board take the view that the applicant has not demonstrated that the proposal is likely in the short term to obtain a grid connection agreement from EirGrid the

national grid operator, then in my opinion a grant of planning permission is premature and should be refused.

8.4.60. On balance, however I have concluded that the proposed development an extra-large energy user (LEU) which does provide for the potential to utilise significant renewable energy generation on site and is reliant on the national grid, does satisfy the Agreed Principles contained in The Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy published in July 2022. In my opinion therefore, the applicant has demonstrated that the proposed use is acceptable on EE zoned lands, in accordance with EDE7 objective 2 of the South Dublin County Development Plan 2022-2028 and planning permission should be granted on this basis.

8.5. Other Issues

8.5.1. *Waste Heat Recovery* - It is the policy of the Council to promote the development of waste heat technologies and the utilisation and sharing of waste heat in new or extended industrial and commercial developments, where the primary operation on site generates waste heat.

8.5.2. The observers to the appeal note the PA carried out an assessment of the potential to run a District Heating System on waste heat recovered from Data Centres and determined the potential was limited. It is submitted in the observations that there is no assessment of the potential waste heat from the process converting thermal energy to electricity, using either OCGT (Open Cycle Gas Turbines) or CCGT (Combined Cycle Gas Turbines).

8.5.3. Section 5.5 of the Energy Statement report outlines how a waste heat recovery system will be provided as part of the heating system for the office areas. The return water from the DM cooling process will be used to maximise the efficiency of the water sourced heat pump used for the admin block heating system.

8.5.4. Provisions are outlined which could allow the supply of heat energy to a future district heating scheme. I am satisfied that adequate design provisions have been made which allow for a future connection.

8.5.5. *Description of Development* – Third party observers to the appeal have raised concern in relation to the sufficiency of the information to describe the development.

In my opinion the public notices adequately describe the nature and extent of development proposed. I am also satisfied that the revised public notices requested by the Board and submitted by the applicant further to the appeal are also adequate.

8.5.6. *Adequacy of Documentation* – Third party observers to the appeal note that many of the EIAR documents on the PA website are scanned and are not electronically searchable. In this regard the Board have no jurisdiction over the functions of the PA.

8.5.7. *Duration of Permission* – Third party observers to the appeal have raised concern in relation to the 10-year duration of the proposed development as it puts the development beyond the reach of a rapidly changing policy and law on decarbonisation. In my opinion a permission of 10 year duration is not unreasonable.

9.0 Environmental Impact Assessment

9.1. Introduction

9.1.1. The proposed data centre is on a site with an area of c. 3.79ha. It forms the second phase of development within the Vantage Campus Facility. Phases 1 and 2 are on a site of c. 8.7ha.

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 considered by the applicant that the nature and scale of the proposed 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 1st September 2018 under the European Union (Planning and Development) (Environmental Impact Assessment) Regulations, 2018. The EIAR was submitted to the Board in June 2023 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), 110kV GIS substation, and underground 110kV transmission lines permitted under (ABP-312793-22), along 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 submitted 8th November 2022, revised EIAR submitted 4th April 2023, and further amended EIAR submitted 26th June 2023 with the appeal, and the submissions made during the course of the application for approval.

9.1.5. 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:

- Adequacy of information in the EIAR – Reason for refusal no. 2
- Examination of alternatives
- Cultural heritage and landscape impacts.
- Impacts of the proposed development on material assets

9.1.6. 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. Vulnerability of Project to Major Accident and/ or Natural Disaster

9.3.1. The requirements of Article 3(2) of the Directive include the expected effect deriving from the vulnerability of the project to risks of major accidents and/or disaster that are relevant to the project concerned.

9.3.2. The EIAR addresses this issue Major Accidents and Disasters in Chapter 4 and throughout the chapters. I note that the development site is not regulated or connected or close to any site regulated under the Control of Major Accident Hazards (COMAH) Involving Dangerous Substances Regulations i.e. SEVESO. Therefore, this is not a source for potential impacts.

9.3.3. Nonetheless, consideration has been given to this topic within the proposed development description; the Construction Management Plan (CMP); Chapter 10: Water Resources and Flood Risk; and Chapter 13: Climate Change.

9.3.4. 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. The implementation of the CMP and mitigation measures will ensure risk of minor accident/ spillage is low.

9.3.5. A Flood Risk Assessment concludes that there is no historic flooding on site, the site is classified as Zone C and in part Zone B, and it is not expected that the proposed development will have any significant risk of flooding.

9.3.6. 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.

9.4. Reasonable Alternatives

9.4.1. The issue of site selection and alternatives is addressed in Chapter 3 of the EIAR. I note that Article 5(1)(d) of the 2014 EIA Directive requires:

"(d) a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment;"

9.4.2. Annex IV of the Directive (Information for the EIAR) provides more detail on 'reasonable alternatives':

"A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects."

9.4.3. 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 layouts/designs for the proposed development.

9.4.4. The ‘do nothing’ alternative would result in a number of negative effects and lost opportunities. The land would therefore remain undeveloped and there would be loss of further economic and employment growth; loss of opportunity to maximise productive use of the site; loss of investment in international data storage capacity and IT infrastructure; loss of opportunity to further establish Profile Park as a data centre hub, and loss of opportunity to improve on-site biodiversity.

9.4.5. No alternative sites for the proposed development were considered because the site is owned by the applicant and is adjacent to the July 2022 DUB-1 consented development site which is under the applicant’s ownership and provides an opportunity for an extended and co-ordinated data centre campus. In addition, the site is located on suitably zoned land.

9.4.6. A series of concept options were examined throughout the development and design process that included a ‘test-fit’ exercise to assess the design and layout of DUB 13 and the attenuation and wetland provision.

9.4.7. The initial concept for the data centre was orientated parallel to New Nangor Road with offices facing north. The size shape and orientation of the data centre was refined to provide increased stormwater attenuation to the northwestern corner of the site and set back from the Baldonnel Stream which enters the site on the southern section of the site. A second access point was also added to the south of the proposed development in the form or a road crossing over the Baldonnel Stream.

9.4.8. The test-fit exercise data centre looked at four initial options. Options 2 and 3 were discounted due to surface water attenuation constraints, and requirements for landscaping and biodiversity improvements along the northern and eastern boundaries to address visual impacts. Following refinement of SuDS and Ecology proposals, the chosen layout was agreed which best balanced environmental considerations including landscaping biodiversity, and surface water attenuation.

9.4.9. In response to the further information request a ‘revised proposed development’ is presented as Option 6 in Chapter 3A of the revised EIAR. This includes an updated material palette, relocation of attenuation pond from northwest to west, introduction

of new hedgerows, replacement of Baldonnel Stream culvert with a bridge structure and extension of the existing cycle lane along the north of New Nangor Road.

9.4.10. In general, the scope for significant design evolution is limited by the configuration of the site and existing road network and watercourse. The main area of evolution was the site layout, surface water attenuation and access arrangements. The chosen proposal allows for high quality facades visible along the New Nangor Road and Falcon Avenue, avoidance of the riparian strip with significant improvement to landscaping and biodiversity, retention of existing trees along the site boundary attenuation of surface water with two attenuation ponds and wetland meadows providing biodiversity benefits.

9.4.11. The revised EIAR submitted with the grounds of appeal further details the environmental considerations of the proposed development, including how the design has responded to the environmental constraints and the outcome of these design changes.

9.4.12. In particular the landscape proposals for the proposed development have been revised (as described in Chapter 4 Proposed Development Description) to strengthen the connectivity of the wider green infrastructure network in South Dublin County. These measures include retaining and enhancing woodland belts, an improved riparian strip to the Baldonnel Stream and proposed SUDs features and meadows across the site. These strengthened linkages are primarily secondary SDCC GI corridors via the Baldonnel Stream corridor to L5 (Griffeen River Link) and via the adjacent golf course hedgerows and trees to Corridor 16 (Grand Canal-Corkagh Link).

Submissions

9.4.13. I note the issue raised in observations to the appeal that the application failed to provide sufficient information on alternatives as required under Article 5 of the EIA Directive. I have had regard to the assessment of the alternatives and those regarded as the main alternatives to be relevant to the environmental effects of the project. I am satisfied that the main alternatives considered are decisive and consistent with the Judgement in the Holahan C-461/17 case.

9.4.14. In general, all reasonable alternatives that are relevant to the project and its specific characteristics are clearly presented in the EIAR and revised EIAR submitted with

the grounds of appeal. 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 as submitted 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.

9.5. Consultations

I am satisfied that the participation of the public has been effective, and the application has been made accessible to the public by electronic and hard copy means with adequate timelines afforded for submissions. I am also satisfied that the revised public notices requested by the Board under section 142(4) which includes a reference to the submitted EIAR allowed for further consultation.

9.6. Likely Significant Effects on the Environment

The likely significant indirect effects of the development are considered under the headings below which follow the order of the factors set out in Article 3 of the EIA Directive 2014/52/EU:

- Population and Human Health
- Biodiversity
- Land and Soils
- Water
- Air and Climate
- Landscape and Visual Assessment
- Cultural Heritage
- Material Assets
- Noise and Vibration
- Traffic and Transportation
- Interaction of Effects

9.6.1. 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; built heritage; and the interactions between these factors) and these are used to inform the EIA.

9.7. Population and Human Health

9.7.1. Chapter 6 of the EIAR addresses Population and Human Health with regard to potential impacts on human health. 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.

9.7.2. 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 600m to the south.

9.7.3. 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.

9.7.4. With respect to community facilities, there is a créche situated 1km south-west of the site and there are a number of primary schools in the wider area. Deansrath Health Centre is approximately 1.2km to the north-east. 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

9.7.5. The proposed development comprises the demolition of a dwelling house, associated outbuildings and farm structures and construction of a data centre. The purpose of the proposed development is to complete the Facility Campus which includes 2 no. 2-storey data centre buildings permitted under Reg. Reg: SD21A/0241 to the west and 110kV gas insulated switchgear (GIS) substation permitted under ABP-312793-22.

9.7.6. The construction period was expected to take from Q1 2024 to Q4 2024/Q1 2025 and it is anticipated that there will be an average of 67 workers on site from construction commencement with approx. 34 additional jobs during peak construction period. Normal working hours will be 07:00 to 19:00 hours Monday to Friday and 08:00 to 13:00 hours on Saturdays. Construction works for the data centre will involve site enabling works (site preparation, site offices/ welfare facilities and general site access); demolition works, excavation works; temporary works; substructure works; superstructure works and fit out; landscaping works; and utilities and service installation which will involve connecting to the electrical grid, and water and foul water network and telecommunications network.

9.7.7. When operational, the proposed data centre will employ approx. 45 full time staff. It is anticipated that there will be ad hoc attendance of maintenance contractors and visitors.

Potential Effects

Do Nothing	Loss of opportunity for further economic and employment growth, to maximise the productive use of the site, and further establish Profile Park and the surrounding area as a data center hub.
Construction Phase	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 on-site 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 156 vehicle movements per day (of which 44 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.
Operational Phase	Increased employment opportunities with positive influence on health through increasing social contact, involvement in a collective effort or activity and by forming social relationships. Potential cross factor effects to human health reported from topic chapters relating to air quality, noise, transport and accessibility, and local amenity. Area has undergone a period of change, transitioning from an agricultural to an industrial and commercial area - nearby residents would be considered to be more resilient to change. Landscape and Visual Impact Assessment reports that on completion, the proposed development would be a new feature within the landscape, similar in size and visual appearance to surrounding developments.

Cumulative Effect	Cumulative impacts have been considered with current and future developments in the vicinity of the subject site. These developments are outlined in Table 6-9 of the EIAR. Potential cumulative impacts mainly relate to air quality, an increase in traffic and accessibility effects during the construction stage of the proposed development. During the operational phase cumulative impacts are considered likely given the overlap with the construction and operation of adjoining developments but not significant.

Mitigation Measures

9.7.8. 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

9.7.9. Once mitigation measures are implemented regarding communication and co-ordination the population and human health residual impacts from the proposed development range from temporary and imperceptible or not significant/ slight during the construction phase, and long-term, permanent, and not significant during the operational phase.

Assessment

9.7.10. I have examined, analysed and evaluated Chapter 6 of the EIAR and all of the associated documentation and submissions on file in respect of population and human health. I have inspected the application site, and the surrounding area. I also had regard to the policy outlined in the South Dublin County Development Plan.

Conclusion

9.7.11. Having regard to the examination of environmental information in respect of Population and Human Health, in particular the EIAR and supplementary information provided by the applicant and the report of the planning authority in the course of the application, I consider that the proposed development would have a neutral impact on the local socio-economic environment. I am also satisfied that the potential for significant adverse impacts on human health during the construction phase can be

avoided, managed, and mitigated by measures that form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on population and human health.

9.8. Biodiversity

9.8.1. Chapter 11 of the EIAR sets out the methodology for evaluating effects on ecology/biodiversity, including identification of ecological receptors that could potentially be affected by the proposed development.

9.8.2. An Ecological Impact Assessment and Biodiversity Management Plan were submitted as Appendices with the application. These were both amended in response to the request for further information as Appendix 11.1 and 11.3 respectively.

9.8.3. An Appropriate Assessment Screening Report was prepared as a standalone document. To avoid any repetition the potential impact on the designated sites is addressed in Section 10 below.

9.8.4. Baseline data was collected through a desk study and field surveys were conducted on 20th July 2022. A species scoping survey was carried out and habitat was classified using the Guide to Habitats in Ireland (Fossitt, A., 2000). Bat activity surveys were completed in August 2022. The bat surveys were designed based on Bat Conservation Trust guidance. Further details are provided in EIAR Volume 3: Technical Appendix 8.1.

9.8.5. Five bat species/groups, hedgehog, badger, otter, pine martin, four invasive mammals (grey squirrel, rabbit, greater whit-toothed shrew and American Mink), 25 bird species and four invasive plant species were identified within 2km of the site from a National Biodiversity Data Centre search.

9.8.6. The nearest European Site is the Rye Water Valley Carton SAC located c. 5.88km 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 buildings and artificial surfaces (BL3), recolonising bare ground (ED3),

depositing/lowland rivers (FW2), amenity grassland (improved) (GA2), scrub (WS1), hedgerows (WL1) and treelines (WL2).

9.8.7. Receptors identified as sensitive are South Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Grand Canal pNHA, Liffey Valley pNHA, Baldonnel Stream, other habitats on site; bats, birds and badger.

Characteristics of the Proposed Development

9.8.8. The proposal comprises the development of a 3.79-hectare 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.

9.8.9. 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.

9.8.10. Treelines and hedgerows at the boundaries of the site would be retained and enhanced where possible. Additional planting of trees and shrubs would occur within the riparian strip alongside the stream channel and native shrubs adding shelter and food sources for a variety of different species. Trees and shrubs planted would be managed in line with the Biodiversity Management Plan (BMP) (Technical Appendix 11.3 and the landscape proposals.

9.8.11. Planting on the banks of the Baldonnel stream would include aquatic species such as yellow iris and fool's watercress. Areas of wildflower meadow would be created in the northwest of the site. This area would act as an attenuation pond, in periods of heavy flow. Species in this area have been selected in order to thrive in a wetter area and create habitat for wetland species, particularly invertebrates.

Potential Effects

Do Nothing	Loss of opportunity to improve on-site biodiversity.

Construction Phase	Given the embedded avoidance measures, distances between the application site and the Dublin Bay, and dilution factors involved there would be negligible impact upon the qualifying features of the SPAs, SACs, and pNHAs. Possibility of indirect loss or damage of the Baldonnel stream as a result of dust or other sir-borne pollution and the construction of the proposed culvert beneath the internal road which crosses the Baldonnel stream. Trees and grassland habitat on site are abundant in the surrounding area and small amount of habitat loss would not be significant. No evidence of roosting bats noted in former residential building and outbuildings. 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. Evidence of swallows flying in and out of potential nesting sites within the garage of the residential home and the shed. 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 April-October inclusive.
Operational Phase	Potential long-term imperceptible/ not significant, negative effect would be anticipated from pollution, however not expected to lead to a permanent imperceptible, neutral effect on species or habitats. Proposed stream enhancements for the proposed development would likely improve the Baldonnel Stream ecologically over time. Proposed planting of native trees, shrub and wildflower species would attract insects and provide foraging

	opportunities for bats, badgers and birds enhancing the situation over the current agricultural context.
Cumulative Effect	Cumulative impacts have been considered with current and future developments in the vicinity of the subject site. These developments are outlined in Table 11-8 of the EIAR. The proposed project in combination with the impacts of other projects or developments is not expected to have a significant negative cumulative impact on designated sites or any other ecological receptors.

Mitigation Measures

9.8.12. No significant effects on biodiversity are predicted and therefore no additional mitigation measures are required. The technical appendix Volume 3: Technical Appendix 8.1 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.

Residual Impacts

9.8.13. Residual impacts on birds, bats, terrestrial habitat and designated sites will be imperceptible or not significant with a slight positive impact on the Baldonnel Stream.

Assessment

9.8.14. The PA raised concerns in respect of the protection and enhancement of the Green Infrastructure elements (for example, not breaking a GI Corridor but enhancing same with a connecting piece of planting, retaining hedgerows or woodlands).

9.8.15. The PA sought revised landscape proposals to significantly reduce the impact on Green Infrastructure to include native species.-hard and soft landscape details; including levels, sections and elevations, detailed design of SUDs features including swales and integrated/bio-retention tree pits.

9.8.16. The PA were concerned with the removal of a centrally located hedgerow and associated mature trees which it was considered to be of significant biodiversity and ecology value. The PA sought the retention and enhancement of the existing central hedgerow located in the northern portion of the site. Proposals for additional tree planting as part of the landscape proposals were also requested to ensure a positive net gain in terms of new trees proposed compared to those being removed.

9.8.17. Revised landscape and planting proposals were submitted to the PA which largely addressed these concerns and were acceptable to the PA.

9.8.18. As part of the first party appeal a Green Infrastructure Plan has been submitted which illustrates the green infrastructure network of the site and linkages to the surrounds. The EIAR submitted with the first party appeal also includes an amended landscape plan which has incorporated additional hedgerows to act as habitat corridors. Specifically, these have been incorporated along the northern boundary of the site creating a connection between on-site biodiversity and the July 2022 DUB-1 permitted development and the L5 Griffeen River Link, and along the eastern site boundary strengthening connections to L6 Grand Canal-Corkagh Link.

9.8.19. A series of bird boxes, bat boxes and mammal passes are also provided. The updated Biodiversity Management Plan submitted as Appendix 11.3A of the updated EIAR submitted to the PA provides amended fencing proposals. I am satisfied that revised fence proposals which will have mammal gates (130mm high and 10mm wide) will allow the movement of badgers, small mammals and herptiles across the proposed development area.

Conclusion

9.8.20. 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.

9.8.21. Having regard to the examination of environmental information in respect of Biodiversity, in particular the EIAR and supplementary information provided by the applicant, the report of the planning authority and the third-party submissions in the course of the application. I am satisfied that the information submitted in the EIAR

adequately assessed the impact of the proposed development on biodiversity and the cumulative impacts of the adjoining permitted development.

9.8.22. I am satisfied that, subject to the implementation of the proposed mitigation measures 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.

9.9. Land and Soils

9.9.1. Chapter 12 of the EIAR addresses the impact on Land and Soils and considers any direct or indirect effects on these resources arising from the proposed development.

9.9.2. The assessment in the EIAR was informed by a desktop study and site investigations. An intrusive ground investigation was undertaken between July and August 2022 to characterise the ground, groundwater and ground gas conditions of the site and the potential contamination risks. The results of this investigation are reported within Appendix 12.1 of EIAR Volume 3.

9.9.3. The site has been in agricultural use up until recent years. Ground conditions consist of topsoil of brown sandy gravelly clay/ silt with occasional cobbles. 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 southern portion of the site flowing from east to west towards the stream and was reported at 2m below ground level. The groundwater body underlying the site is of ‘good status’ and ‘not at risk’.

9.9.4. 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.

9.9.5. The site is within the sub-catchment of the Griffeen River and Baldonnel stream which are tributaries of the River Liffey. Baldonnel stream runs east to west through the south 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.

9.9.6. Sensitive receptors for ground condition impacts include construction workers, adjacent site users, future site users, the water environment (Baldonnel Stream) and groundwater beneath the site. The sensitivity of waste relates to availability of landfill i.e. reduction in capacity, which is recognised as an unsustainable and increasingly scarce option for managing waste. Sensitive receptors for water impacts includes surface water features (Baldonnel Stream), flood risk and groundwater.

Potential Effects

Do Nothing	Loss of opportunity to maximise the productive use of the site.
Construction Phase	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. 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. Potential for unknown contaminated soils within excavations. Subsoil will be excavated to facilitate the construction of access roads car parking areas and other ancillary works

	(SUDS / attenuation ponds etc.) Majority of the cut material generated during site preparation/levelling (mainly topsoil material) and would be re-used on site as fill material or landscaping. 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. There will be loss of approx. 2.30 ha of agricultural soil; however, the area is small in the context of the overall agricultural land available in the region and the site is zoned to provide for enterprise and employment.
Operational Phase	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.
Cumulative Effect	Cumulative impacts have been considered with current and future developments in the vicinity of the subject site. These developments are outlined in Table 12-6 of the EIAR. No significant effects are predicted on the ground conditions as a result of the proposed development alone in either the demolition and construction or the operation stage so there is no potential for cumulative effects.

Mitigation Measures

9.9.8. Section 12.66 of the EIAR and associated outline CMP set out a range of mitigation measures and pollution prevention measures. The measures include both mitigation by design and other mitigation measures and monitoring. Mitigation measures include;

• CMP 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.

• 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 Impact

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

Assessment

9.9.10. I have examined, analysed and evaluated the information provided in Chapter 12 and all the associated documents and submissions on file in respect of Land and Soils. I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts and provides suitably comprehensive range of mitigation and monitoring measures in Section 12.8 to reduce any potential impacts.

9.9.11. 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.

9.9.12. The main activities associated with the construction phase of the proposed development that can give rise to potential impacts include run-off percolating to ground, contaminants in surface water, earthworks, excavations, subsoil stripping and stockpiling, storage of hazardous materials and import and export of materials. The outline CMP 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.

Conclusion

9.9.13. Having regard to the examination of environmental information in respect of Land and Soils, in particular the EIAR and supplementary information provided by the applicant and the report of the planning authority in the course of the application. I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts of the proposed project on Land and Soil and provides suitably comprehensive range of mitigation and monitoring measures in Section 12.8 to reduce any potential impacts. I am satisfied that the proposed development would not have any unacceptable direct or indirect effects on the environment.

9.10. Water

9.10.1. Chapter 10 of the EIAR describes and assesses the potential impacts of the proposed development on water resources and flood risk. The chapter describes the

methodology for the assessment, the relevant guidelines and legislative context. A Flood Risk Assessment (FRA) (Appendix 10.1) Engineering Planning Report and foul and surface water drainage layout drawings were submitted with the EIAR.

9.10.2. A revised Technical Appendix 10.1 Site Specific FRA was submitted as part of the further information response. Revised foul and surface water drainage layout drawings included in Appendix 10.3A were also submitted as part of the further information response. The main revision relates to the provision of three surface water attenuation ponds and provision of a bridge over the Baldonnel Stream which would have a greater hydraulic capacity than the existing box culvert.

9.10.3. The first party appeal was also accompanied by a further Appendix 10.4 which includes an Engineering Planning Report.

9.10.4. The site is within the sub-catchment of the Griffeen River and Baldonnel Stream, which are tributaries of the River Liffey. Baldonnel Stream flows through the south of the site entering the site in the southeast before meandering north-west and then leaving the site. Approx. 190m downstream (west) it enters a short 0.6m culvert and approx. 300m downstream it discharges to a culvert. The Baldonnel Stream discharges to the River Griffeen.

9.10.5. 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).

Potential Effects

Do Nothing	None.
Construction Phase	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.

	Change in Surface Water Quality and Hydrodynamic Status (as a result of proposed works to Baldonnel Stream). Disruption of groundwater during excavations. Changes to flood risk – site located in Flood Zone B 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.
Operational Phase	Potential for operational stage impacts from increased flood risk from the Baldonnel Stream, 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.
Cumulative Effect	Cumulative impacts have been considered with current and future developments in the vicinity of the subject site. These developments are outlined in Table 12-6 of the EIAR. No significant effects are predicted on the ground conditions as a result of the proposed development alone in either the demolition and construction or the operation stage so there is no potential for cumulative effects.

Mitigation Measures

9.10.6. Section 10.8 of the EIAR and associated outline CMP set out a range of mitigation measures and pollution prevention measures. The measures include both mitigation by design and other mitigation measures and monitoring. Mitigation measures include:

• CMP 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 box culvert would have a significantly greater hydraulic capacity than that of the existing Falcon Avenue culvert which would mitigate any risk from surface water flooding.

• Water arising from excavations would be disposed of to the local sewer network.

• Proposed development includes measures to manage surface water run-off and includes two attenuation ponds and a permeable paving sub-base to provide required surface water attenuation, taking into account allowances for climate change would result in a positive impact of low magnitude.

• Method of foundations would take account of the ground conditions and environmental considerations.

Residual Impact

9.10.7. Significant effects are not envisaged during either the construction or operational phase. Any potentially significant impacts have been identified, namely the potential contamination of surface water as a result of silt laden runoff introduced through leakages /spillages, disruption of groundwater during excavations, flood risk from the Baldonnel Stream, water supply and foul drainage capacity during construction. These impacts would be mitigated against and monitored. Residual impacts on water will be imperceptible or not significant/ slight. I am satisfied that significant impacts are not expected.

Assessment

9.10.8. I have examined, analysed and evaluated the information provided in Chapter 10 and all the associated documents and submissions on file in respect of Water. I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts and provides suitably comprehensive range of mitigation and monitoring measures in Section 10.8 to reduce any potential impacts.

Surface Water Management

9.10.9. The proposed development was modified by way of further information such that three attenuation ponds are proposed, one to the west and two to the south of the data center. The attenuation pond to the west will incorporate a native wetland edge and will be surrounded by a wetland meadow to provide an ecologically rich and diverse habitat. In order to retain the hedgerow in the northwestern portion of the site the attenuation pond has been amended to reduce the width and increase the length. In conjunction with the modifications made to the north-western portion of the site, the southernmost point has been amended to incorporate an additional attenuation pond.

9.10.10. The total attenuation volume required for the site is approximately 1,084m^3 which was increased during the course of the application to a volume of 1,804m^3. The two attenuation ponds provide a combined storage volume of 970m^3 which was increased to 1,640m^3. The permeable paving sub-base provides a storage volume of 114m^3.

9.10.11. The PA were satisfied that the Sustainable Urban Drainage system proposals were acceptable, and I am satisfied that the revised proposals submitted by way of further information have addressed concerns raised.

9.10.12. There is no evidence of pluvial drainage entering the site and the Flood Risk Assessment states that there is no evidence of groundwater flooding.

Conclusion

9.10.13. I have had regard to the examination of environmental information in respect of Water, in particular the EIAR and supplementary information provided by the applicant and the report of the planning authority in the course of the application. I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts of the proposed project on Water and provides suitably

comprehensive range of mitigation and monitoring measures in Section 10.8. I am, therefore, satisfied that the proposed development would not have any unacceptable direct or indirect effects on the environment.

9.11. Air and Climate

9.11.1. Chapter 8 and Chapter 13 of the EIAR assesses the likely impacts of the proposed development on air quality and climate respectively.

Air Quality

9.11.2. Appendix 8.1 Air Quality Modelling Inputs and Appendix 8.2 Air Quality Detailed Results are both contained in EIAR Volume 3.

9.11.3. 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.

9.11.4. EIAR notes that main air pollutants of concern are dust and particulate matter with an aerodynamic diameter of less than 10 µm (PM_{10}), typically generated during construction activities, and nitrogen oxides (NOx) represented as nitrogen dioxide (NO_2), typically generated by combustion engine emissions and road traffic.

Climate

9.11.5. 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 in Chapter 13. 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.

Potential Effects

Do Nothing	Air Quality – None

	Climate – CHG emissions associated to buildings/structures within the site.
Construction Phase	Air Quality Main activities during construction with potential to cause dust emissions are earthworks and site preparation including demolition; 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. Effects of construction related traffic emissions would be short term, negative in nature, and not significant in relation to human health. Main potential air quality impacts during construction would be dust annoyance and locally elevated concentrations of PM10. Separation distance and weather are important factors. Climate GHG emissions resulting from demolition and construction stage activities, such as from the material supply, transportation, manufacturing and construction process and site works associated with the proposed development. Increased frequency and intensity of extreme weather events affecting construction works. Emissions from the construction phase are predicted to total in the region of 15,828 $MtCO_2e$. Construction and demolition of the proposed development is expected to contribute 0.00537% of Ireland's proposed 295 $MtCO_2e$ carbon budget for 2021-2025, 0.00392% of the 250 $MtCO_2e$ 2026-2030 carbon budget and 0.00502% of the 151 Mt 2031-2035 carbon budget.
Operational Phase	Air Quality

	Potential for air quality impacts during the operation phase from combustion backup generator engines. Effects of operation stage related traffic emissions would be long-term, neutral, and not significant in relation to human health. 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. <u>Climate</u> CHG emissions associated with the land use change. CHG emissions associated with the powering of data centers. 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 proposed data centre development will be connected to via a substation.
Cumulative Effect	<u>Air Quality</u> Cumulative impacts have been considered with current and future developments in the vicinity of the subject site. These developments are outlined in Table 8-17 of the EIAR. No significant effects are predicted on air quality as a result of the proposed development alone in either the demolition and construction or the operation stage so there is no potential for cumulative effects. <u>Climate</u> In combination effects are considered in Table13-12 and Table 13-16 of the EIAR. Cumulative impacts have also been considered and are outlined in Chapter 16.

	Cumulative effects are not likely to be significant to an extent that might warrant a refusal for the proposed development.

Mitigation Measures

Air Quality

9.11.6. Section 8.9 sets out mitigation measures. It is recommended that best practice construction standards be adhered to minimise dust emissions. All appropriate controls and measures are outlined in the outline CMP. Mitigation measures include;

• Communications to include community engagement, name of person responsible for dust issues, etc.

• Develop and implement a Dust Management Plan as part of CMP.

• 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.

• Measures specific to demolition including effective water suppression.

• 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.

Climate

Table 13-11, 13-12 and 13-13 sets out mitigation measures. It is recommended that best practice construction standards be adhered to, and all appropriate controls and measures are outlined in the CMP. Mitigation measures include

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

• Provision of flood compensation storage areas

• 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.

• A Site-Specific Flood Risk Mitigation Plan should be prepared which includes a maintenance regime for all drainage features.

• Regular inspection of drainage infrastructure and structures has been specified to assess the condition after extreme weather events.

• Additional mitigation not required - existing design and mitigation measures are appropriate to account for climate change/ extreme weather.

• Smart grid technology should be explored in order to store energy ready for peaks in energy demand.

• Passive design measures for reducing overheating should be explored.

• Installation of Photovoltaic panels on the roof of the Administration block.

• Usage of high efficiency lighting and low loss transformers.

• Measures to reduce energy consumption of cooling, ventilation and fan systems and allow for waste heat recovery.

Residual Impacts

9.11.7. Residual air quality effects are imperceptible in terms of dust soiling and PM_{10} due to construction work and changes in NO_2, PM_{10} and $PM_{2.5}$ levels due to vehicle emissions.

9.11.8. 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.

Assessment

9.11.9. I have examined, analysed and evaluated the information provided in Chapter 8 and Chapter 13 and all the associated documents and submissions on file in respect of Air Quality and Climate. I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts and provides suitably comprehensive range of mitigation and monitoring measures in Section 8.9 and the CMP to reduce any potential impacts.

9.11.10. The proposed development is an extension of the to the July 2022 DUB-1 consented development and would operate as part of the wider data center campus.

9.11.11. The proposed development will incorporate emergency diesel generators to provide power to the data center in the event of failure of the electricity supply. The assessment includes a quantitative assessment of proposed developments emergency generators and the cumulative impact of all emergency generators running for DUB-13 and DUB-1 campus simultaneously.

9.11.12. Technical Appendix 8.1 Air Quality Modelling Inputs and Appendix 8.2 Air Quality Detailed Results are both contained in EIAR Volume 3. Two scenarios for the emergency generators are presented in Table 1.1 scenario 1 is for the current development DUB13, and in Table 2.1 scenario 2 is for DUB 11 and DUB12.

9.11.13. The potential impact to air quality during the operation phase is a breach of the ambient AQS associated with the emissions from the proposed development combustion engines (emergency generators). The main pollutant of concern in relation to emissions from the combustion engines is NO_2 and the assessment concentrates on the impacts of NO_2 emissions on human health receptors.

9.11.14. In relation to carbon monoxide (CO), sulphur (SO_2), PM_{10}, $PM_{2.5}$ and benzene no detailed modelling was undertaken, as combustion engines emissions of these pollutants would be significantly lower when compared with NOx emissions relative to their respective ambient air quality standard.

9.11.15. The maximum results indicate that the ambient level concentrations due to emissions arising from the emergency scenario would be comfortably below the

relevant NO_2 AQS. For the worst-case year modelled predicted (including background) would be below 75% of the ambient NO_2 annual AQS at all assessed receptors, with maximum PEC predicted at receptor R1 where concentrations would be approximately 45% of the NO_2 annual AQS.

9.11.16. ***Conclusion***

9.11.17. Having regard to the examination of environmental information in respect of Air Quality and Climate, in particular the EIAR and supplementary information provided by the applicant and the report of the planning authority in the course of the application I am satisfied that no significant direct or indirect effects would arise due to the nature and scale of the proposed project, the duration (11 months) of the works, the separation distance to sensitive receptors and to the comprehensive range of mitigation and monitoring measures in Section 8.9 and the CMP to reduce any potential impacts.

9.12. Landscape and Visual Assessment

9.12.1. Chapter 1 of Volume 2 of the EIAR comprises a Landscape and Visual Impact Assessment (LVIA). The landscape and visual 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.

9.12.2. Volume 2 of the EIAR includes 11 no. photomontages comprising 11 no. viewpoints providing a comparison of the existing site and the proposed development. A zone of theoretical visibility has also been produced. Appendix 1.3 includes photomontages – Operation Day 1 and Appendix 1.4 includes photomontages – Operation Year 5. I am satisfied that the applicants submitted photomontages provide a reasonable representation of how the proposed development would appear to allow for a full assessment of the potential impact.

9.12.3. The LVIA provides an assessment of the visual impact of the development from the 11 no. viewpoints. Section 1.6.3 of Chapter 1 of Volume 2 of the EIAR provides full details of the assessment criteria. In general, there are 4 no. categories used to classify the ‘sensitivity’ of the landscape and the magnitude of likely impact, these are Very High, High, Medium, and Low. The significance of the impact is based on a

balance between the sensitivity of the receptors and the magnitude of the impact. There are 5 categories of significance of an impact ranging from profound to imperceptible.

9.12.4. Sensitive visual receptors include residential receptors in the surrounding settlements of Oldcastle Park and the scattered dwellings along Baldonnel Road. Recreational receptors include along the Grand Canal and adjacent Grange Castle Golf Club. Employment receptors include the commercial premises on the R134 adjacent to Boland's Garage, Digital Reality Profile Park, Google PPL Data Centre Campus and businesses within the Grange Castle Business Park (North and South) and Kilcarbery Park. Travel receptors include those associated with the New Nangor Road R134, Baldonnel Road, Falcon Avenue and potentially views form the N7 Naas Road.

Potential Effects

Do Nothing	This scenario is not addressed in the EIAR however it is assumed that the current situation would prevail.
Construction Phase	Initial demolition and construction operations created by the clearance of the site and construction of buildings and plant will give rise to temporary impacts on landscape character. Removal of 160 linear meters of existing hedgerow and 72 no. trees from the site. Landscape mitigation works would commence at the earliest opportunity to allow planting to mature through the construction works programme. Appropriate material excavated during ground works would be re-used as part of earthworks as a temporary backfill where necessary. 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.

	Proposed development would be experienced within the landscape as a continuation of current activity, limiting the magnitude of impact.
Operational Phase	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 intervening buildings and vegetation would screen the majority of the proposed development from this location. • VP-02: New Nangor Road at the roundabout junction with Baldonnel Road looking south-east – proposed development would be partially visible from this location with white cladding providing a less intrusive visual impact than the dark grey buildings visible from this location. • VP-03: Baldonnel Road at Falcon Avenue junction with Profile Park Road looking east – proposed building not expected to be visible from this location as screened by a large commercial building in the foreground. • VP-04: Baldonnel Road near the entrance to the Casement Aerodrome looking north – proposed building would be visible in the far distance and is proportionate to DUB1 of similar scale and materiality within the view. • VP-05: New Nangor Road at Boland's Car Centre to the north-west corner of the site looking southeast – associated data centre DUB-1 building and landscaping will screen the proposed development from view. • VP-06: New Nangor Road at the northwest corner of the site looking south towards the site – approved data centre

	DUB-1 development will mean that proposed development is partially visible from this location. • VP-07: New Nangor Road and Profile Park Road roundabout junctions looking south-west – part of the proposed developments north and east elevations would be visible from this location, located to the rear of the proposed boundary treatments that include berms tree planting and hedging. Travel and employment receptors are of low sensitivity. • VP-08: Profile Park Road roundabout at the site entrance looking north-west – a small element of the proposed development's east elevation would be visible at this location screened by proposed berms, planting and established retained trees along Falcon Avenue. • VP-09: Profile Park Road looking south-east across the site – building is not visible within this view and would be screened by the consented development DUB-1 landscaping and building. • VP-10: N7 and R136 junction looking northwest – proposed development is not visible at this location due to distance and screening by vegetation. • VP-11: R134 at entrance to Grange Castle Golf Course looking west – A small element of the proposed development is visible at this location in the far distance. The scale of the building is relatively small in comparison to surrounding vegetation and lighting structures. As boundary matures the building would be further screened.
Cumulative Effect	The proposed development would change the character of the landscape and the visual amenity but would not contribute to additional significant cumulative negative effects.

Mitigation Measures

• Proposed landscaping scheme includes boundary landscaping that includes berms with woodland planting, wetland meadow, riparian planting along Baldonnel Stream and SUDS attenuation pond and will help establish a linear park to enhance green infrastructure.

• Embedded mitigation within CMP, 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

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

9.12.6. There will be a moderate positive and long-term impact along Baldonnel Stream in year 5 of the operational phase; however, the proposed development would be consistent with the existing and emerging trends in the area.

Assessment

9.12.7. The subject site has an area of 3.79 ha. It is proposed to demolish an existing 2 storey dwelling and three outbuildings/sheds and remove some of the existing hedgerow trees from the site.

9.12.8. The proposed data centre is situated to the north of Falcon Avenue in Profile Park. The data centre development will include a 2- storey building with a building footprint of 12,893 sq.m., with offices at first floor, and will have a height of 15.7m above finished floor level. The data centre includes 13 standby emergency generators with associated flues each 22.3m in height on the west of the building.

9.12.9. Access will be via Falcon Avene with a new vehicular access point, surface car parking area for 60 cars.

9.12.10. The data centre building will be finished in cladding in white, light and dark grey consistent with associated DUB-1 permitted development and other data centres within the context of the proposed development. Green walls are proposed

on the east elevation where the building would be visible from the R134 New Nangor Road. Rooftop plant including chillers and transformers are masked by dark grey mesh panels. A sedum green roof is introduced over the office and non-critical areas of the data centre.

9.12.11. I note proposals as outlined in the revised EIAR submitted in response to the further information request provides for an updated façade design to incorporate lighter materials and more windows to improve the visual impact along the New Nangor Road and Falcon Avenue. Further north-east and south-east elevation drawings were submitted illustrating these facades incorporating the revised material palette.

9.12.12. The PA while noting the changes to the design which includes additional glazing to the east extending to the northern elevations, it was considered that this was not a significant improvement to the visual impact, but that in the event of a grant of permission the matter could be addressed by way of a condition. I have had regard to the proposed elevation drawings and am satisfied that they are acceptable in terms of the architectural treatment.

9.12.13. DUB-13 would be screened by proposed boundary 4m high berms, planting and landscaping to the north and east, to reduce the visual bulk of the data center from New Nangor Road and Falcon Avenue. Existing vegetation to the north and east would be retained to maintain screening.

9.12.14. Landscaping will be in accordance with the landscape masterplan that will include triple staggered rows of native trees on berm ridges, and copses of native trees. Native riparian planting is proposed along the southwest area in proximity to the Baldonnel stream. A 557m length of native hedgerow will be planted around the north and east of the proposed development to the rear of established trees. Climbers will extend up exterior staircase wall structures to create a visible green wall to the north elevation.

9.12.15. The application as lodged proposed the retention of 58 no. trees predominantly located around the perimeter of the site. This was reduced to 51 no. trees in the revised EIAR submitted in response to the further information request. The application also proposed felling 72 no. trees mainly located in the tree line

adjacent to the existing residential property. This was increased to 79 no. trees in the revised EIAR submitted in response to the further information request.

9.12.16. Substantial new planting of berm and woodland would be provided in the landscaping scheme with 897 new trees proposed to be planted and 4,449 transported as saplings. In the revised EIAR submitted in response to further information the number of new trees was reduced to 443 while the number of saplings was increased to 4,903. The revised scheme provides for the retention of the hedgerow in the northwest of the site. Adjacent to the east of the attenuation pond, with new hedgerow added to the southern length, where it meets hard standing areas.

9.12.17. The PA sought further information in relation to the proposed fencing and boundary treatment. Revised details submitted in the RFI indicated an internal 3m security fence in addition to a 1.5m mesh fence situated behind the proposed landscaping. The PA considered that in the context of the outer boundary treatment in the area characterised by a low stone wall with railings that this may be a more appropriate boundary treatment. In this regard I would concur, and this can be dealt with by way of condition.

9.12.18. To address the impact of the proposed development on the landscape the applicant provided an assessment of the significance of the impact of the proposed development from 11 no. viewpoints. In my view Viewpoints, VP6, VP7, VP8 and VP9 are short distance views, VP2, VP3, VP4, and VP5 are medium distance and VP1, VP10 and VP11 are longer distance view. Table 1.9 provides an assessment of the visual impact of the development from the 11 no. viewpoints.

Short Distance Views

9.12.19. The significance of the visual impact from short distance views is generally range from not significant/slight to imperceptible. These short distance views are categorised as having a low sensitivity.

9.12.20. At viewpoints VP6 and VP7 day 1 photomontages a medium magnitude of impact has been identified. I agree with the LVIA that the significance of the visual impact would be Moderate to Slight. VP6 is taken from the north-western corner of the site. At year 5 it is anticipated that with the increase in boundary vegetation and green wall

coverage, the magnitude of impact would reduce to low. VP7 is taken from the entrance to Profile Park. At year 5 it is acknowledged that due to the scale of the building at this location it is judged the impact would continue in magnitude.

9.12.21. At viewpoints VP8 day 1 photomontages a low magnitude of impact has been identified, while for VP9 a negligible impact has been identified. I agree with the LVIA that the significance of the visual impact would be negative and not significant.

9.12.22. I am satisfied that the proposed development would not have a significant impact on the existing character of the area. It is noted that the proposed woodland planting, linking to the retained conifers along with the green wall vegetation will help assimilate the proposed development into its surrounding landscape and townscape. I agree with the findings of the LVIA that the significance of the visual impact would be slight.

Medium Distance Views

9.12.23. The significance of the visual impact from medium distance views is generally considered to be not significant/slight to imperceptible. These medium distance views for VP2 and VP3 are categorised as having a low sensitivity with VP4 and VP5 having a medium sensitivity.

9.12.24. At viewpoints VP2, VP3 and VP5 day 1 photomontages a negligible magnitude of impact has been identified reducing to negligible in year 5. At viewpoint VP4 Baldonnel Road photomontages a low magnitude of impact has been identified for both day 1 and year 5.

9.12.25. I agree with the assessment of the LVIA that the visual change would have little bearing on the visual amenity of the setting and would not be visually obtrusive or incongruous. Due to the existing and permitted buildings, existing and proposed planting the proposed development would be partially screened.

Long Distance Views

9.12.26. The significance of the visual impact from long distance views is generally considered to be slight to imperceptible. VP1 is taken from the Grand Canal looking southeast, which is categorised as having a medium sensitivity.

9.12.27. VP10 is taken from N7 Junction with R136. This location is within an area of transport and employment and is categorised as having a low sensitivity. I agree with the LVIA that the significance of the visual impact would be Slight. VP11 is taken at the entrance to Grange Castle Golf Course looking west.

9.12.28. It is acknowledged that the proposed data centre would be visible or partially visible from long distance views, however, due to the context within the existing business park and the urban area I am satisfied that the visual impact would not be significant.

9.12.29. Overall, I agree with the conclusion of the EIAR that in the wider business park that the proposed development would be a relatively small component within an area of commercial development that is undergoing a rapid change of character. I am satisfied that the proposed data centre represents a compatible and consistent extension of an established, contemporary, and rapidly evolving built environment and that the proposed project would strengthen the function and future of the business park. Therefore, the magnitude of the change is considered to be low and, therefore, acceptable.

Conclusion

9.12.30. I have had regard to the examination of environmental information in respect of Landscape, in particular the EIAR and supplementary information provided by the applicant, the report of the planning authority and submissions and observations made in the course of the application. I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts of the proposed project on the landscape.

9.12.31. While it is acknowledged that the proposed development would be visible from some locations, I am satisfied that it in the context of the existing business park and busy urban area and having regard to the design and siting of the proposed development no significant direct, indirect or cumulative adverse effects on the landscape are likely to arise.

9.13. Cultural Heritage (Archaeology)

9.13.1. Chapter 2 of Volume 2 of the EIAR comprises a Cultural Impact Assessment.

9.13.2. 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, NIAH or RPS. The site has been the subject of a geophysical survey and subsequent test trenching by Archaeological Consultancy Services Unit Ltd (ASCU) in September and October 2022. The results of these surveys are presented in the reports in technical appendices 2.4 and 2.5 in EIAR Volume 3.

Potential Effects

Do Nothing	This scenario is not addressed in the EIAR however it is assumed that the current situation would prevail.
Construction Phase	Study area covers an area of 1km radius from the site boundary – 24 monuments and sites are listed in the Sites and Monuments Record (SMR) data for the site and 1km radius study area, none of which fall within the site boundary. Archaeology – There are no recorded archaeological sites listed on the SMR or Record of Monuments and Places (RMP) anywhere within the site boundary. Proposed development would involve groundworks which would have an impact on any below ground archaeological remains. Built Heritage – There are no structures included in the Register of Protected Structures within the site.
Operational Phase	No significant effects are predicted on the archaeological resource on site during the operation stage. Impacts on built heritage resources in the wider area (Kilbride church and related features, Grange Castle, Kilcarberry House, and the buildings of heritage interest at Casement Aerodrome) would be not significant or slight significant.
Cumulative Effect	Cumulative impacts have been considered with current and future developments in the vicinity of the subject site, including with the July 2022 DUB-1 permitted development.

	Cumulative effects during the demolition and construction and operation stages are not considered to be significant for archaeology or built heritage.

Mitigation Measures

• Programme of archaeological monitoring of topsoil stripping in the area immediately surrounding the possible prehistoric or early historic ditch and by the preservation by record of any feature prior to construction as recommended by ACSU report (Appendix 2.5).

• Predicted moderate significant effect on the archaeology resource can be wholly mitigated through the aforementioned scheme of excavation and preservation by record.

Residual Impact

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

Assessment

9.13.4. I have examined, analysed and evaluated the information provided in Chapter 2 of Volume 2 of the EIAR and all the associated documents and submissions on file in respect of Cultural Heritage (archaeology). I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts and provides suitably comprehensive range of mitigation and monitoring measures in Section 2.8 and 2.9 to reduce any potential impacts.

9.13.5. Geophysical survey undertaken for the July 2022 DUB-1 permitted development by ACSU and subsequent test trenching identified a sub-circular enclosure c.210-metres south-west on the southern side of the internal access road.

9.13.6. 30 test trenches were excavated and confirmed the remains of an oval/circular enclosure, measuring 37m in length by 34m in width, with pottery recovered producing a Bronze Age date.

9.13.7. Geophysical survey and subsequent test trenching of the site was undertaken in September and October 2022 by ASCU, identified the alignment of a ditch of possible prehistoric or early historic date, and is considered to be low sensitivity.

Conclusion

9.13.8. I have had regard to the examination of environmental information in respect of Cultural Heritage (Archaeology), in particular the EIAR and supplementary information provided by the applicant, the report of the planning authority and submissions and observations made in the course of the application. I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts of the proposed project on the Cultural Heritage (archaeology). I am satisfied subject to the recommended mitigation measures being adhered to the proposed development would have no significant direct or indirect effect on the cultural heritage (archaeology) of the site.

9.14. Material Assets

9.14.1. Chapter 15 provides an assessment of the likely impacts of the proposed development on material assets. Material assets are defined as resources that are valued and that are intrinsic to specific places. They may be either human or of natural origin and the value may arise for either economic or cultural reasons.

9.14.2. 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.

9.14.3. The PA sought further information in relation to the contents of Chapter 15 – Material Assets of the EIAR, and subsequently refused planning permission on the basis of the inadequacy of information contained within the EIAR, such that the PA was unable to adequately assess the potential impacts of the proposed development on the receiving environment in compliance with the requirements of Article 94 of the Planning and Development Regulations 2001 (as amended).

9.14.4. An updated Chapter 15 of the main EIAR was submitted with the grounds of appeal.

9.14.5. 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 is served by the Gas Networks Ireland (GNI) network which is a natural gas supply. Multiple telecommunication service lines exist along Falcon Avenue and Concorde Drive.

9.14.6. The power requirements for the proposed development would be provided via a connection to a 110 kV EirGrid substation, which was subject to a SID application to ABP. The substation would then provide a 20kV electrical power distribution at medium voltage throughout the site. To reduce electrical losses between HV/MV/LV conversions it is proposed to install low loss transformers.

9.14.7. Photovoltaic panels would be installed with an approximate ratio of $1m^2$ per $20m^2$ of office space.

9.14.8. Chapter 14 provides an assessment of the likely impacts of the proposed development on waste.

9.14.9. 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.

Submissions/Observations

9.14.10. Concerns are raised by the observers to the appeal regarding the extent of the application documents to determine the application in respect of the EIA Directive.

Potential Effects

Do Nothing	This scenario is not addressed in the EIAR however it is assumed that the current situation would prevail.
Construction Phase	Power and electrical supply receptors are of high sensitivity as the development is located in a constrained area in terms of electrical grid capacity. Potential for surface water run off to become contaminated with pollutants and pose a risk to surface water quality within the Baldonnel stream.

	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. <u>Waste</u> 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 would generate approximately 6,000m^3 of material. Cut material generated during site preparation/ levelling would be reused on site. C. 12,500 m^3 of fill would be required to facilitate construction of foundations and other ground preparation works. Wastes generated from other construction activities, such as from construction workers, would be imperceptible and not significant. Estimated in EIAR that c. 15,000 tonnes of C&D waste would be generated and of this volume 79 tonnes would be disposed to landfill – would have not have a significant impact on capacity in waste management facilities and landfill sites.
Operational Phase	Prior to operation, a comprehensive set of operational procedures would be established which would include site-specific mitigation measures and emergency response measures.

	Potential impact on surface water relates to accidental spill of diesel fuel which is stored and used on site for back-up power generation. Increase in foul water discharge from the site. <u>Waste</u> Waste collection vehicles would service the development regularly to ensure the resources are dedicated to ensuring efficient waste management practices. Hazardous waste generated from batteries, contaminated chemical drums and other packaging not suitable for recycling is typically sent for energy recovery.
Cumulative Effect	Cumulative impacts have been considered with current and future developments in the vicinity of the subject site. These developments are outlined in Table 15-3 of the EIAR. Chapter 15 considers the cumulative effect on Material Assets during the Operational Phase in relation to the Electricity Grid and Gas networks, and how it will be met with reference to the single connection agreement that is in place for overall Facility Campus is also fully detailed. Cumulative effects during the demolition and construction and operation stages are considered to be unlikely for material assets. Cumulative effects for waste during the demolition and construction and operation stages are considered are considered to be not significant

Mitigation Measures

Section 15.9 sets out mitigation measures. It is recommended that best practice construction standards be adhered to and that all appropriate controls and measures are outlined in the outline CMP. These include the following;

• CMP 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.

Mitigation measures for Waste

• Construction and Demolition Waste Management Plan (CDWMP) 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/permitted/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.

Residual Impacts

9.14.11. The impact on resource use (power and electrical supply, gas supply, surface water, foul drainage, water supply and telecommunications) is a permanent

imperceptible and neutral effect. The impact on other material assets is considered to be not significant.

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

Assessment

9.14.13. I have examined, analysed and evaluated the information provided in Chapter 15 and 14 and all the associated documents and submissions on file in respect of Material Assets. I am satisfied that the information submitted in the EIAR and as subsequently amended by way of further information with the appeal adequately demonstrates an understanding of the potential impacts and provides suitably comprehensive range of mitigation and monitoring measures to reduce any potential impacts.

9.14.14. Concerns were raised by the PA in relation to the consideration in the EIAR of the cumulative impact of the development on Material Assets during the operational phase. The PA sought further information in relation to the Electricity grid and Gas networks, as well as more detail on what the energy demand for the proposed data centre is and how precisely it would be met with reference to the electricity grid connection agreement, the permitted Multi-Fuel Generation Plant, the proposed diesel generators and the interplay between these power sources. The applicant was advised that an emergency scenario in which the proposed data centre's grid connection is temporarily suspended should also be provided for, while verification documentation around the grid connection and MFGP connection were also requested.

9.14.15. The applicant did not in their response to a further information request submit an updated Chapter 15 of the Main EIAR, and PA determined that in the absence of this information, necessary to allow for an adequate assessment of the potential impacts of the proposed development, that planning permission be refused.

9.14.16. The first party appeal is accompanied by a copy of all sections of the updated EIAR, that should have been submitted as part of the AI response. The applicant has clarified that the omission of the updated Chapter 15 – Material Assets as part of the AI response was due to an administrative error. While I consider this omission was a significant error, the submission of this updated chapter with the grounds of

appeal in my opinion does address the second reason for refusal subject to further assessment of the updated content.

Electricity

9.14.17. The EIAR submitted with the application indicated that the MFGP would provide some supply to DUB 13 until the full electrical load is provided by the above grid connection, and that DUB 13 would connect to the MFGP through the internal connection through the July 2022 DUB-1 permitted development.

9.14.18. Chapter 15 of the revised EIAR submitted as part of the first party appeal notes that the MFGP would increase resilience of the power network and ensure a power supply for the proposed development, with the proposed development also connecting to the MFGP. It states that the MFGP would have the capacity to provide equal energy to the amount consumed through the July 2022 DUB-1 permitted development, and that the MFGP is scaled to ensure it has capacity to dispatch energy equivalent to or greater than DUB-13 and the July DUB-1 permitted development demand into the national grid.

9.14.19. I am satisfied that due to the secured EirGrid connection agreement and the resilience to the network the MFGP provides, effects on power and electrical supply would not have a significant effect.

Gas Supply

9.14.20. The EIAR submitted with the applicationl indicates that natural gas would be supplied to the MFGP via the high-pressure GNI gas network for which the connection has been agreed with GNI. The natural gas supply and HVO would be supplied to the proposed development through a commercial provider.

9.14.21. The revised EIAR submitted as part of the first part appeal states that no gas supply is required as part of the proposed development (as gas supply to the MFGP is already permitted as part of the July 2022 DUB-1 consented scheme).

Water Supply

It is proposed to serve the development via connection off the 160mm diameter network, as located in Falcon Avenue. Water meters, sluice valves and hydrants, in line with Irish Water requirements and specifications, would be installed at the connections onto the existing water mains as required. It is understood that there is

adequate capacity within the existing water main network to supply the proposed development. I am satisfied that the proposed development would not have a significant effect on the public water supply.

Wastewater

The proposed development would lead to an increase in foul water discharge from the site. It is proposed to discharge to foul water via a 225mm diameter gravity foul sewer outfall into the existing 225mm diameter spur connection laid along Falcon Avenue, which runs in a southerly direction. I am satisfied that the proposed development would not have a significant effect on the existing public sewerage network.

Waste Management

9.14.22. 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. I agree with the EIAR that the impact on landfill sites is not significant.

Cumulative Effects

9.14.23. The cumulative effects of the proposed development are outlined in Table 15-3A of the revised EIAR submitted with the appeal. The EIAR outlines that the applicant has secured a connection agreement for the proposed developments permanent electrical connection from EirGrid, with a gas connection agreed with GNI. It states that when connected natural gas and HVO would be supplied through a commercial provider.

9.14.24. It further states that the proposed development would be powered via a grid connection and the MFGP consented as part of the July 2022 DUB-1 consented scheme. It states that the MFGP increases resilience of the power network as it would have the capacity to provide equal energy to the amount consumed on site and consumed through the July 2022 DUB-1 permitted development. The MFGP would also be called upon for use if the local network drops in response to EirGrid's Data Centre Connection Offer Policy and Process (DCCOPP) regulations. Due to this reliance provided to the network it is considered unlikely that the proposed development would result in cumulative effects to material assets. I am satisfied that

the proposed development would not have significant cumulative effects to Material Assets.

Conclusion

9.14.25. I have had regard to the examination of environmental information in respect of Material Assets and Waste, in particular the EIAR and supplementary information provided by the applicant and the report of the planning authority. I am satisfied that the information submitted in the EIAR and as revised in the appeal adequately demonstrates an understanding of the potential impacts of the proposed project on Material Assets. I am satisfied subject to the recommended mitigation measures being adhered to the proposed development would have no significant direct or indirect effects.

9.15. Noise and Vibration

9.15.1. Chapter 9 of the EIAR describes the potential for noise and vibration impacts from the proposed development on the receiving environment. Appendix 9.1 includes an Acoustic Terminology report and Appendix 9.2 outlines the Construction Noise Calculations.

9.15.2. Baseline noise surveys were undertaken to quantify the prevailing ambient and background noise levels during the daytime and night-time periods. It is noted that surveys were taken outside of Covid lockdown measures and are informed by the baseline noise survey of the July 2022 DUB-1 permitted development. Details of the noise monitoring locations and a summary of the findings are provided in section 9.8.

9.15.3. The existing noise environment in the study area varies with location. The northern portion of the site generally experiences higher levels of noise due to the influence of the surrounding road network and other commercial/industrial uses. Other noise sources include industrial uses and aircraft movements from the nearby Casement Aerodrome.

Potential Effects

Do Nothing	This scenario is not addressed in the EIAR however it is assumed that the current situation would prevail.

Construction Phase	Potential for construction noise from enabling works, demolition, 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 (83dBA at 10m) 44t lorry travelling at 34 kph, the peak permissible number of HGV vehicle movements passing a receptor at 20m has been assessed in the EIAR as 16 per hour, or 8 return journeys per hour. On this basis, the predicted construction traffic noise level would be calculated as 65dB LAeq, giving rise to a short-term slight negative effect for receptors NSR1 and NSR2-5. Potential that construction induced vibration may be perceptible mainly from earthwork activities.
Operational Phase	14 no. Airedale TurboChill V chillers with acoustically attenuated inlets and discharge (or equivalent). 13 no. KD3300-F emergency generators, silenced to 85dBA. 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 temporary slight, negative effect.
Cumulative Effect	Cumulative impacts have been considered with current and future developments in the vicinity of the subject site, including with the July 2022 DUB-1 permitted development. Cumulative effects during the demolition and construction and operation stages are not considered to be significant for noise and vibration.

Mitigation Measures

• 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.

• CMP includes construction phase 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.).

• CMP 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.

• The CMP 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 emissions and vibration including the establishment of channels of communication, weather monitoring, limitation of construction hours and procedures for dealing with any complaints.

Residual Impact

9.15.4. 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 slight, negative and not significant impacts with emergency operation running.

Assessment

9.15.5. I have examined, analysed and evaluated the information provided in Chapter 9 and all the associated documents and submissions on file in respect of Noise. I am satisfied that the information submitted in the EIAR and as subsequently amended by way of further information including the submission of an acoustic assessment and with the appeal adequately demonstrates an understanding of the potential

impacts and provides suitably comprehensive range of mitigation and monitoring measures to reduce any potential impacts.

Conclusion

9.15.6. I have had regard to the examination of environmental information in respect of noise and vibration, in particular the EIAR and supplementary information provided by the applicant and the report to the planning authority. I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts of the proposed project on noise and vibration. I am satisfied subject to the recommended mitigation measures being adhered to the proposed development would have no significant direct or indirect effects.

9.16. Traffic and Transportation

9.16.1. Chapter 7 of the EIAR describes the potential traffic and transportation impacts from the proposed development on the receiving environment. The Transport and Accessibility chapter is supported by technical appendices containing traffic flow and distribution diagrams, accident data, cumulative schemes daily traffic flow diagrams and proposed development trip generation.

9.16.2. 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.

9.16.3. Five junctions were assessed along Nangor Road and it has been assumed that peak construction traffic would occur in 2024 and the development would be operational in 2025. Traffic survey data contained within the submitted Grange Castle Business Park South, Baldonnel, Dublin 22.

9.16.4. Traffic Impact Assessment (TIA) (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.

9.16.5. All vehicular traffic will access the site via the four-arm roundabout on Falcon Avenue which leads to a roundabout on the R134 Nangor Road.

9.16.6. The application site would be accessed via two entry points on Falcon Avenue. HGVs, maintenance vehicles and delivery vehicles would access the site via the roundabout on Falcon Avenue, south of the proposed development through the July 2022 DUB-1 permitted development. HGV, maintenance vehicles and delivery vehicles would cross over an attenuation pond and stream via a road crossing to access the southern portion of the site. In response to the further information request this road crossing was replaced by a bridge structure.

9.16.7. Cars would access the site via Falcon Avenue from the east, through the main gate. This would keep daily office traffic separate from HGV, maintenance vehicles and delivery vehicles.

Potential Effects

Do Nothing	Table 7-16 presents the baseline traffic figures 2025 Do Nothing and Do Something Annual Average Daily Flow (AADF).
Construction Phase	Daily peak demolition and construction traffic would consist of 56 staff (112 vehicles movements); and 22 HGVs (44 movements) which results in a total of 156 vehicle movements. With additional traffic distributed across the network, all the two-way highway links are within the 30% threshold in construction vehicle movements. Percentage increase during the demolition construction phase is 0 or 6%/7% at the Falcon Avenue 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 demolition construction phase are short term, negative and not significant in terms of pedestrian severance, delay, amenity, fear and intimidation; driver delay; and accidents and safety.

Operational Phase	Vehicle trips anticipated during the operational stage of the proposed development, of 29 cars and 2 deliveries arriving and departing daily (total 59 cars and 4 deliveries) will have a slight negative but not significant impact.
Cumulative Effect	Cumulative impacts have been considered with current and future developments in the vicinity of the subject site, including with the July 2022 DUB-1 permitted development. Cumulative effects during the demolition and construction and operation stages are not considered to be significant for traffic and transportation.

Mitigation Measures

• A CMP 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.

Residual Impacts

9.16.8. The EIAR notes that the demolition and construction phase would have a short term, slight, negative and not significant residual effect. The residual impacts of the proposed development once operational will be long term, slight, negative and not significant.

Assessment

9.16.9. In response to the further information request a ‘revised proposed development’ is presented as Option 6 in Chapter 3A of the revised EIAR. Safe travel and sustainable transport have been encouraged through the extension of the existing cycle lane and footpath along the northern boundary, adjacent to the New Nangor Road to connect to the site.

9.16.10. The EIAR submitted with the grounds of appeal notes that the existing cycle lane to the northern boundary on New Nangor Road (R134) would be extended to Falcon Avenue, which will match the existing cycle lane further west along the R134.

Conclusion

9.16.11. 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 daily site visits for 63 vehicles.

9.16.12. I have had regard to the examination of environmental information in respect of Traffic and Transportation, in particular the EIAR and supplementary information provided by the applicant and the report to the planning authority. I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts of the proposed project on traffic and transportation and provides suitable monitoring measures and that no significant direct or indirect effects would arise due to the nature and scale of the proposed project, the duration (11months) of the works and to the comprehensive range of mitigation and monitoring measures. I am satisfied subject to the recommended mitigation measures being adhered to the proposed development would have no significant direct or indirect effects.

9.17. Interaction of Effects

9.17.1. Chapter 16 of the EIAR addresses 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.

9.17.2. Slight positive interactions will occur between the local economy and population and human health with the creation of employment and introduction of resident population, and slight negative but not significant interactions between existing off-site local residents and human health.

9.17.3. Slight negative interactions will occur between existing and future pedestrians, road users and cyclists and the changes in transport and accessibility. Slight negative interactions will occur between existing and future residents and plant noise. Slight negative interactions will occur between global climate, landfills and landscape

9.17.4. There will be a slight to moderate positive interaction between surface water and fluvial flood risk and on-site habitats and species with the ecological enhancements of the Baldonnel Stream. Positive interactions will occur in terms of interaction between the enhancement with new riverine planting and features including wetland meadow and pond and site landscape features.

9.17.5. Slight negative interactions will occur in terms of interaction between the enhancement of linked green infrastructure features and increased commercial development and existing character areas and landscape features and existing views.

9.17.6. 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.

9.17.7. **Mitigation Measures**

9.17.8. Chapter 16 of the EIAR and Appendix 7 of the RFI requested by the planning authority provide a schedule of environmental mitigation measures.

9.18. Cumulative Impacts

9.18.1. The potential cumulative impact of the proposed data centre 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 permitted data centre, 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) Digital Reality Trust development (SD17A/0377) in Profile Park, and Cyrus One developments (SD18A/0134, SD20A/0295 and ABP-309146-21) in Grange Castle South Business Park and the Vantage substation ABP 312793. 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.

9.18.2. 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.

9.18.3. 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 CMP.

9.18.4. 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.

9.18.5. 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.

9.18.6. On completion, the proposed development is unlikely to contribute to cumulative visual and landscape effects due to its position within the business park and screening proposed.

9.18.7. 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.

9.18.8. 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.

9.18.9. 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 data centre 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.

9.19. Reasoned Conclusion on the Significant Effects

9.19.1. Having regard to the examination of environmental information contained above, to the EIAR and other information provided by the developer, and to the submissions from Planning Authority, prescribed bodies and third parties, 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:

Population and Human Health:

- Positive impact to the local economy during the construction phase due to the increase in local construction workers and associated benefits. from increased spending and jobs during the construction period.
- Potential significant health and safety impacts during construction that would be mitigated through the implementation of the measures set out in the EIAR, including the Construction Environmental Plan and best practice construction methods.

Biodiversity:

- Potential significant effects on habitats, birds, mammals and aquatic ecology during construction and operational phases would be mitigated by the

implementation of the mitigation measures, contained in the Environmental Impact Assessment Report, including the Construction Environmental Plan, good practice construction measures, timing of vegetation removal, water pollution prevention measures, provision of bird boxes, bat boxes and mammal passes.

- Further pre-commencement biodiversity surveys are also proposed.

Land, Soils, Water, Air and Climate:

- 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 negative impacts on hydrology, hydrogeology and land and soils during construction and operational phase would be mitigated by a series of best practice construction management and pollution prevention measures and other specific measures outlined in the EIAR, including the Construction Environmental Plan, surface water management plan, and use of pollution prevention measures.
- Construction noise will be mitigated by the measures outlined in the CMP.

Material Assets, Cultural Heritage and the Landscape:

- Traffic impacts would be short term and will be mitigated during construction by the measures set out in the EIAR, including the EIAR. Traffic and transportation impacts during the operational stage would be negative.
- Potential impacts on Cultural Heritage will be mitigated during the construction stage through archaeological monitoring of ground works, with provision made for resolution of any archaeological feature/deposits that may be identified.
- Landscape and visual impacts are likely, however, given the context and characteristics of the existing business park they are considered acceptable and compatible with the existing uses.

9.19.2. The EIAR has considered that the main significant direct and indirect effects of the proposed development on the environment would be primarily mitigated by environmental management measures, as appropriate. The assessments provided in many of the individual EIAR chapters are satisfactory to enable the likely

significant environmental effects arising as a consequence of the proposed development to be satisfactorily identified, described and assessed. The environmental impacts identified are not significant and would not justify refusing permission for the proposed development or require substantial amendments.

10.0 AA Screening

10.1.1. 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

10.1.2. **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.

10.1.3. The proposed development comprises the construction of a data centre. 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).

10.2. Appropriate Assessment Screening Report and Associated Documents

10.2.1. The application for the proposed data centre is accompanied by an Appropriate Assessment Screening Report dated 13th October 2022. An amended AA Screening report dated 27th February 2023 was submitted in response to the RFI. The 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 a Flood Risk Assessment and a Biodiversity Management Plan.

10.2.2. 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.

10.2.3. 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.

10.2.4. 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, and
- Environmental Protection Agency (EPA) maps of river catchments, sub catchments and flow directions.

• Fossitt habitat survey undertaken in August 2021 which identified buildings and artificial surfaces (BL3); amenity grassland (GA2), recolonising bare ground (ED3); scrub (WS1), depositing/lowland rivers (FW2), hedgerows (WL1) 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.

10.3. Geographical Scope and Main Characteristics

10.3.1. 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 Aryzta. 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.

10.3.2. The subject site is roughly triangular shape and comprises an area of c. 3.79ha which includes an unoccupied 2 storey house with outbuildings and a former agricultural field where the proposed data centre will be located. The site is bounded to the north by New Nangor Road, to the east by Falcon Avenue and Grange Castle Golf Club beyond, and to the south by Falcon Avenue. The site is bounded to the west by the consented Vantage data centre development DUB-1 (planning reference SD21A/0241).

10.3.3. The proposed data centre is located to the east of the 2 data centre buildings permitted under Reg. Ref: SD21A/0241 and adjacent to the 110kV GIS substation compound permitted under ABP-312793-22. Landscaping is proposed around the northern and eastern site boundaries. Planting is also proposed along the banks of the Baldonnel Stream which flows through the site.

10.4. Screening the need for Appropriate Assessment

10.4.1. 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.

10.4.2. 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).

10.4.3. 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	8km	No potential connections	N
Wicklow Mountains SAC	002122	9.8km	No potential connections	N
Red Bog, Kildare SAC	000397	14.4km	No potential connections	N
South Dublin Bay SAC	000210	15.2km	Potential hydrological connection	Y
North Dublin Bay SAC	000206	17.9km	Potential hydrological connection	Y
Wicklow Mountains SPA	004040	12.9km	No potential connections	N
South Dublin Bay and River Tolka SPA	004024	14.8km	Potential hydrological connection	Y
North Bull Island SPA	004006	19.7km	Potential hydrological connection	y

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

10.4.4. 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:
Rye Water Valley/ Carton SAC **Qualifying Interest:** Petrifying springs with tufa formation (Cratoneurion) [7220] Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]	c. 5.9km	Habitats at application site are not suitable for supporting any mobile species associated with the SAC. Narrow-mouthed Whorl Snail and Desmoulin's Whorl Snail are restricted to wetland habitats. Proposed development will not interact directly with the underlying groundwater and the subject site lies downgradient of the SAC.	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
Glenasmole Valley SAC **Qualifying Interests:** Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Petrifying springs with tufa formation (Cratoneurion) [7220]	c.8km	No possibility of effects due to the distance from and lack of connections to the habitat for which this site is designated.	No effect	Screened out for need for AA

Wicklow Mountains SAC **Qualifying Interests:** Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Natural dystrophic lakes and ponds [3160] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Alpine and Boreal heaths [4060] Calaminarian grasslands of the Violetalia calaminariae [6130] Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] Blanket bogs (* if active bog) [7130] Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110] Calcareous rocky slopes with chasmophytic vegetation [8210] Siliceous rocky slopes with chasmophytic vegetation [8220] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Lutra lutra (Otter) [1355]	c. 9.8km	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.	No effect	Screened out for need for AA

Red Bog, Kildare SAC **Qualifying Interests:** Transition mires and quaking bogs [7140]	c. 14.4km Outside of water catchment area and no other ecological or hydrological connects.	No possibility of effects	No effect	Screened out for need for AA
South Dublin Bay SAC **Qualifying Interests:** 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 discharges to the Baldonnel Stream, 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 28km before entering into the Dublin Bay.	No possibility of effects due to the 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
North Dublin Bay SAC **Qualifying Interests** Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210]	Existing surface water discharges to the Baldonnel Stream, 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	No possibility of effects due to the 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	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	Screened out for need for AA

Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190] Petalophyllum ralfsii (Petalwort) [1395]	approximately 28km before entering into the Dublin Bay.	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.	result in significant effects on any European Site.	
Wicklow Mountains SPA **Qualifying Interests:** 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
South Dublin Bay and River Tolka SPA **Qualifying Interests:** Light-bellied Brent Goose (Branta bernicla hrota) [A046] Oystercatcher (Haematopus ostralegus) [A130] Ringed Plover (Charadrius hiaticula) [A137]	c. 15km	Given the drainage measures in place at the site, and the large distance between the application site and the SPA, the dilution factor will result in a negligible impact upon the SPA and its qualifying species.	Given the distance (approximately 30km downstream) and dilution factors, it is not anticipated that the proposed development in combination with any other plans or projects, would cause any impact to any	Screened out for need for AA

Grey Plover (Pluvialis squatarola) [A141] Knot (Calidris canutus) [A143] Sanderling (Calidris alba) [A144] Dunlin (Calidris alpina) [A149] Bar-tailed Godwit (Limosa lapponica) [A157] Redshank (Tringa totanus) [A162] Black-headed Gull (Chroicocephalus ridibundus) [A179] Roseate Tern (Sterna dougallii) [A192] Common Tern (Sterna hirundo) [A193] Arctic Tern (Sterna paradisaea) [A194] Wetland and Waterbirds [A999]			designated site or its qualifying features.	
North Bull Island SPA **Qualifying Interests** Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Teal (Anas crecca) [A052] Pintail (Anas acuta) [A054] Shoveler (Anas clypeata) [A056] Oystercatcher (Haematopus ostralegus) [A130] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141]	19.7km	Given the drainage measures in place at the site, and the large distance between the application site and the SPA, the dilution factor will result in a negligible impact upon the SPA and its qualifying species.	Given the distance (approximately 30km downstream) and dilution factors, it is not anticipated that the proposed development in combination with any other plans or projects, would cause any impact to any designated site or its qualifying features.	Screened out for need for AA

Knot (Calidris canutus) [A143] Sanderling (Calidris alba) [A144] Dunlin (Calidris alpina) [A149] Black-tailed Godwit (Limosa limosa) [A156] Bar-tailed Godwit (Limosa lapponica) [A157] Curlew (Numenius arquata) [A160] Redshank (Tringa totanus) [A162] Turnstone (Arenaria interpres) [A169] Black-headed Gull (Chroicocephalus ridibundus) [A179] Wetland and Waterbirds [A999]				

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

10.5. Identification of Likely Effects

10.5.1. 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.

10.5.2. 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.

10.5.3. There is a watercourse within the application site. The Baldonnel stream discharges into the river Liffey, approx. 7km from the application site. The river Liffey stretches approx. 28km before entering into Dublin Bay. Therefore, there is a hydrological connection between the application site and the designated sites within the Dublin Bay (South Dublin Bay and River Tolka SPA, North Bull Island SPA, South Dublin Bay SAC and North Dublin Bay SAC). However, the proposed development will not have a measurable effect on water quality in Dublin Bay or the Irish Sea based on the 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.

10.5.4. The closest European Site to the proposed development site is the Rye Water Valley/ Carton SAC located approximately 5.9km to the north-west. Narrow-mouthed Whorl Snail and Desmoulin's whorl snail are restricted to the marsh vegetation of the Rye Water Vallery/Carton SAC. The application site does not offer

suitable habitat for otter, as the Baldonnel stream is too narrow to support breeding and foraging otter, and the surrounding habitats (business parks, a golf course and a significant amount of residential housing and shopping centres) are not suitable to support otters commuting from the Wicklow Mountain SAC. Furthermore, the proposed development will not interact directly with the underlying groundwater and the subject site lies downgradient of the SAC.

10.5.5. 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.

10.5.6. 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.

10.5.7. 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.

10.6. Screening Determination

10.6.1. 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 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**

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**

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

a) National Policy in particular:

- The National Planning Framework – Ireland 2040
- The Climate Action Plan 2024
- The Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy, July 2022,

b) Regional Policy including in particular:

- The Regional Spatial and Economic Strategy for the Eastern and Midlands Region 2019-2031

c) Local Planning Policy including in particular:

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

d) 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.

12.1. Proper Planning and Sustainable Development

12.1.1. 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.

12.2. Environmental Impact Assessment

12.2.1. 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:

Population and Human Health:

- Positive impact to the local economy during the construction phase due to the increase in local construction workers and associated benefits. from increased spending and jobs during the construction period.
- Potential significant health and safety impacts during construction that would be mitigated through the implementation of the measures set out in the EIAR, including the Construction Environmental Plan and best practice construction methods.

Biodiversity:

- Potential significant effects on habitats, birds, mammals and aquatic ecology during construction and operational phases would be mitigated by the implementation of the mitigation measures, contained in the Environmental Impact Assessment Report, including the Construction Environmental Plan, good practice construction measures, timing of vegetation removal, water pollution prevention measures, provision of bird boxes, bat boxes and mammal passes.
- Further pre-commencement biodiversity surveys are also proposed. The proposed works are also subject to EPA licencing requirements.

Land, Soils, Water, Air and Climate:

- 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 negative impacts on hydrology, hydrogeology and land and soils during construction and operational phase would be mitigated by a series of best practice construction management and pollution prevention measures and other specific measures outlined in the EIAR, including the Construction Environmental Plan, surface water management plan, and use of pollution prevention measures.
- Construction noise will be mitigated by the measures outlined in the CMP.

Material Assets, Cultural Heritage and the Landscape:

- Traffic impacts would be short term and will be mitigated during construction by the measures set out in the EIAR, including the EIAR. Traffic and transportation impacts during the operational stage would be negative.
- Potential impacts on Cultural Heritage will be mitigated during the construction stage through archaeological monitoring of ground works, with provision made for resolution of any archaeological feature/deposits that may be identified.

- Landscape and visual impacts are likely, however, given the context and characteristics of the existing business park they are considered acceptable and compatible with the existing uses.

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, as amended by the further plans and particulars received by the planning authority on the 8th day of November, 2022, the 4th day of April, 2023, and by An Bord Pleanála on the 10th day of July, 2023, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of

	development and the development shall be carried out and completed in accordance with the agreed particulars. **Reason**: In the interest of clarity.
2.	The period during which the development hereby permitted may be carried out shall be 10 years from the date of this order. **Reason**: Having regard to the nature of the development, the Board considers it appropriate to specify a period of validity of this permission in excess of five years.
3.	The mitigation measures identified in the Environmental Impact Assessment Report and other plans and particulars submitted with the planning application, shall be implemented in full by the developer in conjunction with the timelines set out therein, except as may otherwise be required in order to comply with the conditions of this permission. **Reason**: In the interest of clarity and protection of the environment during the construction and operational phases of the proposed development.
4.	The developer shall comply with the following general requirements: (a) The developer shall submit full details in relation to all external finishes of all buildings to the planning authority for written agreement prior to commencement of development. (b) No additional artificial lighting shall be installed or operational on site unless authorised by a prior grant of permission. (c) Operational noise levels shall not exceed 55dB(A) Leq 1hr at the nearest noise sensitive locations between 0800 and 2000 hours (Monday to Friday inclusive) and shall not exceed 45dB(A) Leq 1hr at any other time. (d) Cables within the site shall be located underground. (e) No additional signage or advertising shall be erected on the lands or buildings without a prior grant of planning permission.

	Reason: In the interest of clarity, of visual and residential amenity, to allow wildlife to continue to have access to and through the site, and to minimise impacts on drainage patterns and surface water quality.
5.	The developer shall comply with the following nature conservation requirements: (a)A suitably qualified and experienced Project Ecologist shall be appointed to oversee the protection of biodiversity during the construction phase, and for a monitoring period of five years following completion of the development. (b)The Project Ecologist shall certify that the completed development is compliant with the Environmental Impact Assessment Report and Ecological Impact Assessment mitigation measures and the following conditions. (c)No felling or vegetation removal shall take place during the period 1st March to 31st August. (d)A pre-construction bird survey shall be carried out by a suitably qualified ecologist if works commence between March and August inclusive. (e)A pre-construction badger and otter survey shall be carried out by a suitably qualified ecologist. (f)Mammal friendly fencing shall be installed during the construction and post construction phases. **Reason**: In the interest of biodiversity and nature conservation.
6.	The landscaping scheme shown on drawing number 101, as submitted to the An Bord Pleanála on the 10th day of July, 2023 shall be carried out within the first planting season following substantial completion of external construction works. All planting shall be adequately protected from damage until established. Any plants which die, are removed or become seriously damaged or diseased, within a period of five years from the completion of the

	development [or until the development is taken in charge by the local authority, whichever is the sooner], shall be replaced within the next planting season with others of similar size and species, unless otherwise agreed in writing with the planning authority. **Reason**: In the interest of visual amenity.
7.	Prior to the commencement of development the developer shall enter into a Connection Agreement with Uisce Éireann (Irish Water) to provide for a service connection to the public water supply and/or wastewater collection network. **Reason**: In the interest of public health and to ensure adequate water/wastewater facilities.
8.	Drainage arrangements including the attenuation and disposal of surface water, shall comply with the requirements of the relevant Section of the Council for such works and services. Prior to the commencement of development, the developer shall submit to the Planning Authority for written agreement a Stage 2 - Detailed Design Stage Storm Water Audit. Upon completion of the development a Stage 3 Completion Stormwater Audit to demonstrate Sustainable Urban Drainage System measures have been installed and are working as designed and that there has been no misconnections or damage to storm water drainage infrastructure during construction, shall be submitted to the planning authority for written agreement. **Reason**: In the interest of public health and surface water management.
9.	The construction of the development shall be managed in accordance with a Construction and Environmental 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. This plan shall provide details of intended construction practice for the development, including:

	(a) Location of the site and materials compound(s) including area(s) identified for the storage of construction refuse; (b) Location of areas for construction site offices and staff facilities; (c) Details of site security fencing and hoardings; (d) Details of on-site car parking facilities for site workers during the course of construction; (e) Details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site; (f) Measures to obviate queuing of construction traffic on the adjoining road network; (g) Measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network; (h) Alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public road or footpath during the course of site development works; (i) Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels; (j) Containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained. Such bunds shall be roofed to exclude rainwater; (k) Off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil; (l) Means to ensure that surface water run-off is controlled such that no silt or other pollutants enter local surface water sewers or drains. (m) A record of daily checks that the works are being undertaken in accordance with the Construction Management Plan shall be available for inspection by the planning authority; **Reason**: In the interest of amenities, public health and safety and environmental protection.

10.	Revised proposals in relation to the perimeter site boundary details shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. **Reason**: In the interest of visual amenity.
11.	Public lighting shall be provided in accordance with a scheme which shall be submitted to and agreed in writing with the planning authority prior to the commencement of development. **Reason**: In the interest of amenity.
12.	All mitigation measures in relation to archaeology and cultural heritage as set out in technical appendices 2.4 and ASCU report 2.5 in EIAR Volume 3, and Chapter 2 of the EIAR included in application documents shall be implemented in full, except as may otherwise be required in order to comply with conditions relating to archaeological heritage/the conditions of this permission. The planning authority and the National Monuments Service shall be furnished with a final archaeological report describing the results of any archaeological investigative work/ excavation required, following the completion of all archaeological work on site and any necessary post-excavation specialist analysis. All resulting and associated archaeological costs shall be borne by the developer. **Reason**: To ensure the continued preservation [either in situ or by record] of places, caves, sites, features or other objects of archaeological interest.
13.	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. **Reason**: In the interests of orderly development and safety.
14.	Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or

	such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site upon cessation of the project coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination. **Reason**: To ensure satisfactory reinstatement of the site.
15.	The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme. **Reason**: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

Susan McHugh
Senior Planning Inspector

29th July 2024