An Bord Pleanála

Inspector's Report

ABP-314461-22

Development	10 year permission for development consisting of removal of waste water treatment system and the construction of 2 data centre buildings. Natura Impact Statement will be submitted to the planning authority with the application. A Natura Impact Statement (NIS) is submitted with this application.
Location	Profile Park, Nangor Road, Clondalkin, Dublin 22.
Planning Authority	South Dublin County Council
Planning Authority Reg. Ref.	SD21A/0217
Applicant(s)	Digital Netherlands VIII B.V.
Type of Application	Permission.
Planning Authority Decision	Grant Permission.
Type of Appeal	Third Party v Grant.
Appellant(s)	John Conway and Louth Environmental Group.

Observer(s)	None.
Date of Site Inspection	7th December 2023.
Inspector	Susan McHugh

Contents

1.0 Site Location and Description 5

2.0 Proposed Development 6

3.0 Planning Authority Decision 10

3.1. Decision 10

3.2. Planning Authority Reports 11

3.3. Prescribed Bodies 16

3.4. Third Party Observations 17

4.0 Planning History 18

5.0 Policy Context 20

5.1. National Policy 20

5.2. Regional Policy 26

5.3. Local Policy 27

5.4. Natural Heritage Designations 31

5.5. Environmental Impact Assessment Screening 31

6.0 The Appeal 33

6.1. Grounds of Appeal 33

6.2. Applicant Response 35

6.3. Planning Authority Response 41

6.4. Observations 41

6.5. Further Responses 41

6.6. Further Reports 41

7.0 Assessment 42

7.1. Introduction 42

7.2. Principle of Development 43
7.3. Energy Use and Contribution to Greenhouse Gas Emissions 44
7.5. Air Quality and Climate 52
7.6. Design Scale and Layout 54
7.7. Drainage and Flood Risk 55
7.8. Noise Impacts 61
7.9. Ecology 63
7.10. Access and Car Parking 67
7.11. Other Matters Arising 68
8.0 Appropriate Assessment 70
9.0 Recommendation 85
10.0 Reasons and Considerations 85
Appendix 1 – Form 1: EIA Pre-Screening

1.0 Site Location and Description

1.1. The site is located on the eastern fringe of Profile Park business park, south of Nangor Road and west of Clondalkin Village. Kilcarbery Golf Course is located to the east of the site. Grange Castle Business Park is located to the north of Profile Park. The site of Kilbride Castle, Church (Protected Structure and graveyard and Kilbride House) are located to the south of the site. The site is located within the Department of Defence Inner Zone Limit, but not in the approach zone to either runway.

1.2. To the northwest of the site is a smaller area which contains two data centre/warehouse structures (known as DUB13 and DUB14), and associated service roads, parking and ancillary works. The existing buildings comprise large rectangular data halls book-ended by ancillary plant and office blocks at the short ends. External plant cooler units punctuate the long elevations.

1.3. The application site itself comprises c.6.181ha. of brownfield land, having been cleared pursuant to a previous permission which was not fully implemented[1]. To the east of the site is a disused wastewater treatment plant. Through the centre of the site is a service road which was constructed to serve the permitted (now expired) scheme.

1.4. At the time of my inspection the area to the east which adjoins the golf course was largely laid to hardstanding with construction materials site offices and car parking contained therein. This area forms part of and is identified as a temporary construction compound in concurrent application by Greener Ideas Limited under ABP-317297-23 for the Baldonnell 110kV substation and grid connection located to the northwest. Directly north of DUB 13 a gas fired power plant with an electrical output of up to 125MW permitted under PA Reg.Ref.SD21A/0167 is under construction by Greener Ideas Limited.

1.5. A watercourse runs from north to south through the centre of the site adjacent to the service road. This stream was constructed pursuant to the partly implemented planning permission and was re-routed from another location within the site.

[1] PA. Reg.Ref.SD11A/0023

2.0 **Proposed Development**

2.1. The application was lodged with the planning authority on the 04/08/2021 with further plans and details submitted by way of additional information on 24/03/2022, and clarification of additional information on 05/07/2022.

2.2. The proposed development as lodged comprises;

- Removal of an existing unused waste water treatment facility on site
- Construction of two no. two storey data centre buildings, associated three storey offices and services with a gross floor area of c. 33,577sq.m.
- Gas powered energy generation compound.

2.3. The 2 no. two storey data centre buildings, DUB 15 and DUB 16, with a single data hall on each floor of each block (4 data halls overall) will comprise;

- DUB15 is located to the southwest of the site, and has a gross floor area of 16,865sq.m.
    - At ground floor 7,340sq.m of data hall space with 940sq.m ancillary space to the north.
    - At first floor 7,333sq.m of data hall space with 1,049sq.m ancillary space to the north.
    - Roof level will comprise three small elements of stair core totalling 74sq.m with ancillary space measuring 131sq.m to the north.
- DUB16 is located to the southeast of the site, and has a gross floor area of 16,712sq.m.
    - At ground floor there will be 7,279sq.m data hall space with 940sq.m ancillary space to the north.
    - At first floor 7,274sq.m data hall space with 1,028sq.m ancillary space to the north.
    - The third floor will comprise two small elements of data hall at the southeast and southwest corners totalling 56sq.m with 133sq.m ancillary floor space to the north.

2.4. The data halls within DUB 15 and DUB16 comprise a large data hall area with smaller technical rooms to the west and south respectively.

2.5. The overall height of both data centre buildings will reach a height of 20m with a parapet level of 96.7mOD for DUB 15 and 97.69mOD for DUB 16.

2.6. Each data centre will be served by associated electrical and mechanical plant rooms, loading bays, maintenance and storage space.

2.7. External finishes will be primarily powder coated vertical profiled metal cladding in various colours including medium grey, pearl, moonstone, pigeon blue and dark grey. The north elevation will comprise curtain walling glazing to provide light to the ancillary floor space.

2.8. High level signage is proposed on the western elevation of DUB 15 and DUB 16.

2.9. *Power Supply Energy Centre* - A gas powered energy generation compound is proposed to the northeast corner of the site to provide electricity for the proposed development.

2.10. This will comprise five gas powered generators in their own acoustic containers, the heat recovery plant room (c.35sqm) the distribution gas compound building (c.23sqm), electrical substation (c.623sqm) building within this compound.

2.11. The installed capacity of the generators will be 12.5MW and will connect to the Gas Networks Ireland (GNI) grid. The Energy Centre will have sufficient capacity for the first phase of data centre development for an electrical demand of 10MW. It is the applicant's intention for a long-term gird connection to be established to serve the data centres. This grid connection will be capable of supporting the ultimate combined electrical demand of both DUB 15 and DUB 16 of 52MW.

2.12. A single storey screened generator compound is proposed to the south and west of DUB 15 and to the south of DUB 16. The generators provide the first phase of DUB 15 with power. Future phases will import power from the grid. This will allow the data centre to use renewable power when available. During times of low renewable generation or grid constraints, the site will import power from the new natural gas power station in Profile Park.

2.13. *Emergency Generators* - and associated emission flues and plant are proposed in compounds adjacent to each data centre building. The proposed development

incorporates 32 no. diesel generators that will power the facility in the event of a power outage.

2.14. It is proposed to reroute and widen an existing watercourse (constructed under an earlier permission) along the eastern and southern boundary of the site.

2.15. Drainage will be provided across the site as well as Sustainable Urban Drainage measures to control run-off from the site.

2.16. The development will be accessed from the existing road network to the northwest with new access roads proposed throughout the site. It is proposed to provide 71 car parking spaces (of which 4 are disabled spaces and 8 spaces will be available for charging electrical vehicles) and 26 cycle spaces.

2.17. Other ancillary buildings throughout the site will include a pump room (c.52sqm) and two refuse stores (c.25sqm). The total floor area of all ancillary structures' measures c.2,717sqm.

2.18. It will also include site development works, site lighting, and all associated works including underground foul and storm water drainage attenuation and utility cables and all other ancillary works.

2.19. Landscaping is proposed to the south of the site to screen the buildings, with fencing and security gates proposed around the site.

2.20. It is proposed that the new facility will operate 24 hours a day, 7 days per week.

2.21. The application seeks a 10-year permission.

2.22. The application for the proposed development was accompanied by the following;

- Planning Report – RPS Group
- Architectural Design Statement – RKD Architects
- Verified Views – Digital Dimensions
- Natura Impact Statement (NIS) and Appendices – Malone O'Regan
- Environmental Impact Assessment (EIA) Screening Report – Malone O'Regan
- Ecological Impact Assessment and Appendices – Malone O' Regan
- Construction Environmental Management Plan – Malone O' Regan

- Archaeological Assessment – Reliqua
- Tree Protection Strategy – Murray and Associates
- Landscape Design Report – Murray and Associates
- Flood Risk Assessment – Arup
- Air Quality and Climate Impact Assessment Report - Arup
- Noise Impact Assessment Report - Arup
- Traffic and Transport Assessment & Mobility Management Plan – Arup
- Construction Management Plan - Arup
- Construction and Demolition Resource Management Plan - Arup
- MEP and Public Lighting – Arup
- Engineering Report – Arup
- Soils and Geology Report – Arup
- Part L Planning Report - Arup

2.23. Letter of consent from landowner Moffash Ltd. Lisgrew, Emyvale, Co. Monaghan.

2.24. Further information was lodged 21/03/2022. The application was **amended** to include the omission of the on-site gas-powered energy generators and proposal to provide a grid connection. Revised plans also provide for the introduction of a surface water attenuation pond.

2.25. The application was accompanied by the following;

- Masterplan Update
- Architectural Visualisations – Visual Impact Assessment
- Design Statement and Photomontages
- Aviation Impact Assessment
- Air Quality and Climate Impact Assessment Report
- MEP & Public Lighting Report
- Noise Impact Assessment

- Updated Flood Risk Assessment
- Removal of Derelict Wastewater Treatment Plant
- Surface Water Drainage Report
- Environmental Impact Assessment Screening Report
- Ecological Impact Assessment Report
- Construction Environmental Management Plan
- Natura Impact Statement
- Engineering Drawings
- Landscape Drawings
    - Arboriculture Inventory and Impact Assessment incorporating a Tree Protection Strategy
- Surface Water Attenuation Report
- Storm Water Attenuation Calculations Appendix B
- Irish Water Connection letter dated 7th October 2021

2.26. Clarification of further information was lodged 5th July 2022.

2.27. In response to the clarification of further information request the following were submitted.

- Revised southern elevations.
- Proposed Attenuation Catchment Area Report
- Cover letter from Arup and proposed catchment area

3.0 **Planning Authority Decision**

3.1. **Decision**

The decision to grant permission is subject to **15** no. conditions including;

Condition 1. Compliance with plans and particulars as amended by further information and clarification of further information.

Condition 2.	Road's requirements.
Condition 3.	Drainage requirements.
Condition 4.	Waste Heat requirements.
Condition 5.	Appointment of Ecological Clerk of Works.
Condition 6.	Irish Water Connection Agreement requirements.
Condition 7.	SuDS requirements including revised proposals that utilise above ground natural source control features.
Condition 8.	Landscape and Planting Plan requirements.
Condition 9.	Dept. of Defence requirements.
Condition 10.	Restrictions on further development above roof parapet level.
Condition 11.	Services to be underground.
Condition 12.	Signage restrictions.
Condition 13.	Archaeological monitoring, recording and reporting requirements.
Condition 14.	Inland Fisheries requirements.
Condition 15.	Environmental Health and noise requirements.
Condition 16.	Section 48 Development Contribution.

3.2. Planning Authority Reports

3.2.1. The **1st Planner's Report** dated 28th September 2021 is the basis for the Planning Authority decision. It includes;

- Item 1 *Climate Action* - Seriously concerned with proposal to power the data centres with a gas generator due to the absence of capacity in the national grid. Concerns in relation to the number and extent of large demand connections in this area and demand for future grid reinforcements. Refers to Action 20 of the Climate Action Plan 2019 and notes the absence of power supply via EirGrid to commence operation and the apparent shortfall in power supply from the Gas Energy Centre appears to contribute to a future demand for grid reinforcements.

a) Applicant advised the proposed development may be premature pending a stable connection to the national grid and the use of gas-powered generators conflicts with the macro policies in the Development Plan around Energy and Climate Action. Applicant advised PA has significant concerns in relation to the justification and site suitability for a gas-powered data centre proposal, in the context of national, regional and local policy on energy and climate resilience and adaptability.

b) Applicant requested to provide an assessment of the potential to serve the site with renewable energy.

- Item 2 *Proposed development within zoned 'RU' lands* – Notes proposal to provide security fencing, a hydrant pump room and two tanks and landscaping on this section of land alongside the re-diversion/re-alignment of the historic stream. Considers overall development constitutes overdevelopment and works proposed within 'RU' zoned lands do not support the 'RU' land use zoning objective.

a) Applicant advised PA has significant concerns regarding the visual impact of the proposal and requested to reduce the visual impact in terms of design of the buildings, reduction in footprint of the buildings and also the provision of significantly additional green infrastructure and landscaping. The PA requires as a minimum that all southern elevations of the structures shall be provided with green walls.

b) Applicant requested to submit revised proposals to significantly reduce development across the entire site and substantially reduce the footprint of the structures. The rural zoned lands should not be included in calculations for green infrastructure and landscaping on the site.

c) Applicant requested to demonstrate how the siting and location of the proposed development responds appropriately to the natural topography of the site and would improve upon and enhance natural characteristics.

d) Applicant requested to submit revised proposals incorporating major design solutions to mitigate the impact of the proposed development on the protected structures and recorded monument. This will require green walls and reduction in size of the structures on site.

e) Applicant requested to provide additional/new photomontages based on design changes sought on the foot of this additional information request:

(i) From Grange Castle Golf Club/R136 to the east and from Nangor Road to the north.

(ii) Viewing the site from the east in its context with the Protected Structure and recorded monument.

(iii) Viewing the site from the west in its context with the Protected Structure and recorded monument.

3.2.2. The applicant was granted a time extension up to and including (05/07/2022) to respond to the Request for Further Information in accordance with Article 33(3) of the Planning and Development Regulations 2001 (as amended) dated 22nd March 2022.

3.2.3. The **2nd Planner's Report** dated 20th April 2022 included the following;

- Item 1 *Climate Action* – Welcome the removal of the on-site power generation. Note that the EirGrid connection is conditional of planning permission and a condition is recommended in the event of grant seeking confirmation of connection, prior to the commencement of development. Notes that the applicant has undertaken an assessment of the potential to use renewable energy on site.
- Item 2 *Proposed development within zoned 'RU' lands* – Welcome the removal of built development from 'RU' zoned lands. Notes repositioned security fence would mark the boundary between the 'EE' and 'RU' zoned lands.
    - Notes revised design which results in a reduction in the building footprint and the introduction of a façade treatment, landscaping and revised photomontages provided. Considers the proposed revisions successfully mitigate the potential impact, concerns remain in relation to the impact of the development when viewed from the south.
    - Recommend Clarification of Additional information.
- Item 3 *Stream Realignment* – Welcome the removal of engineered solutions.

- Item 4 *Cut and Fill* – Accept that the level of cut and fill have been minimised and is acceptable.
- Item 5 *Office Provision* – Clarifies 712sqm office space proposed for DUB15 and 690sqm proposed for DUB16. Satisfied each building would have less than 1,000sqm office space, which are open for consideration within the zoning.

Recommends Clarification of additional information.

3.2.4. The **3rd Planner's Report** dated 2nd August 2022 included the following;

- *Visual Impact* - Revised elevations include additional Green Walls to the Generator Enclosures at the southern elevation and a secondary rainscreen system with Urban Glass panel finish on elements of the upper portion of the southern elevation acceptable.
- *Surface Water Drainage* – Revised SuDS and surface water attenuation details submitted acceptable.
- Recommends a grant of permission.

3.2.5. **Other Technical Reports**

- **Roads**: Report recommends no objections subject to conditions (no report on file).
- **Water Services Division**: **1st Report** dated 29th Sept 2021 **recommends further information** in relation to surface water attenuation calculations in m^2, a revised surface water drawing showing location of hydro brakes and discharge rates, above ground SuDS proposals, and distance between top of bank of stream and boundary of proposed development. In relation to flood risk a revised drawing in plan and cross section of the stream to include details of the ecological enhancement value of the stream above its existing condition.
- **2nd Report** dated 13th April 2022 recommends **clarification of additional information** in respect to amount of surface water attenuation in m^3 is provided by SuDS features, the location of flow controls in SuDS, where SuDS can provide surface water attenuation, cross section drawing of

proposed SuDS systems and clarify what areas are draining to the proposed pond. In relation to flood risk report recommends no objection subject to requirements. **3rd Report** dated 22nd July 2022 recommends **no objections** subject to conditions.

- **Parks & Landscape Services/Public Realm: 1st Report** dated 21st September 2021 **recommends further information**. Applicant requested to extend the tree survey, arboriculture assessment and tree protection plan to include all of the area within the redline boundary and immediately adjacent, to submit revised landscape proposals and further SuDS proposals. Report concludes the proposed development would materially contravene policy IE Objective 5, Policy GI5 Objective 1 and 2, Policy GI2 and GI3 of the CDP. Request landscape layout include; (i) existing hedgerows and how they are to be protected, (ii) a higher percentage of soft natural SuDS features in the landscape- the southern landscaped area should be used as part of the SuDS treatment train, (iii) planted berms along the southern boundary to mitigate the substantial visual impact, (iv) living green walls should be investigated for the southern building facades.

  2nd Report dated 20th April 2022 recommends no objection subject to requirements in respect to SuDS, Landscape/Planting Plan and appointment of an Ecological Clerk of Works.

- **EHO**: **1st** Report dated 15th September 2021 **recommends further information** in relation to noise levels referenced in the acoustic report. Applicant requested to assess and re-evaluate all noise emitting from proposed development on site, to undertake necessary modifications to the proposed structures and operations on site to reduce predicted noise levels at nearby receivers to an acceptable level during both day and night-time. Applicant advised that the development must not give rise to noise levels that exceed the background level for evening and night-time periods, and meet standards set out by SDCC. Amended acoustic report must indicate time and duration of predicted noise at NSR1 during emergency testing and include mitigation measures to reduce noise emissions. It must also include exact times for which noise monitoring was undertaken during both daytime and nighttime.

2nd Report dated 22nd July 2022 recommends no objection subject to conditions in relation to noise and emissions.

3.3. Prescribed Bodies

- **Irish Water**: **1st Report** dated 4th August 2021 **recommends further information**. In relation to water a confirmation of feasibility letter from IW is sought. In relation to foul drainage a report showing how existing sewage treatment plant on site will be dealt with or decommissioned, and a confirmation of feasibility letter from IW is also sought. Letter dated 7th October 2021 from Irish Water Connection submitted in response to further information response 24th March 2022. **2nd Report** dated 20th April 2022 recommends no objection subject to requirements. **3rd Report** dated 5th July 2022 recommends no objection subject to requirements.
- **Dept. of Defence**, **Military Air Traffic Services**: Report dated 27th August 2021 recommends no objection subject to requirements. Requirements in relation to the operation of cranes to be co-ordinated with Air Corps Air Traffic Services, requests an Aviation Impact Assessment on all potential emissions, notes area may be subject to a high level of noise from aircraft operating in the vicinity, and avoidance of plants and areas of dense cover for roosting by flocking species of birds.
- **Transport Infrastructure Ireland TII**: Report dated 13th September 2021 and 13th April 2022 recommends no objection.
- **Geological Survey Ireland**: Report dated 6th September 2021 and 21st April 2022 recommends no objection.
- **An Taisce**: Report dated 7th September 2021 comments on data centres, energy use and climate, the future connection to the highly constrained national electricity grid and sub-threshold EIA.
- **Dept. of Environment Climate Communication DECC**: Report dated 21st April 2022 recommends no objection.

The application was referred to Department of Housing, Local Government and Heritage, Inland Fisheries, IAA, and NTA, no reports were received.

3.4. Third Party Observations

3.4.1. Submission lodged with the PA from Elected Representatives undersigned by:

- Cllr. Laura Donaghy - Green Party
- Cllr. Peter Kavanagh – Independent
- Cllr. Suzanne McEneaney – Green Party
- Cllr. Liam Sinclair - Green Left Ireland

Issues raised can be summarised as follows;

- Development would lead to a significant strain on power in the area.
- Data centres are space and power intensive contrary to the County's environmental and economic goals.
- Falls short on provision of power by renewable sources and on promotion of biodiversity.

3.4.2. Submission lodged with the PA from Proinsias Mac Fhlannchadha, 6 Wilkins Court, Limekiln Lane, Dublin 12. The following issues were raised;

- Input from the Commission for Regulations of Utilities (CRU) has not formed part of the planning application.
- Disproportionate concentration of data centres in the environs of SDCC.
- Premature to consider additional planning permission for data centres until EirGrid public consultation is complete.
- No proposals to supplement the significant energy demands of the data centre with alternative energy supply to include renewable energy sources.
- No information on proposals to connect the power plant and site to the national grid and the source of gas proposed.
- Use of gas as a power source and diesel as a backup system contrary to SDCC Development Plan and the Climate Action and Low Carbon Development (Amendment) Act 2021.
- Propose a condition of grant of planning should be that all energy utilised are sources from 100% renewable energy sources.

- No provision for green roofs contrary to E2 Objective 8 of the SDCC DP and Landscape Plan is deficient in promoting and encouraging biodiversity.

3.4.3. Submission was lodged with the PA by BKC Solicitors on behalf of John Conway and Louth Environmental Group the appellant in the current appeal. Issues raised are similar to those raised in the third-party appeal.

4.0 Planning History

Appeal Site

PA Reg.Ref.SD12A/0002/EP: Permission **refused** 7th August 2019 for the extension of duration of the 2012 permission on site by Digital Realty Trust. Reason for refusal related to the application being made after the appropriate period of the parent permission.

PA Reg.Ref.SD17A/0377: Permission **granted** December 2017 for revisions and alterations of the permitted data processing facility granted under PA Reg.Ref.SD12A/0002 including DUB 14.

PA Reg.Ref.SD12A/0002: Permission **granted** 11th April 2012 for amendments to PA Reg.Ref.SD11A/0023. This included the extension of the appropriate period to seven years.

PA Reg.Ref.SD11A/0023: Permission **granted** 15th June 2011 for a data processing facility on a site of 4.04ha comprising four buildings totalling 21,090m^2. The permitted development includes the western portion of the subject appeal site.

Concurrent applications within Profile Park

PA Reg.Ref.SD22A/0156 ABP 317936-23: 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. First Party appeal against PA decision to **refuse** planning permission dated 8th August 2023. Appeal decision pending. PA Reason for Refusal is as follows;

1. 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 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.

PA Reg.Ref.SD22A/0420 ABP 317446-23: Permission for demolition of two storey dwelling house, associated outbuildings and farm structure and construction of 1 no. two storey data centre and ancillary associated ancillary development with a gross floor area of 12,893sqm on the site of 3.79ha to the south of the new Nangor Road (R134). First Party appeal against PA decision to **refuse** planning permission dated 29th May 2023. Appeal decision pending. The PA Reason for refusal No.1 is similar to the above, reason for refusal No. 2 refers to EIAR and noncompliance with the requirements of Article 94 of the Planning and Development Regulations 2001 (as amended).

Permitted Development under construction.

SD21A/0167: Permission **granted** 30th August 2022 for construction of a Gas Fired Power Plant with an electrical output of up to 125MW by Greener Ideas Limited.

SD21A/0241 ABP-313787-22 : Permission **granted** 19th July 2022 for demolition of abandoned single storey dwelling and associated outbuildings (206sqm) and the construction of 2 no storey data centres with plant at roof level of each facility and associated ancillary development that will have a gross floor area of 40,589sqm, plus a temporary gas powered generation plant if required, at the site of 8.7 hectares to the south of the New Nangor Road (R134) and on land within the townlands of Ballybane and Kilbride within Profile Park, Clondalkin, Dublin 22.

First Party appeal against condition no. 2 of grant of permission was withdrawn 4th July 2022 under S.140(1)(a).

Substations and Grid Connection – Concurrent Applications

ABP 317297-23: Application for permission lodged 28th June 2023 for 110kV substation and grid connection by Greener Ideas at Profile Park, Baldonnell. Part of the application site includes a large area within the eastern part of the appeal site. See Map attached. Decision pending.

ABP VA06S.312793-22: Application for permission for 110kV Gas Insulated Switchgear (GIS) Substation compound and 110kV transmission lines along with associated and ancillary works by Vantage Data Centres DUB11 Limited. Decision pending.

Permitted Substation

ABP VA06S.VA0019: Permission **granted** 27th June 2016 for 220/110kV substation and associated works to EirGrid Plc in the Grange Caste area.

5.0 Policy Context

5.1. National Policy

5.1.1. 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'.*

5.1.2. Climate Action Plan 2023

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 2023 (CAP23) is the second annual update to Ireland's Climate Action Plan 2019. This plan is the first to be 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. The plan was launched on 21 December 2022.

The plan implements the carbon budgets and sectoral emissions ceilings and sets out a roadmap for taking decisive action to halve our emissions by 2030 and reach net zero no later than 2050, as committed to in the Programme for Government. Climate Action Plan 2023 sets out how Ireland can accelerate the actions that are required to respond to the climate crisis, putting climate solutions at the centre of Ireland's social and economic development.

Progress Reports on the Climate Action Plans are published each quarter. For CAP23, progress reports will highlight 'high impact' measures, Key Performance Indicators (KPIs), state of play on emissions targets, recent emissions trends, action case studies and foresight on key actions.

The Plan outlines that projections indicate that continued emissions of greenhouse gases (GHGs) will cause further global warming and that as global temperatures increase the extremes of weather and climate we experience will also increase. Ireland is seen to be at risk in a number of areas, including from rising sea levels, extreme weather, pressure on water resources and food production systems and river and coastal flooding.

Section 2.2 discusses EU climate targets and states that in its approach to decarbonising, the EU has split GHG emissions into two categories, namely the Emissions Trading System (ETS) and the non-ETS. Emissions from electricity generation and large industry in the ETS are subject to EU-wide targets which require that emissions from these sectors must be reduced by 43% by 2030, relative to 2005 levels. Within the ETS, participants are required to purchase allowances for every tonne of emissions, with the amount of these allowances declining over time to ensure the required reduction of 43% in GHG emissions is achieved at an EU-level.

Emissions from all other sectors, including agriculture, transport, buildings, and light industry are covered by the EU Effort Sharing Regulation. This established binding annual GHG emission targets for Member States for the period 2021–2030. Ireland is required to reduce its emissions from these sectors by 30% by 2030, relative to 2005 levels.

Section 12.3.3 outlines that improved electricity demand management will require more flexible demand, improved infrastructure, and supportive policies.

As electrification and decarbonisation of the other sectors continues, there will be an increase in electricity demand and a transferring of emissions from those sectors to the electricity sector. Limiting peak demand when renewable resources are unavailable, through improved flexibility and demand management, will be vital.

In the short- and medium-term, new demand growth from large energy users, such as data centres, will have to be moderated to protect security of supply and ensure consistency with the carbon budget programme.

Key measures to manage electricity demand flexibility and growth are:

- The CRU will deliver a Demand Side Strategy, with the aim of 20 to 30% of electricity demand to be flexible by 2030 (15-20% flexibility by 2025), facilitating active participation by citizens and businesses in the energy market. Large Energy Users (LEUs) will be expected to make a higher proportional contribution to the target, and a review will be carried out of the gas and electricity connection policies for new LEUs.

A suite of market incentives will be developed to match electricity demand with renewable energy generation including:

- Develop policies that support extra-large energy users to achieve carbon-free demand in Ireland so that electricity decarbonisation, demand efficiency and flexibility, and enterprise growth can go hand in hand. To include connection agreements; hybrid connections; non-firm connections where appropriate; onsite dispatchable generation; onsite storage; emissions reporting; and renewable PPAs in particular within the scope of this work.
- In line with the Roadmap on Corporate Power Purchase Agreements, the SEAI, the CRU, and the System Operators, will work with LEUs and enterprise development agencies to increase the demand flexibility of LEUs through enhanced reporting and matching of demand with usage of lower carbon energy sources, including increased transparency of emissions data, and regulatory incentives and disincentives.
- ESB Networks, through its National Network, Local Connections Programme, will deliver a suite of actions to enable and incentivise demand-side flexibility

to meet the requirements of the strategy developed by the CRU. This will include customer education and behavioural initiatives, consumer and system operator technology, local flexibility markets, and dedicated community energy and flexibility schemes.

Action number EL/23/27 seeks to 'deliver an enhanced emissions reporting framework for electricity emissions for large energy users.'

Section 13.3.4 refers to Energy Efficiency and lists a number of actions which will be adopted to accelerate energy efficiency measures in industry, including;

- The SEAI's Excellence in Energy Efficient Design (EXEED) programme will support large energy users with developing exemplar energy efficiency approaches to new and existing assets, including energy efficiency design and capital support.
- Dept. of the Environment, Climate and Communications DECC will assess whether mandated caps on any increase in fossil fuel demand by large energy users could be put in place from 2026.

5.1.3. **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.

5.1.4. **'Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy'**, prepared by the Department of Enterprise, Trade and Employment July 2022.

Data is an essential enabler of our increasingly digital economy and society facilitating everything from remote working, online learning and e-health to online retail, food service delivery, banking, and payments.

However, we must align the twin transitions which are both digital and green. While data centres currently account for just under 2% of all greenhouse gas emissions, they are responsible for about 14% of Irish electricity use.

Recognising the significant capacity constraints on the electricity system in the short-to-medium term, and the need for decarbonisation of our energy system, the revised

Statement adopts a set of principles to harness the economic and societal benefits that data centres bring, facilitating sustainable data centre development that adheres to our energy and enterprise policy objectives.

Agreed Principles:

- **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 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 the potential to co-locate a renewable generation facility or advanced storage with the data centre, supported by a CPPA, private wire or other arrangement.
- **Decarbonised Data Centres by Design:** The Government has a preference for data centres 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 the construction phase and throughout the data centre lifecycle.

Data centre developments which are not consistent with these principles would not be in line with government policy.

The Government Statement fulfils commitments under the 2021 Climate Action Plan and the 2022 National Energy Security Framework. This revised statement updates the original Government Statement on Data Centres, which was published in July 2018.

5.1.5. **Commission for Regulation of Utilities Direction to System Operators related to Data Centre Grid Connection Processing**

On 23rd November 2021 the Commission for Regulation of Utilities **(**CRU) published a direction to System Operators (SOs), EirGrid and ESBN, in respect of the processing of data centre grid connection applications. The direction followed earlier public consultation on the issue, in 2021.

The Direction sets out criteria that system operators are now required to consider in assessing data centre connection applications, to determine whether to make a connection offer, and it is stated to have immediate effect.

The identified criteria to be considered is: -

- *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.*

The Direction also states: -

'Under this decision, 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.'

5.1.6. Irelands Greenhouse Gas Emissions Projections 2019-2040, EPA July 2020

This report states that the national greenhouse gas emissions in 2018 are estimated to be 60.9 million tonnes carbon dioxide equivalent ($MtCO_{2eq}$). This is 1.1% lower than emissions in 2017. Irelands greenhouse gas emissions for the energy intensive industries (known as the ETS sectors) are recorded to be 15.5 $MtCO_{2eq}$. in 2018.

The 2020 EPA report outlines, under the With Existing Measures scenario, emissions from the energy industries sector are projected to decrease by 18% to 8.7$MtCO_{2eq}$ over the period 2019 to 2030.

5.2. Regional Policy

5.2.1. Eastern & Midland Regional Assembly (EMRA) Regional Spatial and Economic Strategy (RSES) 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.

5.3. Local Policy

5.3.1. South Dublin County Council Development Plan 2022-2028

5.3.2. The South Dublin County Development Plan 2022-2028 was made on 22nd June 2022 and came into effect on 3rd August 2022.

5.3.3. Most of the 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.

5.3.4. A small portion of the site to the south is zoned **Rural and Agriculture 'RU'**: *'to protect and improve rural amenity and to provide for the development of agriculture'.* As a Use Class a Data Centre is 'Not Permitted' within this zoning objective.

5.3.5. **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.

5.3.6. **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 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.

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. A Noise Significant Area Boundary for Casement Aerodrome is close to the southern boundary of the site.

5.3.7. **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.

5.4. Natural Heritage Designations

There are no designated areas in the vicinity, the following European sites are within a 15km radius of the appeal site:

Site Name	Designation	Site Code	Distance
Rye Water Valley/Carton	SAC	001398	6.2km
Glenasmole Valley	SAC	001209	7.5km
Wicklow Mountains	SAC	002122	9.2km
Red Bog Kildare	SAC	000397	13.8km
Wicklow Mountains	SPA	004040	12.7km
Poulaphouca Reservoir	SPA	004063	14.7km
South Dublin Bay and River Tolka Estuary	SPA	004024	14.9km

5.5. Environmental Impact Assessment Screening

5.5.1. An Environmental Impact Assessment (EIA) Screening Report was carried out by Malone O'Regan Environmental Services and submitted with the application. A revised EIA Screening Report incorporating amendments to the overall proposed development was submitted in response to a request for further information.

Mandatory EIAR Screening

5.5.2. There are no activities listed within Part 1 of Schedule 5 of the Planning Regulations (as amended) which relate to the proposed development. It does not fall within the scope of activities listed in Part 1 of Schedule 5 and a mandatory EIA, as classified under Annex 1 is not required.

5.5.3. Class 10(a) of Part 2 – Industrial estate development projects, where the area would exceed 15 hectares. The site encompasses an area of c.6.18ha.

5.5.4. It is further noted that planning application SD06A/0568 the parent permission for Profile Park, submitted an Environmental Impact Statement (EIS), which covers the subject appeal lands for an industrial estate.

Sub-Threshold Screening for EIAR

5.5.5. Schedule 7 of the Planning and Development Regulations 2001 (as amended) sets out the criteria for assessing whether or not a project will have 'likely' and 'significant' effects on the environment, in which case an EIA is also required. The criteria include, characteristics and location of proposed development, and characteristics of potential impacts. These criteria were considered for the proposed development under the topics recommended in EIAR guidance documents and concludes that the proposed development does not meet the criteria where a subthreshold EIA would be warranted.

5.5.6. I am therefore, satisfied having regard to: -

(a) The nature and scale of the proposed development, which is under the mandatory threshold in respect of Schedule 5 Part 1 and Part 2 of the Planning and Development Regulations 2001 (as amended),

(b) The location of the site on lands that are zoned as 'Enterprise and Employment 'EE': with the stated land use zoning objective *'to provide for enterprise and employment related uses'*, where data centre development is '*Open for Consideration'* under the provisions of the South Dublin County Development Plan 2022-2028.

(c) The planning history of the site.

(d) The location of the site within the existing built-up urban area, which is served by public infrastructure, and the existing pattern of development in the vicinity,

(e) The location of the site outside of any sensitive location specified in article 109(4)(a) of the Planning and Development Regulations 2001 (as amended), and the mitigation measures proposed to ensure no connectivity to any sensitive location,

(f) The separation distance between the site and the Protected Structure RPS Ref: 184 Kilbride stone Church (Ruin) and Graveyard, ringfort and earthworks to the south and the archaeological desk top study and investigations,

(g) The guidance set out in the "Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development", issued by the Department of the Environment, Heritage and Local Government (2003), and

(h) The criteria set out in Schedule 7 of the Planning and development Regulations 2001 (as amended).

5.5.7. It is considered that the proposed development would not be likely to have significant effects on the environment and that the preparation and submission of an environmental impact assessment report is not therefore required. (See Preliminary Examination EIAR Screening Form).

6.0 The Appeal

6.1. Grounds of Appeal

A third-party appeal was lodged by BKC Solicitors on behalf of John Conway and Louth Environmental Group. It includes a copy of the submission made to the planning authority on the application. The main grounds can be summarised as follows:

- Energy intensive nature of the development does not comply with the objectives in the SDCDP (2016-2022) including E2 Objective 3, E4 Objective 1, national climate actions obligations, and the Climate Action and Low Carbon Development (Amendment) Act 2021. The development does not propose any significant renewable generation on the site and is reliant on the national grid.
- Planning application does not comply with requirements of the 2001 Regulations (as amended), the EIA Directive or the Habitats Directive
- Proposed development should be subject to a complete Environmental Impact Assessment. Disagree with screening assessment carried out on the basis;
    - Large development area at c. 61,810sqm and design includes proposals for up to 32 diesel generators including substantial diesel storage, and
    - Inadequate regard given to the cumulative effects of the proposed development, in combination with other development in the vicinity, on the protected sites.

- Extremely high electricity consumption will increase Ireland's carbon emissions. Proposed development will increase fossil fuel emissions and is incompatible with the Climate Action and Low Carbon Development (Amendment) Bill.
- Insufficient information on proposals to connect the power plant and site to the national grid.
- Already a disproportionate number of Data Centres in the South Dublin Area. Dozens of centres have opened in recent years, bring the total to c.54, with a combined power capacity of 642MW.
- Peak demand of water usage stands at around 1,000,000 litres of water per day. Cooling the data centre will divert a valuable resource away from the local community.
- Government has set a target that 70 percent of Irelands electricity will come from renewable sources by 2030. In its Generation Capacity Statement 2020-2029, EirGrid projects that demand from data centres could account for 27 percent of all electricity demand in the country by 2029, up from 11 percent in 2020.
- Ireland is one of the EU's worst carbon emission offenders and faces fines for missing 2020 targets on reducing greenhouse gas emissions. Missing later targets will trigger steeper fines.
- According to Host in Ireland/Bitpower figures, the data centre industry was responsible for 1.85% of electricity related carbon emissions in the country during 2020, which is expected to reach 2.2% by 2025. By 2027, data centres will consume 31% of Ireland's electricity.
- No intention to supplement the significant energy demands of the data centre with alternative energy supply.
- Note that EirGrid has had no issue system alerts/warnings due to power constraints in the national grid due to 'tight margins'. These warnings come against a background where EirGrid warned in 2021 in its 'All-Island Generator Capacity Statement 2021-2030' that the State forecast capacity deficits over the next five winters, in a scenario where 'Emissions from the

Energy Industries sector increased by 17.6 percent in 2021, driven by a tripling of coal and oil use in electricity generation'. Unclear how the development of additional energy intensive data centres will enable the state to realistically take high emitting coal and fuel oil power stations offline without compromising or adversely affecting the ability of the national grid to deliver electricity to all users in the state.

- Notes report from the Department of Enterprise, Trade and Employment, which postdates the First Party Response, 'Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy' that '*the capacity constraints experienced by our electricity system today, 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'*. If existing demand cannot be accommodated it would seem to follow that additional development of data centres is contrary to proper planning and sustainable development.

6.2. Applicant Response

A response to the third-party appeal was lodged by RPS on behalf of the applicant. The response can be summarised as follows;

Compliance with Relevant Policies and Acts

- Numerous data centres have been granted planning permission within areas zoned 'EE'. Proposed development acceptable in principle, subject to compliance with relevant policies, standards and requirements of the current Development Plan.
- *National Government Support for Data Centres* – Project Ireland 2040 (National Planning Framework and National Development Plan 2018-2027)', include objectives for the promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities. The 2018 Government Statement on The Role of Data Centres in Ireland's Enterprise Strategy sets out that data centre development is supported. Notes agreed principle under recent Government Statement on

data centres, issued subsequent to the submission of the application and FI response.

- Data centres are supported in national policy and are also subject to climate change and adaptation policies at national and regional levels including the Climate Action Plan and other climate strategies mentioned in section 15(1) of the Climate Action and Low Carbon Development Act 2015.
- Note removal of initially proposed on-site power generation and that the PA were satisfied that the EirGrid connection which is conditional of planning permission can be addressed by way a suitably worded condition seeking confirmation of the connection prior to commencement of development.
- *South Dublin Climate Action Plans* - Note applicants' response to FI request and removal of on-site energy generation, and alternative proposal to connect to the National Grid. Discussions are ongoing with EirGrid. Energy secured from the grid will become increasingly sustainable in line with the targets set out in the All-Ireland Generation Capacity Statement. Appellants concern in respect of compliance with SDCC Climate Action Plan, now the Adopted Climate Action Plan 9th September 2022, are addressed in the applicant's proposal to obtain energy from the National Grid.
- Back-up generators are essential for such a development, alongside the Grid connection.
- *Energy Provision from EirGrid* - Note applicants' response to FI request and that energy generation had been removed from the application and proposed substations reduced in size. Notes having a grid connection secured from EirGrid is not a requirement of securing planning consent.
- *On-site renewables provision* – Refers to Figure 19 of the All-Ireland Generation Capacity Statement 2021-2030 (EirGrid) indicates how the grid will move towards more renewable energies over the next 10 years. FI response clarified that reliance on energy sourced from the Grid, would in turn be energy sourced from renewables, in compliance with policy requirement.

Compliance with Relevant Regulations and Directives

- Disputes assertion that the application is non-compliant with the requirements of the Planning and Development Regulations 2001 (as amended), EIA Directive 2011/92/EU on the assessment of the effect of certain public and private projects on the environment, as amended by the EIA Directive 2014/52/EU, or the Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora. Applicant is required by EirGrid to engage with it in relation to a method of connection and that connection will be the subject of a separate planning application.

EIA Requirement

- The proposed development underwent EIA screening, and a stage 2 'Natura Impact Statement' was prepared.
- The fact that the connection method remains to be advised to the project developer does not render the EIAR invalid or represent a breach of the EIA Directive or of the Habitats Directive.
- Applicant did include the back-up generators in its July 2022 Screening Report and also referenced the quantities of fuel storage and method of storage and measures such as bunding and leak detection to avoid environmental risk arising. Fuel storage was addressed in the ecological impact report.
- Proposed development does not require a mandatory EIAR, nor does it meet the criteria where a sub-threshold EIA would be warranted. Amount of fuel stored on site is a maximum of 859,248 litres (c.304 tons) which is significantly below the mandatory EIA threshold of 100,000 tonnes.
- Fuel storage facilities have been designed in line with the relevant industrial standards which conform to Irish Regulations.
- An Air Quality Impact assessment took into consideration the use of diesel generators, and the cumulative impact of other developments within Profile Park in accordance with the EPA Air Guidance Note (AG4). It concluded that no adverse impacts would occur.

Cumulative Effects

- NIS concluded that no adverse cumulative effects of the proposed development, in combination with other development in the vicinity, or on the protected sites will occur as a result of the proposed development.

Irelands Carbon Emissions

- Notes appellants inference that data centres consume extremely high levels of electricity and reference to the national requirement to reduce natural emissions by 51% under the Climate Action and Low Carbon Development (Amendment) Bill as the reason for this concern.
- Notes the Bill was signed into law on 23 July 2021 and is no longer a Bill. Legislation intended to support Irelands transition to Net Zero carbon emissions and achieve a climate neutral economy by no later than 2050 in line with the movement toward climate resilience.
- 'Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy' Applicant outlines how each of the agreed principles are satisfied.

Connecting to the National Grid

- Disagree with contention that there is insufficient information on proposals to connect to the national grid. Details of the connection will be the subject of a separate planning application when EirGrid advise on method of connection.

Number of Data Centres

- Disputes reference to 54 Data centres in the South Dublin area. Applicant notes 70 currently in Ireland with 65 of them within the greater Dublin area which employ 1,800 people directly.
- *Need for Data Centres* –They comprise a vital part of IT infrastructure required for Ireland to attract investment and jobs.
- *Energy consumption comparison* –Submit comparing the energy requirement of a data centre with a home/many homes is not an equable comparison. CSO 2022 outlines Data Centres metred electricity consumption in 2020 was 11% of metred electrical consumption, compared to 22% metred urban residential consumption and 12% metred rural dwellings consumption. Rural

and urban dwellings both consumed more electricity than data centres in Jan 2022.

Water Usage – The water demand figure quoted is incorrect.

Energy Source - Data Centres are focal in providing the digital capacity for the increasing use of renewables, providing the technology for onsite renewables functions and for subsequent transmission of renewable energy for use.

- Submit it is misleading to suggest that energy demand is responsible for the shortfall in energy supply for transmission.
- Long term EirGrid strategy is to transform their supply sources in line with national policy to achieve an 80% from renewables source of energy by 2030 To meet this aim, EirGrid need to resource their infrastructure (underground cables, pylons and substations) and energy sources, notably the renewable sector.

Carbon Emissions – Submit that Data Centres are part of the national efforts to decarbonise the economy. They provide digital facilities with which future mechanisms to decarbonise the country.

Energy Consumption - Applicant does not contest that Data Centre industries were responsible for 1.85% of electricity-related carbon emissions in 2020.

- Bitpower Report states that carbon intensity of the grid would decrease linearly by 2025, based on renewable electricity targets. The projected increase in energy sourced from renewables, by EirGrid, would entail Data Centres energy supply deriving increasingly from renewables.
- Submits no information available with regards to the evidence underpinning the claim that Data Centres might consume 31% of Ireland's electricity by 2027 and suggests this is a misinterpretation of the statistics. A separate issue is the lack of energy provision from the grid, over which the data centres have no control.
- The issue remains one of energy sourcing and transmission which EirGrid have the responsibility for, not the planning system or Data Centres.

Renewable Energy

- Data Centres will provide a vital aspect in digitizing and enabling the increasing demand for and supply of renewable electricity.
- Contend that in receiving energy supplies from EirGrid, the Data Centre will be receiving energy from renewable sources.
- Compliance with the SDCCP 2016-2022 and the SDDP 2022-2028 as confirmed by the PA.
- Corporate Power Purchase Agreement's (CPPA's) – Applicant is willing to source CPPA's and note that Digital Reality have a track record in negotiating CPPA's in relation to other their other data centres.

Transmission System Operator Constraints

- Notes concern in terms of recent EirGrid system alerts / warnings arising from power constraints which are an on-going issue.
- Submits advanced technology, including Data Centre technology will be part of the solution to the capacity deficit issue over the next 5 years, a grant of permission for this Data Centre is an aspect of future proofing the energy sector.
- Data Centres provide the technology requirements for data storage and implementation for developments such as digitizing EirGrid, offshore wind farms and solar farms all of which would assist in the closure of remaining fossil fuel power providers.
- The Data Centre is part of national and local policy to digitize and decarbonise the economy.

Data Centre Demand and Capacity Constraints

- The Data Centre network is ideally placed to ensure that the economy digitalises to better assist with decarbonization. This is noted in the statement by the Dept. of Enterprise, Trade and Employment, 'Data is an essential enabler'.
- Notes 'Data Centres' remain 'Open for consideration' in the SDCC CDP

Conclusion

- Proposal is policy compliant and is in accordance with proper planning and sustainable development.
- Third party appeal raises many issues that are irrelevant planning considerations.
- The applicant notes that though the energy supply issue is both national and international, this does not derive from the development proposal but from separate matters outside the planning remit.
- Data centres are very much part of the national policy to digitalise and decarbonize the economy, and this proposal is a part of this requirement.
- Respectfully Request the Board to dismiss the appeal and uphold the PA decision to grant permission.

6.3. Planning Authority Response

The planning authority confirmed its decision and considered the issues raised by the appellant have been considered in the Planner's Report.

6.4. Observations

None received.

6.5. Further Responses

None received.

6.6. Further Reports

The application was circulated by the Board to Failte Ireland and An Chomairle Ealaíon for comment. No reports were received.

7.0 Assessment

The main issues in this appeal are those raised in the grounds of appeal, and I am satisfied that no other substantive issues arise. The issues are addressed under the following headings:

- Introduction
- Principle of Development
- Energy Use and Contribution to Greenhouse Gas Emissions
- Design Scale and Layout
- Drainage and Flood Risk
- Noise Impacts
- Ecology
- Access and Parking
- Other Matters Arising
- Appropriate Assessment

7.1. Introduction

7.1.1. The application site comprises a brownfield site located within an existing business park. Planning permission was granted previously for the development of a data centre development on part of the site /which was partially constructed. This application seeks to develop the remainder of the site. There are a number of data centre developments permitted and under construction in the vicinity of the site including a 125MW gas-powered energy centre PA Reg.Ref.SD21A/0167.

7.1.2. The application as lodged was amended by way of further information and clarification of further information. The principal amendments relate to the omission of a proposed gas fired energy centre with the intention to provide power to the development via a grid connection to a Substation. The amended proposal also provides for a surface water attenuation pond, and development initially proposed in the ‘RU’ lands is now relocated to within the ‘EE’ zoned land.

7.1.3. The South Dublin County Development Plan 2022-2028 was made on 22nd June 2022 and came into effect on 3rd August 2022. The notification of decision to grant planning permission was made on 2nd August 2022.

7.1.4. 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.

7.1.5. I will base my assessment on the current SDCDP and updated Government Statement.

7.2. Principle of Development

7.2.1. The proposed development, comprising a data centre, and office use was determined by the Planning Authority to be 'open for consideration' on lands zoned 'EE', under the SDCDP 2016-2022 and this is not disputed by either party.

7.2.2. I would concur that the principle of a data centre on lands zoned 'EE' Enterprise and Employment in the now adopted South Dublin County Development Plan 2022-2028 is 'open for consideration' on lands zoned 'EE' and is acceptable under the current plan.

7.2.3. The PA sought further information in relation to the quantum of office space proposed. In response the applicant clarified that 712sq.m office space is proposed for DUB15 and 690sq.m is proposed for DUB16. Each building, therefore, would have less than 1,000sqm office space, which is open for consideration within the zoning. I am satisfied that with an overall total office space of 1,402sqm the area of office space which is ancillary to the main use is acceptable in principle.

7.2.4. A small portion of the site to the south is zoned Rural and Agriculture 'RU': 'to protect and improve rural amenity and to provide for the development of agriculture'. Initially the proposed development included works within the southern part of the site zoned 'RU'. The PA expressed concern in relation to this element of the proposed development and this was subsequently omitted in the response to further information. Drawings submitted in response to a further information request indicate the removal of all built areas including campus security fence off the 'RU' land.

7.2.5. The proposed development in terms of the development within the 'EE' zoned lands, is acceptable in principle, subject to compliance with the relevant polices, standards and requirements of the County Development Plan.

7.3. Energy Use and Contribution to Greenhouse Gas Emissions

7.3.1. The grounds of 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.

Proposed On Site source of Energy

7.3.2. The initial proposal was to provide an On-Site Power Generation (OSPG) Plant until such time that EirGrid could provide a connection. The OSPG comprised a gas-powered energy centre to serve the proposed data centre energy requirements. The PA expressed concern with the proposal due to the absence of capacity in the national grid.

7.3.3. The PA note the number and extent of large demand connections in the area. Noted also was the absence of a power supply via EirGrid to commence operation and the shortfall in power supply from the Gas Energy Centre which appears to contribute to a future demand for grid reinforcements.

Proposed Grid Connection

7.3.4. In response to the further information request the gas-powered energy centre was omitted and revised plans and proposals to secure energy from the national grid instead were proposed as an alternative energy supply. The applicant in their response to the FI request states that they had engaged with EirGrid with regard to a connection and that discussions are ongoing. This was accepted by the PA.

Grid Connection Proposals

7.3.5. The third-party appeal contends that insufficient information on proposals to connect to the national grid have been submitted. I note from the first party response to the third-party appeal that it is stated that the site is already connected to the national

grid and that the two existing data centres on site DUB 13 and DUB 14 are connected from the gid and that this route will provide for DUB 15 and DUB 16.

7.3.6. The applicant submits that details of the connection will be the subject of a separate planning application when EirGrid advise on method of connection. I note that the applicant's response to clarification of further information, and response to the third-party appeal were not accompanied by any updated correspondence or confirmation from EirGrid relating to a future connection to the grid application. It is stated that EirGrid was not consulted on the application and thus did not provide a submission. The Board may wish to clarify this aspect of the development.

7.3.7. Notwithstanding the absence of confirmation of capacity from EirGrid, as the applicant states, 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).

Principle of a Grid Connection

7.3.8. 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 of this report.

7.3.9. The third-party appeal refers to the Government Statement noting 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'*. The appellant makes the case that if existing demand cannot be accommodated it would seem to follow that additional development of data centres is contrary to proper planning and sustainable development.

7.3.10. The first party response to the appeal submits however, that the proposed development satisfies the agreed principles for Sustainable Data Centre Development.

7.3.11. 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.

7.3.12. 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 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.

7.3.13. Regarding concerns over energy usage and contributions to greenhouse gas emissions, the applicant states that the grid will move towards more renewable energies over the next 10 years, that that energy sourced from the Grid would in turn be energy sourced from renewables. Box 2.1 of the Climate Action Plan 2023 outlines that emissions from industry sectors covered by the 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 (43% compared to 2005 levels). Available records from the Environmental Protection Agency[3] 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)*'.

7.3.14. The proposed development incorporates 32 no. diesel generators that will power the facility in the event of a power outage. The updated MEP and Public Lighting Report

[2] CRU21121-CRU-Direction-to-the-system-Operators-related-to-Data-Centre-grid-connectiom-processing.pdf
[3] Access to current permits | Environmental Protection Agency (epa.ie)

prepared by Arup and submitted by way of further information refers to a total MW output with (32 sets of 2.75MVA /2.2MW). It is stated that the total electrical site capacity of the generators equals 70.4MW.

7.3.15. It is stated in the application that the site is designed to support up to 40MW of IT equipment, with an option to upgrade to 48MW. The updated MEP and Public Lighting Report prepared by Arup and submitted by way of further information states that calculations are based upon the maximum possible IT equipment load of 48MW. The report also refers to the associated electrical and mechanical cooling equipment supporting the Data Centre which is configured in 'fundamental blocks' of which there are 2 each of which support a maximum of 12MW of critical load (total 24MW).

7.3.16. The report states that the maximum demand for the site which would be running at full load in summer is 63MW. This will, therefore, give rise to a requirement for a GHG Emission Permit. The development will thus be covered by the ETS and will be subject to emissions targets at an EU level, rather than a national level.

Renewable Energy

7.3.17. The appellant notes the proposal does not rely on renewable energy. The updated MEP and Public Lighting Report prepared by Arup and submitted by way of further information also states that the development will import power from the grid, which will allow the data centre to use renewable energy when available.

Capacity

7.3.18. Regarding potential impacts on the National Grid, in the latest All-Island Generation Capacity Statement[4] 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. The Section 5 of the Statement notes that '*offers of new connections will be contingent upon the ability of the data centre applicant to bring onsite dispatchable generation (and/or storage) with a capacity equivalent to or greater than their demand'*.

7.3.19. 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: -

[4]All-Island Generation Capacity Statement 2022-2031 (EirGrid and Soni, October 2022)

'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.'

7.3.20. 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.

7.3.21. 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.

7.3.22. The proposed development in my opinion does not 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 118 jobs during 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 proposed 110kV substation. No on-site energy centre, with potential to supply energy to the grid. Proposal to import power from and therefore reliant on the national grid. Provision of backup (stand-by) DC diesel generators for emergencies. Have not 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.	No evidence provided of ongoing negotiations with renewable energy suppliers. Proposal does not propose any significant renewable energy generations.
Co-location or Proximity with	Preference for DC developments in locations where there is the potential to co-locate a renewable generation facility	No provision of on-site gas generator, with potential to supply energy to the grid.

Future-proof energy supply	or advanced storage with the data centre, supported by a CPPA, private wire or other arrangements.	No evidence provided of ongoing negotiations with nearby suppliers in relation to CPPA & willing to accept a planning condition in this regard. No 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.
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 118 jobs during operational phase.

Concentration of Data Centres

7.3.23. The number of data centres is raised by the appellant and addressed by the applicant in the response 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 north by Digital Reality DUB13 and 14 and to the west by Vantage Data Centre DUB11. Other data centres within Grange Castle Business Park include those owned by Google, Microsoft and EdgeConnex to name but a few.

7.3.24. In this regard the Board should be aware of two recent decisions to refuse planning permission by SDCC under PA Reg.Ref.SD22A/0156 and PA Reg.Ref.SD22A/0420, both of which are currently on appeal to the Bord under ABP 317936-23 and ABP 317446-23 respectively (decisions pending). In both cases, the proposed data centre developments reasons for refusal refer to insufficient capacity in the national grid.

7.3.25. I would also bring two other concurrent applications to the Boards attention, which have decisions pending. These include ABP 317297-23 and ABP VA06S.312793-

22. The former relates to a 110kV substation and grid connection by Greener Ideas at Profile Park, Baldonnell lodged in June 2023. Part of the application site includes a large area within the appeal site which currently comprises a Temporary Construction Compound. The later application is for permission for 110kV Gas Insulated Switchgear (GIS) Substation compound and 110kV transmission lines along with associated and ancillary works by Vantage Data Centres.

Summary

7.3.26. 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.

I am not satisfied that the applicant has sufficiently demonstrated that the proposed development complies with the above requirements in the application as presented, or in the appeal.

7.3.27. I am also 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.

7.3.28. 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 and in the absence of onsite power supply, then in my opinion a grant of planning permission is premature and should be refused.

7.4. On balance, I have concluded that the proposed development an extra-large energy user (LEU) which does not provide for any significant renewable energy generation on site and is reliant on the national grid, fails to meet 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 failed to demonstrate 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 refused on this basis.

7.5. Air Quality and Climate

7.5.1. The grounds of appeal raise concern in relation to the impact of the proposed development on Climate and Climate change and greenhouse gas emissions.

7.5.2. The application was accompanied by an Air Quality and Climate Impact Assessment Report (AQ&CIA) carried out by Arup.

7.5.3. Air dispersion modelling was carried out using AERMOD to assess the concentrations of Nitrogen Dioxide (NO2). Two scenarios were assessed in order to quantify the impact from the site. Scenario 1 examines testing of diesel generators with continuous operation of gas generators while Scenario 2 examines emergency mode.

7.5.4. It was initially proposed that the 5 no. gas generators (referred to as the energy centre), would operate concurrently and continuously with the testing of one standby diesel generator. Each diesel generator would have been tested one at a time for one hour, once a month. The report noted that the continuous operation of the gas generator is only expected to occur between 2023 and 2025 (from 2025 it is expected that the proposed development will be powered from the national electricity grid.

7.5.5. The AQ&CIA was subsequently amended to take account of the updated design changes in response to further information request, namely the omission of the gas generators / energy centre. For clarity my assessment will focus on the amended proposal and revised AQ&CIA report.

7.5.6. Air dispersion modelling was carried out using AERMOD to assess two scenarios. Scenario 1 examines testing of diesel generators, while Scenario 2 examines emergency mode. Scenario 1 allows for 32 no. diesel generators which will be tested one at a time for one hour, once a month. Scenario 2 allows for 32 no. diesel generators (standby) running concurrently and continuously.

7.5.7. The proposed development will have a total of 32 generators all of which have a height of 20m above finished ground levels. The two data halls located to the northwest DUB13 and DUB14 have a total of 16 generators. Modelling for NO_2 was undertaken in detail.

7.5.8. The potential impacts during construction involve excavation over the site and the erection of new buildings. There is potential for dust emissions, from site earthworks, handling of construction materials, construction works and construction traffic movements.

7.5.9. During operation the primary sources of air and climatic emissions involve the use of the emergency diesel generators.

7.5.10. Mitigation measures have been formulated for both phases. During construction standard construction mitigation measures are proposed in order to ensure no dust nuisance occurs. During operation stack heights have been designed to ensure that an adequate height will aid dispersion of the plume. The air impact assessment has demonstrated that mitigation measures are not required. Emissions of greenhouse gases are not expected to be significant due to the infrequent testing and emergency operation of the generators.

7.5.11. During the operational phase the NO_2 modelling includes emissions from the adjacent DUB 13 and DUB 14 facility and the Google Ireland facility which contains 26 stand-by generators. With respect to cumulative impacts the results indicate that the ambient ground level concentrations are below the relevant air quality standards for NO_2.

7.5.12. In terms of climatic impacts, on-site emissions of greenhouse gases from electricity to operate the facility are not expected to be significant. The results of the air dispersion study show that the residual impacts of the proposed development on air quality and climate will not be significant.

7.5.13. I have considered all the documentation in respect of air quality and climate. I am satisfied that any potential impact would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of air quality and climate.

7.6. Design Scale and Layout

7.6.1. The application was accompanied by an Architectural Design Statement prepared by RKD Architects, and Verified Views prepared by Digital Dimensions.

7.6.2. The proposed two data halls are significant in scale with a stated floor area of 33,577sq.m. Each have a building height of 20m. The proposed data halls are located to the south of two existing data halls DUB 13 and DUB 14 which are also two storeys. The three-storey storey office blocks and delivery bays are attached to the north of the data centre blocks.

7.6.3. I do not consider the two no. two storey buildings inappropriate on this site.

7.6.4. The data centres will be served by services and plant located to the south and west of the data centre blocks. These will include 32 containerised standby diesel generators with associated flues per generator (64 in total) and grouped into towers of 2 flues each. These flues are not considered excessive within the context of a Business Park.

7.6.5. The planning authority raised concern in relation to the visual impact of the proposal on the surrounding area particularly as viewed from the south.

7.6.6. In response to item 2 of FI request an updated Masterplan was submitted to the PA. Proposed design changes include the introduction of building facades to southern and eastern elevations, with proposals to explore the use of lighter panels and textures to soften the impact with the vision of a building sat within a parkland setting, to help break the volume and mass.

7.6.7. Design changes include a combination of façade systems and green living walls along southern and western elevations. Additional Green infrastructure was introduced to the north-east of the site following the removal of the proposed on-site

Energy generation. The revised plans also indicate proposals to use raised landscaping areas to improve screening of the building and re-use site topsoil.

Landscape and Visual Impact

7.6.8. The Planning Authority requested additional photomontages as part of the Further Information which form part of the assessment. The images include views of the data halls from 13 no. different viewpoints.

7.6.9. I have reviewed all the photomontages and visited the site and am satisfied that they are representative of the likely views.

7.6.10. The proposed development will have a significant visual impact on the surrounding landscape, and this is illustrated clearly in View 2 from within the Business Park and View 5 from along Baldonnell Road looking north. However, I consider that the design and layout of the proposal seeks to make optimum use of this large, serviced and employment zoned lands. I note that there are no designated protected views.

7.6.11. I am satisfied that from a planning precedent perspective and planning policy point of view, it is reasonable to conclude that the landscape in which the proposal is to be located is one of the more suitable types within the county.

7.6.12. I also note the comprehensive landscaping and planting proposals detailed in the Landscape Design Report submitted, which will in my opinion significantly assist in assimilating the proposed development into the receiving environment. I am satisfied that the existing trees and hedgerows to be retained along the western boundary with the golf course and the proposed landscape buffer to the south, will provide a high level of visual screening, while the colour palette and green infrastructure chosen for the building will further reduce the visual impact.

7.6.13. I am satisfied therefore, that the proposed two storey building height of the data halls is appropriate and the visual impact is acceptable in its context.

7.7. Drainage and Flood Risk

7.7.1. The site is located within Profile Park and to the south of two existing commercial buildings. The land surrounding the appeal site is primarily greenfield and commercial/industrial in nature. Grange Caste Golf Club is located to the east of the site.

7.7.2. Initial surface water drainage proposals outlined in the application relied on surface water attenuation tanks. A Surface Water Drainage report prepared by Arup was submitted to the PA following a request for further information in respect to issues raised by the Water Services section of the planning authority.

7.7.3. The Surface Water Drainage report was informed by the revised Masterplan which indicates the removal of the on-site generation facility and inclusion of a surface water attenuation pond. The previously proposed attenuation tanks no longer form part of the proposed surface water attenuation strategy. The applicant also clarified that the attenuation system for the site is stand alone and not shared.

7.7.4. The revised surface water proposals were accompanied by a series of drawings which outline further details in relation to surface water attenuation calculations, details showing location of hydro brakes and discharge rates, and above ground SuDS proposals. These were further augmented following a request for clarification of further information in respect to SuDS and surface water attenuation.

Existing Drainage Systems

7.7.5. The report outlines how the existing DUB 13 and DUB 14 Data Centres are served by a surface water drainage network, which runs by gravity into one outfall point and discharges into an existing watercourse which traverses the site from south to north. This network incorporates four existing attenuation tanks with a storage volume of 826m^3 which will be maintained.

7.7.6. The report notes that there is another attenuation system with a storage volume of 128m^3 initially intended to serve the proposed development which will now be removed as part of the proposed surface water scheme.

7.7.7. Downstream of the existing discharge point the watercourse is culverted northwards through a 1,100mm diameter pipe to the existing DUB 13 site boundary where it discharges onto an open channel. The watercourse is also culverted upstream through a 1,100mm diameter pipe within the site boundary which will be diverted around the proposed development as detailed in the Flood Risk Assessment.

Proposed Surface Water Drainage

7.7.8. Drainage from the proposed DUB 15 and DUB 16 development will be drained by a completely separate system from the existing, with separate foul drains and surface

water swales. The outfall of the proposed surface water system will discharge into the watercourse, immediately downstream at the end of the of the proposed watercourse realignment.

7.7.9. Surface water discharges from the proposed development will be restricted with flows in excess of the allowable discharge rate being retained on site in one single above ground attenuation pond for storms up to and including the 1 in 100-year event plus 20% climate change allowance.

7.7.10. The Surface Water Drainage report outlines SuDS proposals in response to item no. 6 of the request for further information. The applicant states that the site layout was revised in order to sufficiently accommodate minimal natural solutions, SuDS and Green Infrastructure.

7.7.11. All the surface water run-off from the proposed development and buildings shall drain by gravity via swales and pipes network towards the attenuation pond to the northeast of the site, comprised of Hydro brake flow restricting device limiting the discharge to greenfield run-off rates of approx. 300mm high standing water pool prior to its final outfall discharge. The allowable outflow from the development will be restricted to Qbar of 1.99 litres/second/hectare, detailed in Appendix B for Surface Water Drainage Design Summary and Qbar calculations.

7.7.12. Flows in excess of the allowable discharge rate will be stored on site in the form of a storm attenuation pond. Among the proposed SuDS features incorporated into the revised surface water strategy are green roofs, roadside swales, permeable paving, proprietary surface water treatment system, fuel retention petrol interceptors, bypass petrol interceptor and attenuation pond. The application notes the introduction of green roofs to office/admin building elements, and that roadside swales are now located in non-refuelling/logistics area.

7.7.13. Peak surface water discharges will be reduced due to the restricted outflow from the development, swales and attenuation pond and the proposed watercourse diversion which will promote biodiversity and surface water enhancement.

Storm Attenuation and Online Control

7.7.14. In response to item 7 of further information request the applicant submitted a proposed Attenuation Catchment Area Report with cover letter from Arup in respect

to the proposed catchment area. Storm Water Attenuation Calculations are included in Appendix B of the Surface Water Drainage report submitted in response to further information.

7.7.15. The proposed storm water attenuation pond is designed to store 2,498 m^3. The outflow from the attenuation facility will be gravitational and at a controlled rate of flow. The catchment area of the proposed development is 4.053 ha of which an area of 3.294 ha is impermeable. Given the Qbar of 1.99 litres/second/hectare, the total discharge rate will be 8.06 litres/second. The attenuation outfall manhole will be installed with a Hydro brake to limit discharge via a 225mm surface water drain into the existing segment of the watercourse immediately downstream of the end of the proposed diversion alignment.

7.7.16. During construction standard mitigation measures are proposed. A Construction and Environmental Management Plan (CEMP) prepared by Malone O'Regan accompanied the application. The CEMP was updated and submitted with the response to further information. A site-specific Construction and Environmental Management Plan (CEMP) will be prepared and followed during the operational phase.

Water Supply

7.7.17. The grounds of appeal raise concern in relation to water usage particularly during the cooling process. It is asserted that peak demand of water usage would be around 1,000,000 litres of water per day.

7.7.18. The applicant submits that the water demand figure quoted is incorrect and outlines how the air conditioning system for the data centre is a closed loop, and therefore consumes no water as part of the cooling process. The highest water demand per day (for staff and when humidification is needed) will be 5,803 litres of water, and notes that the sprinkler tank and fire hose reels will be filled once, and do not have a daily water demand.

7.7.19. In this regard I note it is proposed to connect to the public mains water supply. Irish Water have provided the applicant with a confirmation of feasibility letter / IW connection letter dated 7th October 2021 which was requested by and submitted to the PA on 24th March 2022 in response to the request for further information. A copy of the Irish Water pre-connection enquiry form and letter of confirmation of feasibility

can be found in Appendix C. The Water Services section of the planning authority and Irish Water had no objection to the proposal subject to standard requirements.

7.7.20. While I accept that this and other data centres are significant users of water required during the cooling process, Irish Water have not indicated that there is insufficient capacity in the water supply system to accommodate the proposal.

7.7.21. I consider therefore that the water usage associated with the proposed development is overstated by the appellant and is acceptable.

Foul Drainage

7.7.22. It is proposed to connect to the existing foul drainage sewers.

7.7.23. There is an existing decommissioned WWTS which it is proposed to remove as part of the development. Irish Water sought a report showing how the existing sewage treatment plant on site will be dealt with or decommissioned. In response to the further information request under item 11 and 12 a report on the Removal of Derelict Wastewater Treatment Plant prepared by Arup was submitted to the PA.

7.7.24. The report notes that the WWTP was decommissioned some time prior to 1995. Ground investigation and laboratory testing in and around the site indicate that there are soils which will require disposal to inert, non-hazardous licenced landfill. All demolished and removed material will be delivered for reuse and recycling where feasible, with the exaction being backfilled to the required level with suitable materials.

7.7.25. Foul Drainage Layout drawings were updated to reflect the updated surface water drainage layout and are included in Appendix A of the Surface Water Drainage report.

7.7.26. Irish Water and the Water Services Division of the PA raised no further concerns. Condition no 7 of the notification of decision to grant permission refers. If the Board are minded granting permission a similarly worded condition could apply.

Flood Risk

7.7.27. There are two minor watercourses within the site. A minor tributary of the Griffeen River flows through the site in a North South direction. The water course flows through a number of culverts. There is also an existing drainage channel to the east of the site. This channel is dry and receives no flow from the upstream catchment.

An inflow from the Golf course discharges into the channel at the Northwest of the site, and from this point the watercourse conveys the flow downstream to the Griffeen River.

7.7.28. As noted in section 2 above it is proposed to reroute and widen an existing watercourse (constructed under an earlier permission) along the eastern and southern boundary of the site.

7.7.29. The planning application was accompanied by a Flood Risk Assessment (FRA) carried out by Arupq and identifies the development site as within Flood Zone C and 'less vulnerable'. The FRA outlines that hydraulic modelling was carried out to determine design water levels for both the existing and proposed scenarios. The results of the modelling demonstrate that the risk of flooding (fluvial, pluvial and from ground water), to the site is very low.

7.7.30. The proposed finished floor level of DUB 15 data centre is 76.85mOD which is 0.55m higher than the recommended flood defence level. The proposed finished floor level of DUB 16 data centre is 77.84mOD which is 1.54m higher than the recommended level.

7.7.31. I am satisfied that the management of flood risk at the site relies on appropriate finished floor levels and a minimum freeboard of 300mm. The proposed finished floor levels for both data centres and switch rooms are higher than the recommended level.

7.7.32. The Water Services section of the planning authority requested a revised drawing in plan and cross section of the stream to include details of the ecological enhancement value of the stream above its existing condition. In this regard it is noted that the existing stream is currently culverted in sections running through the centre of the site.

7.7.33. An updated FRA was submitted 24th March 2022 in response to the request for further information. Further details on the rerouting of the stream through the development, and on the storm water drainage using more natural water attenuation features necessitated a new design. Detailed hydraulic modelling for the existing and proposed scenario (with no engineering measures) was carried out. Specific details in respect to the maximum and bank full discharge water levels and hydrological calculations were included in Appendix A and B respectively.

7.7.34. The modelling determined that there could be out of bank flooding at the downstream end of the rerouted stream north of the site boundary in the vicinity of the confluence with the golf course. Several engineering measures were considered to ensure flood risk to the golf course from the minor watercourse is addressed as part of the development. Channel conveyance improvement works which involve widening and/or deepening, creatin flood plains in the channel to accommodate excess flow in the watercourse was deemed a viable option.

7.7.35. The updated hydraulic modelling carried out in the revised FRA concludes that the conveyance improvement works proposed reduce the risk of flooding. This was accomplished by widening and/or deepening the channel to accommodate the watercourse, which helped keep the water in the channel.

7.7.36. The Water Services section of the planning authority had no objection to the amended proposals.

Conclusion

7.7.37. I have considered all the written submissions made in respect of drainage, water supply and flooding. I am satisfied therefore, that the proposed development is acceptable in terms of surface water drainage proposals, SuDS, water supply and will not give rise to potential flooding of adjoining sites.

7.8. Noise Impacts

7.8.1. The data centre and ancillary energy generation has the potential to generate noise. The surrounding area is predominantly commercial to the north and west, the land to the south is agricultural with some residential uses and the land to the east is in use as a golf course.

7.8.2. The application is accompanied by a Noise Impact Assessment (NIA) prepared by Arup. The NIA report assesses the potential for the impact of noise from the proposed development to the nearest noise sensitive locations. These include residential properties to the south and golf tees within Grange Castle Golf Club to the east. The closest residential properties are located 71m from the site, and the golf course is between 10-20m from the site boundary.

7.8.3. The applicant has carried out noise surveys and has predicted that noise levels particularly from building service noise (i.e., chillers, condensers and air handling units) and emergency site operations (i.e., generators) at nearby noise sensitive properties will not exceed the Environmental Protection Agency guidance in relation to noise. Noise mitigation measures are recommended as necessary.

7.8.4. During operation it is proposed that noise emissions at the nearby receptors will not exceed 55dBL_{Aeq} (1hr) during daytime (07.00-23.00), 40dBL_{Aeq} (1hr) at night (23.00-07.00). For emergency operations the proposed noise emission limit for residential receptors will not exceed 60dBL_{Aeq} (1hr) and for amenity receptors will not exceed 65dBL_{Aeq} (1hr).

7.8.5. Mitigation measures proposed during construction and operational phases are outlined. These include the construction of a 9m solid noise wall around all diesel generator yards with louvres, a minimum 4m high solid noise parapet constructed on the main data centre building to shield receptors from chiller noise. zs

7.8.6. The Environmental Health Officer raised concerns in relation to noise levels referenced in the acoustic report and further information was requested to address issues raised.

7.8.7. A revised NIA report for the proposed development was updated following a redesign of the masterplan, omitting the energy centre and adding the storm water attenuation pond. The changes to the NIA include removing the gas-powered energy centre and associated noise sources, updating noise modelling for the proposed development following updated building height levels and updated mechanical plant noise outputs. Changes to the NIA also include updating baseline noise levels in line with a proposed power plant that has submitted a planning application and will affect nearby noise sensitive receptors, updating noise limits and the cumulative noise analysis for the proposed development based on advice from the EHO of the planning authority.

7.8.8. The predicted noise levels, (i.e.LA90) from the proposed development at the nearest sensitive receptor is now 34dB, exactly matching measured background noise levels at night-time. The difference in noise levels will be imperceptible.

7.8.9. The chillers and generators (proposed for emergencies when grid power supplies fail) are located to the north of the data centre furthest from the residential properties.

7.8.10. The site is located within the Department of Defence Inner Zone Limit. A Noise Significant Boundary associated with Baldonnell Airdrome is close to the southern boundary of the site.

7.8.11. I noted from my site inspection that existing dominant noise levels at both NSR1 and NSR 2 to the south is traffic from Baldonnell Road which was not excessive and on the day of my site inspection I did not observe any intermittent noise from Casement Aerodrome.

7.8.12. I am satisfied that, subject to normal standards of good practice, the proposed development would not give rise to excessive noise. If the Board are minded granting permission, I suggest a suitably worded condition similar to Condition no. 15 of the grant of permission be attached setting out noise requirements.

7.8.13. I am satisfied therefore, that the proposed development will not seriously injure the residential amenities of these properties or the amenity of the adjoining golf tees within Grange Castle Golf Club to the extent to warrant a refusal.

7.9. Ecology

7.9.1. Ecology is considered in the Ecological Impact Assessment Report (EcIA) prepared by Malone O'Regan which accompanied the application. An updated EcIA was submitted by way of further information which detailed the proposed attenuation pond and the green roofs and trellises.

7.9.2. The site comprises of sparsely vegetated ground to the southwest, areas of improved agricultural grassland and scrub to the east. The site is characterised by mature hedgerows/treelines along the eastern boundary, wet and dry drainage ditches and the Baldonnell stream and Profile Park Road which runs through the northwest/central region of the site. The remains of an old wastewater treatment plant are also present within the eastern portion of the site.

7.9.3. Habitat surveys were carried out on 4th March 2021 with follow up surveys on 24th May and 8th June 2021. Habitats identified in Figure 4-4 include amenity grassland,

recolonising bare ground, improved agricultural grassland, scrub, hedgerow/treeline, drainage ditches and the Baldonnell stream, are all of low local value.

7.9.4. Surveys were also carried out for Flora and Fauna included bats, badgers, otter, birds and amphibians and invasive species. Bat surveys were carried out at dusk on 24th May and 8th June 2021 and are included in Appendix B of the EcIA. Surveys did not identify any bats roosting onsite.

Re-Routing of Baldonnell Stream

7.9.5. The Baldonnell Stream bisects the site, and the proposed development requires this stream to be re-routed east of its current location along the existing eastern drainage ditch on site.

7.9.6. The Baldonnell Stream is a tributary to the Griffeen River and flows in a north/north-westerly direction for c. 2.1km prior to discharging into the river. The Griffeen River flows in a northerly direction for c. 4.2km from this convergence point, crossing the Grand Canal through a siphon system, before discharge into the River Liffey at the Lucan Weir.

7.9.7. The Baldonnell Stream, the Griffeen River and the section of the river Liffey where the Griffeen River joins have 'good' water quality status. A Biological Assessment of Baldonnell Stream at Profile Park carried out by Sweeney Consultancy is included in Appendix C of the EcIA. Appendix 2 of the report identifies the abundance of invertebrates.

7.9.8. It notes that the section of the Baldonnell Stream that is proposed to be moved has already been moved 60m to the east of its original course. No rare or protected species of flora or fauna was found, and the report concludes that re-routing the Baldonnell Stream to the proposed new course will not negatively impact on the aquatic and riparian habitat and could have some significant positive impacts.

7.9.9. Item 3 of the further information request identified concerns with regard to water moving in a confined space under pressure. A more natural design solution was requested to slow the movement of water through the site and general area. Additional information and details on this hydraulic section were requested.

7.9.10. The realigned watercourse has no culverted sections. The revised proposal is for the stream to meander along and includes adjacent floodplains with the backfill discharge.

7.9.11. The bed and the banks of the watercourse will have similar bed material to the existing stream. The dominant bed material will be gravel or boulder and silt only. The banks will be vegetated with native plants to reduce stream bank erosion.

7.9.12. To provide erosion protection at the bends a geotextile membrane is proposed. Instead of the gabions to provide root protection, a willow sapling is proposed.

7.9.13. Ecological enhancement measures include diverting the watercourse, associated landscaping and planting with riparian vegetation which overtime will allow for natural colonisation of freshwater ecology and wildlife.

7.9.14. The proposed attenuation pond is designed as a permanent pool with sloping banks providing shallow areas which will be planted with marsh vegetation to help foster a variety of wildlife.

7.9.15. All hedgerows and treelines bordering the site will be maintained and protected as part of the proposed works. Wildflower meadows, hibernacula and habitat piles in addition to green roofs and trellises are all proposed. The proposed additional landscaping and protected species enhancement measures will supplement the existing treelines on site in the longer term and provide additional habitats for species already existing within the area.

7.9.16. The EcIA concludes that the proposed development will not result in any significant impacts on the ecological receptors identified both on site and in the surrounding area following the implementation of appropriate mitigation measures.

7.9.17. Potential impacts are listed in Table 5.1 of the EcIA and could arise from further site clearance, soil stripping and earthworks; surface water carrying silt or hydrocarbons into the existing culvert which ultimately discharges to the River Liffey via the River Griffeen; noise, dust, lighting or other physical disturbance.

7.9.18. The proposed development will require the removal of areas of improved agricultural grassland. The relatively low ecological value of the habitats to be lost is significant at the local scale only. Retention of treelines along the site boundaries will minimise the scale of the habitat loss.

7.9.19. Bats can be adversely affected by lighting. Potential impact on bat flight paths is significant at local level. However, given the limited extent of habitat loss adverse impacts are likely to be within the site at a local scale. An updated MEP and Public Lighting Report was submitted by way of additional information which provide measures for protection of nocturnal species.

7.9.20. Potential impacts during operation may arise from lighting, noise, electromagnetic or air emissions. The lighting plan includes lux levels below the threshold of 3 lux, which will further mitigate the effect of light spill surrounding the attenuation pond and wetland habitat. The design parameters of the site mean it will not give rise to any emissions of hot air, noise or electromagnetism to any perceptible effect on sensitive receptors. The appointment of an Ecological Clerk of Works (ECoW) is proposed.

7.9.21. With respect to cumulative effects the developed aspect of the proposed site is relatively small in comparison to other developments in the locality.

7.9.22. With regard to mitigation standard construction mitigation measures are proposed. Hedgerows and treelines bordering the proposed development site will be retained where possible and strengthened with additional planting. Additional woodland and hedgerow planting will occur around the perimeter of the site, with native species. Full landscaping planting details will focus on creating areas of grassland, wildflower meadows, tree planting and wetlands. The attenuation pond and a wetland habitat are designed with the aim of creating a native woodland habitat.

7.9.23. No significant residual impacts are predicted with the successful implementation of mitigation measures. Appropriate monitoring following construction is proposed.

7.9.24. The grounds of appeal raise concern in relation to fuel storage. The applicant has clarified that the 32 no. back-up diesel generators will require 859,248 litres of fuel which will be stored in ‘belly tanks’ within each generator container. All fuel storage will be bunded with leak detection systems that conform to Irish Regulations.

7.9.25. A Construction Environmental Management Plan (CEMP) prepared by Malone O’Regan was submitted with the application and further updated by way of further information to reflect the amended proposals.

7.9.26. I have considered all the documentation in relation to ecology. (Impact of the proposed development on European sites is also considered in the appropriate assessment below). I am satisfied that any potential impact would be avoided, managed and mitigated by the measures which 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 in terms of biodiversity.

7.10. Access and Car Parking

7.10.1. A Traffic and Transport Assessment and Mobility Management Plan (Arup) accompanied the application. It notes that a number of internal roads are proposed to provide access to the site. Vehicular access will be from the north of the site using the existing road that connects with the nearest roundabout on Profile Park Road.

7.10.2. Trip generation and traffic distribution is estimated for the full development. The potential impact of trip generation, traffic impact, car parking, walking and cycling infrastructure and construction traffic are also considered. Pedestrian and cycling facilities in the vicinity of the site are of good quality with footpaths and two-way cycle lanes provided on most of the surrounding roads.

7.10.3. Mitigation includes the preparation of a Construction Management Plan during construction while an outline Construction Management Plan has been prepared by Arup and is included with the application documents.

7.10.4. The predicted impact of the general workforce during construction is considered. It is considered that construction will have a short-term impact and will generate less traffic during the peak hours than the operational stage. During operation it is considered that the proposal would have an impact of less than 5% at the junction of Profile Park Road with the R134. It is not considered necessary to undertake any further junction assessment.

7.10.5. During operation there would be 118 staff employed on site with a car (driver) mode share of 60% (71 staff). 71 car parking spaces and 26 cycle spaces are proposed to cater for the predicted 118 office staff and 18 data centre staff.

7.10.6. The Roads section of the planning authority had no objection and Transport Infrastructure Ireland had no objections either subject to requirements.

7.10.7. I have considered all the documentation in relation to traffic and transport. I am satisfied that potential impacts have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of traffic and transport.

7.11. Other Matters Arising

Waste Heat Recovery

7.11.1. 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.

7.11.2. The applicant states that the proposal is designed in a fashion that waste heat can be recovered from the scheme. Section 4.7 of the updated MEP and public lighting report outlines how a waste heat recovery system will be provided as part of the cooling strategy for the data centre buildings. The district heating operator will provide heat pumps outside the INXN for subsequent distribution to customers in the local area.

7.11.3. The applicant in response to the appeal states that they are proposing ground sourced heat pumps and waste heat recovery. Condition no. 4 of the notification to grant permission refers to waste heat requirements of the PA. If the Board are minded granting permission a similarly worded condition could be attached.

Aviation

7.11.4. Baldonnell (or Casement Aerodrome) is located to the south of the application site. The subject site is located within the Department of Defence Inner Zone Limit.

7.11.5. An Aviation Impact Assessment (AIA) was submitted to the PA in response to item 10 of the further information request to address issues raised by the Dept. of Defence, Military Air Traffic Services. This assessment considers all potential emissions with the possible effects of exhaust plumes or any other associated

impact on flight operations at Casement Aerodrome. The AIA outlines the air dispersion modelling carried out using AERMOD.

7.11.6. The results show that applying the dilution factor based on the downwind exhaust plume, the temperature for all receptor heights and does not impact on ambient conditions with the exhaust heat indistinguishable in the atmosphere from 50-200m above ground. The same applies to the oxygen exhaust content. The report concludes that the exhaust plumes from the proposed development are not expected to have an impact on the flight operations at Baldonnell Casement Aerodrome.

7.11.7. I am satisfied therefore that the concerns raised by the Dept. of Defence, Military Air Traffic Services in respect to flight operations at Baldonnell Casement Aerodrome have been addressed. If the Board are minded granting permission any further requirements of the Dept. of Defence, Military Air Traffic Services can be addressed by way of condition.

Archaeology

7.11.8. The subject site is located approx. 50m to the north of Protected Structure RPS Ref: 184 Kilbride stone Church (Ruin) and Graveyard, ringfort and earthworks. The Archaeological Assessment carried out by Reliqua submitted with the application notes that the surrounding area has yielded a considerable number of archaeological features in advance of the nearby Business Parks ranging from the Neolithic period to medieval period. It further notes that the eastern boundary of the site is formed by the townland boundary separating Kilbride and Kilcarbery Townlands. The report concludes that archaeological test excavations should be carried out on the site prior to construction.

7.11.9. I note there is no report from the Development Applications Unit DAU of the Department of Culture, Heritage and the Gaeltacht, but that a condition is attached to the final grant of permission in respect of archaeology. Given the proximity of the RPS and that the eastern boundary of the site is formed by the townland boundary, if the Board are minded granting permission, I suggest a suitably worded condition be attached.

Waste Management

7.11.10. A Construction and Demolition Resource Management Plan (C&D WMP) prepared by Arup accompanied the application. The strategic targets for waste

management are set out in the Eastern-Midlands Region Waste Management Plan 2015-2021. The South Dublin County Development Plan contains several objectives in relation to waste management.

7.11.11. The C&D WMP indicates that excavated material will be reused on site for infilling and landscaping works where possible.

7.11.12. During operations the proposal will give rise to a variety of waste streams. The majority of waste will be generated from packaging for equipment deliveries to the facility which is likely to be at its peak in the early months of operation.

7.11.13. Mitigation include the implementation of the C&D WMP and correct management of waste during operation.

7.11.14. I have considered all the documentation in respect of waste management. I am satisfied that any potential impact would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of waste management.

8.0 Appropriate Assessment

8.1. Background on the Application

The applicant has submitted a screening exercise for Appropriate Assessment as part of the Natura Impact Statement (NIS) provided with the planning application and prepared by Malone O'Regan Environmental. This NIS was updated in response to amendments to the proposed development and a revised NIS was submitted with the response to further information.

This Stage 1 AA screening exercise provides a description of the proposed development and identifies those European Sites within a possible zone of influence of the development. It has concluded that the proposed development will not cause any significant negative impacts upon the integrity of any Natura 2000 sites. These include;

- South Dublin Bay and River Tolka Estuary Special Protection Area (Site Code:004024)

Having reviewed the documents and submissions provided, I am satisfied that there is adequate information to allow for a complete examination and identification of any potential significant effects of the development, alone, or in combination with other plans and projects on European sites.

8.2. Screening for Appropriate Assessment Test of likely significant effects

The project is not directly connected with or necessary to the management of a European Site and therefore it needs to be determined if the proposed development is likely to have significant effects on a European site(s).

The proposal is examined in relation to any possible interaction with European sites designated Special Conservation Areas (SAC) and Special Protection Areas (SPA) to assess whether it may give rise to significant effects on any European Site.

8.3. Brief Description of the development:

The applicant provides a description of the project in section 3 of the NIS. I refer the Board to section 2 of this report.

8.4. Designated sites within Zone of Influence

In determining the zone of influence, I have had regard to the nature and scale of the project, the distance from the site to the European Sites, and any potential pathways which may exist from the site to a European Site. The site is not within or directly adjacent to any European Site.

The proposed development is in the Profile Park business park, within the townland of Kilbride, Dublin 22.

The site is situated within the Liffey and Dublin Bay Catchment and the Liffey sub catchment. There is one hydrological feature of note, the Baldonnell Stream which bisects the site. The proposed development requires this stream to be rerouted east of its current course along the existing eastern drainage ditch on site.

The Baldonnell Stream is a tributary to the Griffeen River and flows in a north/north-westerly direction for c. 2.1km from the weir before discharging into Dublin Bay. Dublin Bay is located 27.4km downstream of the site and forms part of the South Dublin Bay SAC, the South Dublin Bay and River Tolka Estuary SPA, the North Dublin Bay SAC and the North Bull Island SPA.

According to (the EPA database of rivers and streams) the Baldonnell Stream, the Griffeen River and the section of the river Liffey where the Griffeen River joins have '*good*' water quality status but their risk of not achieving a high-water quality status is currently under 'review' (EPA, 2021). Further downstream (c. 7km for the site) the river Liffey is considered to be '*at risk'* with an unassigned water quality (EPA, 2021).

A dry ditch runs along the southern boundary of the site, while a wet ditch is located along the eastern boundary of the site, adjacent to a mature hedgerow/treeline.

The eastern ditch has no discernible flow, while the dry ditch to the south of the site is connected to the culverted stream.

The site is not located within or directly adjacent to any Natura 2000 sites. The following sites are located within 15km of the site.

Site Name	Designation	Site Code	Distance	Direction
Rye Water Valley/Carton	SAC	001398	6.2km	NW
Glenasmole Valley	SAC	001209	7.5km	SE
Wicklow Mountains	SAC	002122	9.2km	SE
Red Bog Kildare	SAC	000397	13.8km	SW
Wicklow Mountains	SPA	004040	12.7km	SE
Poulaphouca Reservoir	SPA	004063	14.7km	SW
South Dublin Bay and River Tolka Estuary	SPA	004024	14.9km	NE

Given the distance, intervening lands and lack of impact pathways between the site and the Rye Water Valley/Carton SAC, Glenasmole SAC, Wicklow Mountains SAC, Red Bog Kildare SAC, Wicklow Mountains SPA and Poulaphouca Reservoir SPA these Natura sites have been screened out from further consideration.

The site is hydrologically connected to the South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC via the Baldonnell Stream which discharges to the Griffeen River, the River Liffey and eventually drains into Dublin Bay. North Dublin Bay SAC and North Bull Island SPA form part of Dublin Bay and are located 19km NE of the site.

South Dublin Bay SAC is located downstream of the site c 15.3km NE of the site boundary but is not considered to be affected by the proposed development given the Great South Wall separates any water discharging into Dublin Port from the South Dublin Bay Annex 1 Habitats. A similar breakwater in the form of the North Bull Wall protects the North Dublin Bay SAC and North Bull Island SPA from potential pollutants. Therefore, both these Natura 2000 sites have been screened out from further consideration.

Areas of wetland habitat that make up the South Dublin Bay and River Tolka Estuary SPA are found on the Liffey side of the Great South Wall and the North Bull Wall and therefore could be affected by a major pollution event (albeit unlikely considering the site is c.27.4km upstream). Given this hydrological connection to the South Dublin Bay and River Tolka Estuary SPA is given further consideration to assess potential impacts resulting from the proposed development.

Having regard to the above, I would concur with the applicants and consider the following Natura 2000 site to be within the Zone of Influence to include South Dublin Bay and River Tolka Estuary SPA (Site Code 004024).

8.5. **Submissions and Observations;**

All submissions and observations received from interested parties are set out in Section 3.0 of this report while section 6.0 details the grounds of appeal and the responses to same received from the applicant and the Planning Authority.

8.6. **European Sites:**

A summary of the European Sites that occur within the possible zone of influence of the development is presented in the table below.

European Site	Qualifying Interest / Special Conservation Interest	Distance from the proposed development	Connections (source-pathway-receptor)	Considered Further in Screening
South Dublin Bay and River Tolka Estuary SPA Site Code 004024	Light-bellied Brent Goose (Branta bernicla hrota) [A046] Oystercatcher (Haematopus ostralegus) [A130]	14.9km NE	Hydrological – surface water runoff/discharge	Yes

	Ringed Plover (Charadrius hiaticula) [A137] Grey Plover (Pluvialis squatarola) [A141] Knot (Calidris canutus) [A143] Sanderling (Calidris alba) [A144] Dunlin (Calidris alpina) [A149] Bar-tailed Godwit (Limosa lapponica) [A157] Redshank (Tringa totanus) [A162] Black-headed Gull (Chroicocephalus ridibundus) [A179] Roseate Tern (Sterna dougallii) [A192] Common Tern (Sterna hirundo) [A193] Arctic Tern (Sterna paradisaea) [A194] Wetland and Waterbirds [A999]			

Specific conservation objectives have been included for the SPA which is to maintain or restore the favourable conservation status of habitats and species.

8.7. **Identification of Likely Effects:**

The proposed development is on a site with hydrological connections to South Dublin Bay and River Tolka Estuary SPA via land drains and streams. The conservation objective for this Natura 2000 site is to maintain or restore the favourable conservation condition of species and as listed as Qualifying Interest (QI) or Special Conservation Interests (SCI) above.

Taking account of the characteristics of the proposed development in terms of its location and the scale of works, there is potential for significant effects upon this Natura 2000 site arising from construction activities associated with the proposed development, as well as during operation. The following issues are considered for examination in terms of implications for likely significant effects on European sites:

Construction related pollution: Possibility that the release of sediment and pollutants from the proposed development into the rerouted Baldonnell stream, Griffeen River and further downstream in the South Dublin Bay and River Tolka Estuary SPA could have detrimental impacts on fish and other wildlife.

Habitat loss/fragmentation: With regard to habitat loss and fragmentation, given the site is not located within or adjoining any European sites, there is no risk of direct habitat loss impacts and there is no potential for habitat fragmentation.

Habitat disturbance / species disturbance: The site does not support suitable habitats for protected species associated with the SPA, therefore no ex-situ impacts arise.

Operational use: There is no direct pathway via groundwater, air or land to Natura 2000 sites and the nearest European site is 6.2km from the proposed development. There is a potential direct pathway to the SPA via land drains and streams in the proximity of the site. In the absence of mitigation, an accidental pollution event could occur during the construction phase of the proposed development arising from polluting materials, such as accidental spillage of oil, sediments and concrete, entering the streams via land drains and being transported downstream could have detrimental impacts on habitats or species for the South Dublin Bay and River Tolka Estuary SPA.

I do not consider that any other European sites fall within the zone of influence of the project based on a combination of factors including the nature and scale of the project, the distance from the site to European sites, and any potential pathways which may exist from the development site to a European site. See also Table 6-1 of the applicant's NIS in relation to Screening, the conservation objectives of Natura 2000 sites, the lack of suitable habitat for qualifying interests, as well as by the information on file, and I have also visited the site.

8.8. Screening Determination

The proposed development was considered in light of the requirements of Section 177U of the Planning and Act 2000 as amended. Having carried out screening for appropriate assessment of the project, it has been concluded that the potential for significant effects on European Site South Dublin Bay and River Tolka Estuary SPA (Site Code 004024) as a result of the project individually or in combination with other plans or projects cannot be excluded in view of the Conservation Objectives of that site, and Appropriate Assessment is therefore required.

8.9. Stage 2 Appropriate Assessment

The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB, sections 177U and 177V of the Planning and development Act 2000 (as amended) are considered fully in this section. The areas address in this section are as follows:

- Compliance with Article 6(3) of the EU Habitats Directive
- Screening the need for appropriate assessment
- The Natura Impact Statements and associated documents
- Appropriate assessment of implications of the proposed development on the integrity of the European site.

8.10. Compliance with Article 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 before consent can be given.

The proposed development on the southern edge of Profile Park, a data centre development is not directly connected to or necessary to the management of any European site and therefore is subject to the provisions of Article 6(3).

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

The development has been screened in relation to any possible interaction with European sites designated as Special Areas of Conservation (SACs) or Special Protection Areas (SPA's) to assess whether the development may give rise to significant effects on any European site(s).

8.12. **Screening Determination**

Following the screening process, it has been determined that Appropriate Assessment is required as it cannot be excluded on the basis of objective information that the proposed development individually or in-combination with other plans or projects will have a significant effect on the following European site (i.e., there is the possibility of significant effect):

- The South Dublin Bay and River Tolka Estuary SPA (Site Code 004024)

8.13. **The Natura Impact Statement**

The application has been accompanied by a 'Natura Impact Statement: INXN DUB15/16 at Profile Park, Nangor Road, Clondalkin, Dublin 22 and prepared by Malone O'Regan which examines and assesses the potential adverse effects of the proposed development on the South Dublin Bay and River Tolka Estuary SPA (Site Code 004024). It has been informed by a desk-top analysis of various source material as well as an Ecological Assessment.

The NIS includes a description of the project and the receiving environment and is stated to be based on standard methods and current best practice guidance including.

- Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities (DoEHLG,2009),
- Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4), E.E.2002
- Guidelines on Protection of Fisheries During Construction Works in and around in and adjacent to Waters Inland Fisheries Ireland (IFI) 2016

- Guidelines for the crossing of watercourses during the construction of national road schemes. National Roads Authority (NRA) 2005

It outlines the characteristics of the relevant designated site while Section 7 sets out the potential impacts arising from the construction and operational phases of the development on the single European Site. Based on changes to the design of the proposed development that in the absence of mitigation the proposed development and the original planning permission may act in combination to increase the scale on the downstream South Dublin Bay and River Tolka Estuary SPA, and mitigation is therefore required.

The NIS thus concludes as follows:

'*It is considered reasonable to conclude that the proposed development will not result in any adverse effects on the basis that all recommended specific mitigation measures will be implemented. Specifically, the proposed construction and stream diversion works will be undertaken to avoid impairment to water quality*'……

'It can be concluded that the proposed development and all associated site works, alone or in-combination with other projects, will not adversely affect the integrity, and conservation status of any of the qualifying interests of the South Dublin Bay and River Tolka Estuary SPA or any other Natura 2000 sites.'

Having reviewed the documentation available to me, I am satisfied that the information allows for a complete assessment of any adverse effects of the development on the conservation objectives of the European sites listed above, alone or in combination with other plans and projects.

8.14. **Appropriate Assessment of implications of the proposed development**

The following is a summary of the detailed scientific assessment of the implications of the project on the qualifying interest features of South Dublin Bay and River Tolka Estuary SPA (Site Code 004024). All aspects of the project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects are considered and assessed. I have relied on the following guidance:

• DoEHLG (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, National Parks and Wildlife Service.

• EC (2002) Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EC.

• EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC.

8.15. **European Sites:**

The relevant European site subject to Stage 2 Appropriate Assessment is as follows:

- South Dublin Bay and River Tolka Estuary SPA (Site Code 004024)

A description of the site and the Conservation and Qualifying Interests /Special Conservation Interests is set out in Section 4.2 of the NIS as well as the screening assessment set out above. I have also examined the Natura 2000 data forms where relevant and the Conservation Objectives supporting documents for this site available through the NPWS website (www.npws.ie)

The main aspects of the proposed development that could adversely affect the conservation objectives of European sites include:

- Impacts to water quality arising from surface water discharges which contain suspended solids and/or pollutants, at the construction stage.

8.16. **Evaluation of Likely Effects**

Potential for Direct Impacts:

Given the site location outside any SAC or SPA, the proposed development will not directly impact on any natura 2000 site through the loss or fragmentation of habitats listed as qualifying interests.

Potential for Indirect & Secondary Impacts:

Impacts to water quality arising from surface water discharge that contains suspended solids and/or pollutants at the construction stage:

South Dublin Bay and River Tolka Estuary SPA (Site Code 004024)

The South Dublin Bay and River Tolka Estuary SPA is located c.14.9km from the proposed site.

The proposed development is connected to the South Dublin Bay and River Tolka estuary SPA via the Baldonnell Stream which discharges into the Griffeen River that

feeds into the River Liffey and eventually drains into Dublin Bay. Therefore, potential pathways via surface water cannot be screened out of the assessment given the potential of polluting materials from the proposed development being transported downstream causing a deterioration in water quality which could detrimentally affect the Special Conservation Interest (SCI) for the South Dublin Bay and River Tolka Estuary SPA.

Potential pathways via air and land are screened out due to the distance.

Potential impacts via groundwater are not likely to be significant based on the nature of the QI of the SPA and their supporting habitats to groundwater water pollution. The habitat suitability of the application site for SPA bird species is also ruled out.

To address potential indirect effects due to surface water pollution (construction phase) pollution-prevention measures will be employed during construction works, in order to avoid or minimise the risk of impacts on the SPA.

8.17. **Proposed Mitigation**

Section 7.1 of the submitted NIS describes protective measures to be implemented during the construction of the proposed development to avoid potential impairment of water quality and adverse effects on the SPA. This sets out that measures/actions have either avoided or reduced the potential for the proposed development to affect the conservation objectives of the identified European site:

- All works to be carried out in accordance with the submitted NIS.

<u>Sediment Control Measures</u>

- Silt traps/fences will be installed as required under the direction of the ECoW;
- Existing vegetation will be retained where possible;
- The working area will be clearly defined, and construction activities will be carefully planned to minimise ground disturbance; and
- Runoff will be diverted away from stripped areas.

Best practice guidelines will be followed which are based on Inland Fisheries Ireland (IFI, 2016) and the National Roads Authority (NRA, 2005) guidance documents.

- Construction stage works will be undertaken in accordance with an approved CEMP;

- Weather conditions will be considered when planning construction activities to minimise risk of sun off from site;
- All materials shall be stored at the main contractor compound and transported to the works zone immediately prior to construction;
- Any chemical / oils to be stored onsite will be placed within a bund on an area of hardstanding to ensure there is no seepage of pollutants into groundwater or surface water;
- All bunds will have the capacity of the largest tank volume plus 10 percent, at a minimum, with additional capacity to hold 30mm of rainfall;
- Prior to any works commencing, all construction equipment will be checked to ensure that they are mechanically sound, to avoid leaks of oil, fuel, hydraulic fluids and grease;
- Preventative maintenance and relevant maintenance logs will be kept for all onsite plant and equipment;
- Excavations will be left open for minimal periods to avoid acting as a conduit for surface water flows;

Concrete and Cement

- Any pouring of concrete will only be carried out during dry weather. Washout of concrete trucks will not be permitted on the site.
- Washouts of equipment used for concrete operations will be done either offsite or within a designated washout area, which will comprise a container that will capture the washout material/water for reuse or disposal off site;
- Any spillage of cementitious materials will be cleaned-up immediately.

Hydrocarbons and chemicals

- Steel tanks will be protected from corrosion;
- All drainage bund areas must be a dedicated tanker or in a delivery bowser dedicated to that purpose;
- The Appointed Contractor will put in place a specific, step-by-step refuelling procedure which will be communicated to all relevant employees on site;
- All valves should be of steel construction and the open and close positions should be clearly marked;

- Fuels, lubricants and hydraulic fluids for equipment used in the construction Site will be carefully handled to avoid spillage, properly secured against unauthorised access or vandalism, and provided with spill containment according to best practice;
- Vehicle or equipment maintenance work will be carried out in a designated area on the site. In the event that refuelling is required outside this are a spill tray will be employed during the refuelling operation;
- No surface water run-off will be discharged onto public roads, foul sewers or adjacent property;
- In order to prevent potential water pollution risk when drainage lines are in place but not fully commissioned, no discharge to the surface water drainage system at the site will be made until all drains are fully connected to the proposed and approved petrol interceptor; and,
- Measures will be implemented to minimise waste and ensure correct handling, storage and disposal of waste.

Proposed measures to remove the risk from potential contamination and emergency procedures to be implemented in the event of an accidental release or spill of potentially contaminating substances are also outlined.

Section 7.1.1 of the submitted NIS describes design and mitigation measures to be implemented throughout the in-river works/watercourse diversion works to prevent any adverse impact to species within the river system.

A suitable qualified ecologist must be present on-site when the watercourse is initially diverted and to ensure that the measures detailed in the NIS have been adhered to.

The Ecological Clerk of Works (ECoW) will inspect the site in advance of works commencing and will undertake site inspections as required during the works to ensure that the works will be completed in line with the mitigation measures stipulated within the CEMP.

An appropriate condition in this regard should be attached to any grant of permission if it is forthcoming.

Section 7.2 of the submitted NIS describes the proposed drainage system which will prevent any potential impairment of water quality during operation. During the

operational phase the proposed development will connect into the existing foul drainage system in Profile Park and Irish Water infrastructure.

The diversion of the Baldonnell Stream and associated drainage system design will have slight positive impacts on the quality and quantity of water on site.

Some 859,248 litres of fuel will be stored onsite to be used if the power supply is compromised. This fuel will be stored in 'bellytanks' and will be internally bunded with leak detection systems to conform to Irish regulations.

These measures will reduce the likelihood and magnitude of pollution events to negligible levels, thus preventing a significant negative impact on the conservation status of the qualifying interests (aquatic and habitats) of the South Dublin Bay and River Tolka Estuary SPA or any other Natura 2000 sites. It is considered that the implementation of these measures ensures that any direct or indirect impacts to the conservation objectives supporting the QI/SCI species of the South Dublin Bay and River Tolka Estuary SPA will not arise and will ensure that adverse effects on site integrity are avoided.

Having regard to the measures outlined as well as the application of best practice construction methods and operational practices I am satisfied that direct or indirect effects on the SPA can be ruled out with confidence.

I consider that the proposed mitigation measures set out in the NIS, are clearly described, are reasonable, practical and enforceable. I am also satisfied that the measures outlined fully address any potential impacts arising from the proposed development and that it is reasonable to conclude on the basis of objective scientific information, that the proposed development would not have an adverse effect on the South Dublin Bay and River Tolka Estuary SPA (Site Code 004024).

8.18. **In-Combination Effects**

The site is located in an urban environment on the edge of an existing business park. Construction on this site will create localised light, dust and noise disturbance. The site is the remaining phase of development on lands at this location. The overall development was subject to appropriate assessment. A review of permitted and constructed development in the vicinity has been carried out and I conclude:

- The principal sources of in-combination effect arise from run off of contaminated surface water to the local drains during the construction phase. With mitigation

measures to prevent and minimise this there is no potential for a significant adverse effect due to in combination effects with other phases of development.

- The surface water drainage has been designed to cater for the entire development and there is no potential for a significant adverse effect due to in-combination effects with other phases of development.

8.19. **Integrity Test**

Following the Appropriate Assessment and the consideration of mitigation measures, I can ascertain with confidence that the project would not adversely affect the integrity of the South Dublin Bay and River Tolka Estuary SPA (Site Code 004024) in view of the Conservation Objectives of these sites. This conclusion has been based on a complete assessment of all implications of the project alone and in combination with plans and projects.

8.20. **Appropriate Assessment Conclusion**

The proposed data centre development at lands at Profile Park, Nangor Road, Clondalkin, Dublin 22 has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act 2000 as amended. Having carried out a Stage 1 Appropriate Assessment Screening of the project, it was concluded that it may have a significant effect on South Dublin Bay and River Tolka Estuary SPA (Site Code 004024). Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of that site in light of its conservation objectives.

Following a Stage 2 Appropriate Assessment, with submission of a revied NIS, it has been determined that subject to mitigation (which is known to be effective) the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the European site South Dublin Bay and River Tolka Estuary SPA (Site Code 004024) or any other European site, in view of the sites Conservation Objectives.

This conclusion is based on:

• A full and detailed assessment of all aspects of the proposed project including proposed mitigation measures and ecological monitoring in relation to the Conservation Objectives of South Dublin Bay and River Tolka Estuary SPA (Site Code 004024).

• Detailed assessment of in combination effects with other plans and projects including historical projects, current proposals and future plans.

• No reasonable scientific doubt as to the absence of adverse effects on the integrity of South Dublin Bay and River Tolka Estuary SPA (Site Code 004024).

9.0 Recommendation

9.1. I recommend that planning permission should be **refused** for the reasons and considerations as set out below.

10.0 Reasons and Considerations

Having regard to the existing insufficient capacity in the electricity network (grid),

(a) the lack of a fixed connection agreement to connect to the grid,

(b) the lack of significant on-site renewable energy to power the proposed development,

(c) the lack of evidence provided in relation to the applicant's engagement with EirGrid,

(d) the lack of evidence provided in relation to the applicant's engagement with Power Purchase Agreements (PPAs) in Ireland

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 of the South Dublin County Development Plan 2022-2028. The proposed development is considered contrary to national regional and local policy on energy and climate resilience and adaptability.

In this regard the proposed development, would, therefore, be contrary to the proper planning and sustainable development of the area.

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

9th January 2024

Appendix 1 - Form 1

EIA Pre-Screening

[EIAR not submitted]

An Bord Pleanála Case Reference	314461-22
Proposed Development Summary	10 year permission for development consisting of removal of an existing unused waste water treatment facility on site and the erection of two data centre buildings, gas powered energy generation compound, and all other associated ancillary buildings and works.
Development Address	Profile Park, Nangor Road, Clondalkin, Dublin 22.

1. Does the proposed development come within the definition of a 'project' for the purposes of EIA? (that is involving construction works, demolition, or interventions in the natural surroundings)	**Yes**	✓
	No	No further action required

2. Is the proposed development of a class specified in Part 1 or Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) or does it equal or exceed any relevant quantity, area or limit where specified for that class?

Yes		Class……	EIA Mandatory EIAR required
No	✓		Proceed to Q.3

3. Is the proposed development of a class specified in Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) but does not equal or exceed a relevant quantity, area or other limit specified [sub-threshold development]?

		Threshold	**Comment (if relevant)**	**Conclusion**
No		N/A		No EIAR or Preliminary Examination required
Yes	✓	Part 1 Class 21 & Part 2 item 3(e)		Proceed to Q.4

4. Has Schedule 7A information been submitted?		
No		**Preliminary Examination required**
Yes	✓	**Screening Determination required**

Inspector: _____ **Date:** _____