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PR/1294/21

Reg. Reference: SD21A/0217 **Application Date:** 04-Aug-2021 **Submission Type:** New Application **Registration Date:** 04-Aug-2021

Correspondence Name and Address: Brian Coughlan West Pier Business Campus, Dun

Laoghaire, Co. Dublin

Proposed Development:

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; the two data centre buildings, DUB 15 and DUB 16, will comprise a total floor area of c. 33,577sq.m over two storeys; the first 2 storey data centre building (DUB15), located to the southwest of the site, will comprise 16,865sq.m data storage use, ancillary office use and associated electrical and mechanical plant rooms, loading bays, maintenance and storage space; a second 2 storey data centre building (DUB16), located to the southeast of the site, will comprise 16,712sq.m data storage areas, ancillary office use and associated electrical and mechanical plant rooms, loading bays, maintenance and storage space; both data centre buildings will reach a height of 20m; emergency generators and associated emission flues and plant are proposed in compounds adjacent to each data centre building; gas powered energy generation is proposed to the north east corner of the site to provide electricity for the proposed development; the application proposes to re-route and widen an existing watercourse constructed following an earlier planning permission; it is proposed to reroute this watercourse along the eastern and southern boundary of the site; landscaping is proposed to the south of the site to screen the buildings; fencing and security gates are proposed around the site; new access roads within the site are proposed along with 71 car parking spaces and 26 cycle spaces, bin stores, site lighting, and all associated works including underground foul and storm water drainage attenuation and utility cables and all other ancillary works; a Natura Impact Statement will be

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submitted to the planning authority with the

application.

Location: Profile Park, Nangor Road, Clondalkin, Dublin 22

Applicant Name: Digital Netherlands VIII B. V.

Application Type: Permission

(SW)

Description of Site and Surroundings:

Site Area

Stated as 6.181 hectares

Site Description

The site is located within Profile Park. The site is located directly to the west of the Grangecastle Golf course and takes access from a spur road that connects to one of the roundabouts at Profile Park. The lands, located directly to the north and within the ownership of the applicant, have been developed for two separate datacentres. Lands to the west remain undeveloped. The lands to the south constitute rural lands and are the buffer between the EE zoned lands and protected structures and monuments. Historic field boundaries appear to have been removed from the entire landholding and the original stream, which runs in a northerly direction, has been realigned to wrap around the eastern boundary, thereby dividing the site from the access road. The realigned stream/watercourse is devoid of vegetation. Casement aerodrome lies beyond the site to the south.

Proposal

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;
- the two data centre buildings, DUB 15 and DUB 16, will comprise a total floor area of c. 33,577sq.m over two storeys;
 - o the first 2 storey data centre building (DUB15), located to the southwest of the site, will comprise 16,865sq.m data storage use, ancillary office use and associated electrical and mechanical plant rooms, loading bays, maintenance and storage space;
 - o a second 2 storey data centre building (DUB16), located to the southeast of the site, will comprise 16,712sq.m data storage areas, ancillary office use and associated electrical and mechanical plant rooms, loading bays, maintenance and storage space;
 - o both data centre buildings will reach a height of 20m;
 - o emergency generators and associated emission flues and plant are proposed in compounds adjacent to each data centre building;
 - o gas powered energy generation is proposed to the north east corner of the site to provide electricity for the proposed development;

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- o the application proposes to <u>re-route and widen an existing watercourse</u> constructed following an earlier planning permission; it is proposed to reroute this watercourse along the eastern and southern boundary of the site;
- o landscaping is proposed to the south of the site to screen the buildings;
- o fencing and security gates are proposed around the site;
- o new access roads within the site are proposed along with 71 car parking spaces and 26 cycle spaces, bin stores, site lighting, and all associated works including underground foul and storm water drainage attenuation and utility cables and all other ancillary works;
- o a Natura Impact Statement will be submitted to the planning authority with the application.

Zoning

The site is predominantly subject to zoning objective EE – 'To provide for enterprise and employment related uses.'

An element of the site in the south is zoned 'RU' – To protect and improve rural amenity and to provide for the development of agriculture.

A small element of the access road to the north is zoned 'OS' - To preserve and provide for Open Space and recreational activities.

SEA: Indicates overlap with SFRA B and Rural. The Site is located within the Department of Defence Inner Zone.

Consultations

Pollution Control: No report received at time of writing. Water Services: Request Additional Information. No objection, subject to conditions. Roads: Heritage: No report received at time of writing. Request Additional Information. Parks: EHO: Request Additional Information. Irish Water: Request Additional Information. Comm. for Regulation of Utilities: No report received at time of writing. No report received at time of writing. Fire Officer:

Department of Defence: Observations made.

GSI: No comment.

An Taisce: Request Additional Information.

TII: No observations.

Inland Fisheries: No report received at time of writing.

Dept of Housing, Local Gov

& Heritage: No report received at time of writing.

Dept. Communications Climate

Action Env.: No report received at time of writing.

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Chief Fire Officer: No report received at time of writing.

Submissions/Observations / Representations

A number of submissions and representations were received. Matters raised were as follows:

- Application does not comply with the requirements of the Planning and Development Act 2000 as the applicant has failed to notify CRU.
- The proposal does not comply with the objectives of SDCC CDP (2016-2022, including Policy E2, objective 2, E4 objective 1 and national climate actions obligations and the Climate Action and Low Carbon Development Amendment Ace 2021 or SDCC Climate Action Plan
- Development should be subject to EIA
- Does not comply with Planning and Development Act / Habitats regulations
- Inadequate NIS information provided more expert scientific opinion required
- The AA Screening, included in the NIS, does not provide sufficient reasons or findings, as required under Article 6(3) of the Habitats Directive and national law. There is no clear methodology, analysis.
- Zone of influence in the NIS is not reasoned or explained.
- No regard given to cumulative impacts.
- Proposal will have high energy consumption and will increase carbon emissions.
- No information regarding connection to grid provided Climate Action and Low Carbon Development (amendment) Act 2021 in not referenced.
- Disproportionate number of data centres within SDCC 54 with a combined capacity of 642MW
- Landscape plan has no provision for green roofs (as required by E2 objective 8)
- Renewable energy not considered by 2027 data centres will consume 31% of electricity
- EIAR is inadequate and deficient and does not permit an assessment of the potential environmental impacts of the proposed development.
- Proposal does not consider GI / biodiversity and does not consider renewable sources. Proposal would undermine the good work of the County Council on climate action
- Eirgrid is proposing to ban additional data centres and consultation is underway

These are considered in the overall assessment of the planning application.

Relevant Planning History

SD06A/0568/EP Provision of roads and services infrastructure to facilitate the future development of a business park, to be known as 'Profile Park' on these lands. The development includes the provision of 1,675 metres of internal distributor roads consisting of 267 metres to dual carriageway standard (at the main entrance) with a further 1,408 metres to single carriageway standard and one internal roundabout. The development also includes surface water drainage, foul drainage and water supply infrastructure, associated landscaping, and all ancillary works, on a site of 39.84 hectares. Access to the site will be provided at the northern boundary off the existing roundabout to

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Kilcarbery Business Park. This application is accompanied by an Environmental Impact Statement. **Grant Extension of Duration.**

SD17A/0377 Revisions and alterations of the permitted development of a data processing facility under planning Ref: SD12A/0002 on a 3.85-hectare site. The revised application consists of alterations to the DUB14 (previously DUB12) data centre/warehouse structure, granted in the previous application. The alterations to the DUB14 (Previously DUB12) include: (i) 2 data halls 2137sq.m (increase of 180sq.m), (ii) offices/reception 478sq.m (decrease of 190sq.m), (iii) support space/staff facilities and internal plant with a floor area of 953sq.m (increase of 84sq.m), (iv) external plant of 1,777sq.m (footprint increase of 35sq.m). The data centre part of the building is single storey reaching a maximum of 8.6 m in height. The plant area is to a maximum of 10.5m high and the office building has been lowered one storey and is 9.1m in height (decrease from 12.3m). The development will be constructed in 5 phases, currently Phases 1 & 2 have been completed with the enabling site works and 2 substations and single warehouse building to the North of the site. The subsequent phases will contain a single warehouse building starting with Phase 3, the application in which this Site Notice relates. A total of 84 (60 at the end of Phase 3) car parking spaces will be provided together with recycling storage and all ancillary services and landscaping. There will be 2 site entrances from vehicular accesses permitted as part of business park infrastructure (SD06A/0568). Grant permission.

SD12A/0002/EP Revisions and alterations to the permitted development of a data processing facility under planning reference SD11A/0023 consisting of minor alterations to the four permitted data centre/warehouse structures, additional internal floor areas, alterations to sub-station structures and car park layout to be provided on a phased basis (it is proposed to extend the life of the planning permission to 7 years). The construction of the four data centre/warehouse buildings totals 23278sq.m. (an increase of 2188sq.m.) and associated site works comprising the following areas: Two Type 'A' buildings each with 1872sq.m. of data halls, 697sq.m. of offices/reception, 1934sq.m. of support space/staff facilities/internal plant giving each a total internal floor area of 4503sq.m. (previously 3582sq.m.) and 1483sq.m. of external plant - total area for both Type 'A' is 11972sq.m. (previously 11094sq.m.); Two Type 'B' buildings each with 1872sq.m. of data halls, 419sq.m. (previously 67sq.m.) of offices/reception; 1879sq.m. support space/staff facilities/internal plant giving a total internal floor area of 4170sq.m. (previously 3005sq.m.) and 1483sq.m. of external plant - total area for both Type 'B' structures is 11306sq.m. (previously 9996sq.m.) Centre part of the building is single storey reaching a maximum of 8.6m in height; the plant area is to a maximum of 10.7m high (increase from 9m) and the tallest building is Type 'A' office building is 12.5m in height (increase from 10m). 4 substations accessed from the estate road to facilitate the development are now proposed; each has an area of 49sq.m. and will be 3.75 metres in height. The development will be constructed in 5 phases initially with the enabling site works and 2 substations; the subsequent phases will contain a single warehouse building starting with the northern-most building. A total of 84 car parking spaces will be provided together with recycling storage and all ancillary services and landscaping. There will be 2 site entrances from vehicular accesses permitted as part of business park infrastructure (SD06A/0568). Refuse Extension of **Duration.**

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SD12A/0002 Revisions and alterations to the permitted development of a data processing facility under planning reference SD11A/0023 consisting of minor alterations to the four permitted data centre/warehouse structures, additional internal floor areas, alterations to sub-station structures and car park layout to be provided on a phased basis (it is proposed to extend the life of the planning permission to 7 years). The construction of the four data centre/warehouse buildings totals 23278sq.m. (an increase of 2188sq.m.) and associated site works comprising the following areas: Two Type 'A' buildings each with 1872sq.m. of data halls, 697sq.m. of offices/reception, 1934sq.m. of support space/staff facilities/internal plant giving each a total internal floor area of 4503sq.m. (previously 3582sq.m.) and 1483sq.m. of external plant - total area for both Type 'A' is 11972sq.m. (previously 11094sq.m.); Two Type 'B' buildings each with 1872sq.m. of data halls, 419sq.m. (previously 67sq.m.) of offices/reception; 1879sq.m. support space/staff facilities/internal plant giving a total internal floor area of 4170sq.m. (previously 3005sq.m.) and 1483sq.m. of external plant - total area for both Type 'B' structures is 11306sq.m. (previously 9996sq.m.) Centre part of the building is single storey reaching a maximum of 8.6m in height; the plant area is to a maximum of 10.7m high (increase from 9m) and the tallest building is Type 'A' office building is 12.5m in height (increase from 10m). 4 substations accessed from the estate road to facilitate the development are now proposed; each has an area of 49sq.m. and will be 3.75 metres in height. The development will be constructed in 5 phases initially with the enabling site works and 2 substations; the subsequent phases will contain a single warehouse building starting with the northern-most building. A total of 84 car parking spaces will be provided together with recycling storage and all ancillary services and landscaping. There will be 2 site entrances from vehicular accesses permitted as part of business park infrastructure (SD06A/0568). Grant Permission.

SD11A/0023 Development of a data processing facility on a 4.04ha site consisting of: the construction of four buildings totalling 21090sq.m. and associated site works comprising the following: two 'Type A' buildings each with a data hall (1870sq.m.), offices/reception (607sq.m.), support space/staff facilities and internal plant with a floor area of 3572sq.m. each and external plant 1975sq.m. each (total 'Type A' structures is 11094sq.m.); two 'Type B' buildings each with a data hall (1870sq.m.), reception (67sq.m.), support space/staff facilities and internal plant with a floor area of 3005sq.m. each and external plant of 1993sq.m. each (total Type B structures is 9996sq.m.). The Data Centre part is single storey reaching a maximum of 8.2 metres in height; the plant area is to a maximum of 9.2 metres and the office block is 10 metres in height. A substation to facilitate the development is also proposed with 16sq.m. area and will be 2.6 metres in height. The development will be constructed in two phases with building No.s 3. and 4 built initially. 84 car parking spaces will be provided together with recycling storage. There will be 2 site entrances from the existing crossovers already established as part of business park infrastructure. Surface and foul drainage has been designed to utilize existing sewer system and all retention of surface water and drainage will be in accordance with the agreed design criteria. Lighting and landscaping have been designed with the approved masterplan and site owners. **Grant Permission.**

SD08A/0239 Temporary single storey prefabricated 'shomera' structure of 98.58sq.m. which will be used as a marketing suite/site office for the 'Profile Park' business park for a period of

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approximately 3-5 years. The structure is located adjacent to the eastern boundary of the business park, to the south and west of Grange Castle Golf Course. The development includes a temporary new access off the internal road network which amends the road layout permitted under planning application reg. ref. SD06A/0568, landscaping and site works, all on a site of approximately 1 hectare. **Grant Permission for Retention.**

SD07A/0665 A 'Trade Park' consisting of 35 units in 5 separate blocks and a single office/showroom building (5 units). The units range in scale from 171 sqm (gross floor area) to 1,519 sqm (gross floor area) with a total gross floor of approx. 10,998 sqm, and 336 no. parking spaces. Each trade park unit (in Blocks B to F) shall be for trade park use only comprising storage/enterprise/workshop use and customer service/showroom/sales space for both trade and public customers. Block A (804 sqm) is a signature two storey building comprising of 4 no. units for office and showroom use and a coffee shop of approx. 120 sqm (in Unit 2); Block B (2,130 sqm) is a double height single storey building (including 534 sqm at mezzanine level) comprises of 9 no. units for trade park use; Block C (2,130 sqm) is a double height single storey building (including 534 sqm at mezzanine level) comprises of 9 no. units for trade park use; Block D (1,519 sqm) is a double height single storey unit for trade park use with single storey element to North elevation; Block E (3,195 sqm) is a double height single storey building (including 795 sqm at mezzanine level) and comprises of 15 no. units for trade park use; Block F (1,519 sqm) is a double height single storey unit for trade park use with single storey element to North elevation. The development also includes surface water drainage, 3 no. ESB substations, foul drainage and water supply infrastructure, yard areas, associated landscaping and all ancillary works, on a site of approx 3.54 hectares. Access to the site will be provided from the Northern boundary off the existing roundabout to Kilcarbery Business Park, via the internal road network permitted under Reg. Ref. SD06A/0568. Grant Permission.

SD06A/0568 Provision of roads and services infrastructure to facilitate the future development of a business park, to be known as 'Profile Park' on these lands. The development includes the provision of 1,675 metres of internal distributor roads consisting of 267 metres to dual carriageway standard (at the main entrance) with a further 1,408 metres to single carriageway standard and one internal roundabout. The development also includes surface water drainage, foul drainage and water supply infrastructure, associated landscaping and all ancillary works, on a site of 39.84 hectares. Access to the site will be provided at the northern boundary off the existing roundabout to Kilcarbery Business Park. This application is accompanied by an Environmental Impact Statement. **Grant Permission.**

Relevant Enforcement History

None recorded for subject site.

Pre-Planning Consultation

PP019/21 Development of the remainder of the site comprising two data centre buildings, an energy centre, access roads, services and landscaping.

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The two data centre buildings, located to the south of the site, will comprise c. 17,000m2 warehouse space to comprise a data centre. The buildings will be predominantly 13.6m. The energy centre, located towards the northeast of the site, will provide sustainable energy generation for the site. Electricity will be produced from gas at this location.

Planning Policy and Guidance

Relevant Policy in South Dublin County Council Development Plan (2016-2022)

Section 1.12.0 Employment Lands

Section 4.2.0 Strategic Policy For Employment

Policy ET1 Economic and Tourism Overarching Policies and Objectives

It is the policy of the Council to support sustainable enterprise and employment growth in South Dublin County and in the Greater Dublin Area, whilst maintaining environmental quality.

Policy ET3 Enterprise and Employment (EE)

It is the policy of the Council to support and facilitate enterprise and employment uses (hightech manufacturing, light industry, research and development, food science and associated uses) in business parks and industrial areas.

ET3 Objective 2

To prioritise high tech manufacturing, research and development and associated uses in the established Business and Technology Cluster to the west of the County (Grange Castle and Citywest areas) to maximise the value of higher order infrastructure and services that are required to support large scale strategic investment.

ET3 Objective 5

To ensure that all business parks and industrial areas are designed to the highest architectural and landscaping standards and that natural site features, such as watercourses, trees and hedgerows are retained and enhanced as an integral part of the scheme.

ET3 Objective 6

To ensure that business parks and industrial areas are designed to promote walking, cycling and public transport.

Section 6.4.4 Car Parking Policy TM7 Car Parking

Section 7.1.0 Water Supply & Wastewater Policy IE1 Water & Wastewater

Section 7.2.0 Surface Water & Groundwater Policy IE2 Surface Water & Groundwater

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Section 7.3.0 Flood Risk Management Policy IE3 Flood Risk

Section 7.5.1 Waste and Resource Policy and Legislation Policy IE5 Waste Management

Section 7.6.0 Major Accidents Directive Policy IE6 Major Accidents

7.7.0 Environmental Quality Policy IE6 Environmental Quality

Policy IE8 Casement Aerodrome

Section 8.0 Green Infrastructure Policy G5 Sustainable Urban Drainage Systems Policy G6 New Development in Urban Areas

Section 9.3.1 Natura 2000 Sites Policy HCL12 Natura 2000 Sites

Section 10.0 Energy

Policy E3 Energy Performance in Existing Buildings

Policy E4 Energy Performance in New Buildings

Policy E5 Waste Heat Recovery & Utilisation

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 processes associated with the primary operation on site generates waste heat.

E5 Objective 1

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 processes associated with the primary operation on site generates waste heat.

Section 11.7.6 Waste Heat Recovery & Utilisation

Table 11.18: Key Principles for Development within Enterprise and Employment Zones

Section 11.2.1 Design Statements

Section 11.2.5 Enterprise and Employment Areas

Section 11.2.7 Building Height

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Section 11.4.1 Bicycle Parking Standards

Table 11.22: Minimum Bicycle Parking Rates

Section 11.4.2 Car Parking Standards

Table 11.23: Maximum Parking Rates (Non Residential)

Section 11.4.4 Car Parking Design and Layout

Section 11.4.6 Travel Plans

Section 11.6.1 (i) Flood Risk Assessment

Section 11.6.1 (ii) Surface Water

Section 11.6.1 (iii) Sustainable Urban Drainage System (SUDS)

Section 11.6.1 (iv) Groundwater

Section 11.6.1 (v) Rainwater Harvesting

Section 11.6.1 (vi) Water Services

Section 11.6.3 Environmental Hazard Management

Section 11.6.3 (i) Air Quality

Section 11.6.3 (ii) Noise

Section 11.6.3 (iii) Lighting

Section 11.6.4 Major Accidents – Seveso Sites

Section 11.6.5 Waste Management

Section 11.7.2 Energy Performance In New Buildings

Section 11.8.1 Environmental Impact Assessment

Section 11.8.2 Appropriate Assessment

National and Regional Policy

Project Ireland 2040 National Planning Framework, Government of Ireland, 2018.

Government Statement on The Role of Data Centres in Ireland's Enterprise Strategy, June 2018.

National Climate Action Plan 2019

Regional Spatial & Economic Strategy 2019-2031, Eastern & Midland Regional Assembly (2019)

Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government, (2009)

Assessment

The main areas for consideration are the following:

- Data Centres Power Generation
- Zoning and Policy
- Ten Year Permission
- Residential Amenity

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- Design and Visual Amenity
- Parking, Transport and Access
- Services and Drainage
- Archaeology and Protected Structures
- Landscaping
- Energy Analysis
- Ecology / Heritage
- Aviation safety
- Environmental Impact Assessment
- Appropriate Assessment

Data Centres – Strategic Context

Principle, Power Supply & Climate Action

Project Ireland 2040 (National Planning Framework and National Development Plan 2018-2027) includes an objective for the promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities. The strategic importance of data centres is reflected in the thematic infrastructure priorities in Project Ireland 2040, which embeds policy support for data centres into the planning policy hierarchy. The 2018 Government Statement on The Role of Data Centres in Ireland's Enterprise Strategy sets out that data centre development is supported.

It is noted that the application outlines that the proposal will not connect to the electricity grid due to the current limited power availability of power in Ireland from Eirgrid. Power will initially be provided by an on-site Energy Centre, compromising five gas powered generators. This will serve the first phase of development up to 10MW. The applicants state that it is the long term intention for a grid connection to be established for the electrical demand of both data centres of 52MW. The Energy Centre will be decommissioned when the facility is transferred to the grid supply.

Notwithstanding that data centres are generally supported by National planning policy they are also subject to policy on climate change and adaptation, which in essence is to provide for climate resilience. In terms of policy at a national level, National Strategic Outcome 8 of the NPF seeks to transition to a low carbon and climate resilient society. Whilst at a regional level Chapter 7 of the Eastern & Midland Regional Assembly RSES seeks to decarbonise the energy sector with a shift from its reliance on using fossil fuels and natural gas as its main energy source to a more diverse range of low and zero-carbon sources.

Ireland's Climate Action Plan 2019 laid out a roadmap to reduce our greenhouse gas emissions and tackle the climate crisis. Implementing the Plan is helping to meet the overall 2030 climate commitments and putting Ireland on the pathway to achieving net zero emissions by 2050. The Plan outlined 183 Actions across all sectors, with responsibilities and clear timelines for delivery mapped out.

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Action 20 of the Climate Action Plan, 2019 clearly states

"Implement energy actions under the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy to ensure that large demand connections are regionally balanced to minimise grid reinforcements".

In terms of local policy the South Dublin County Development Plan (2016-2022) is relevant and includes an Energy Chapter. Chapter 10 – Energy of the County Development Plan (2016-2022) is relevant and states that 'South Dublin County should aspire to becoming as carbon neutral as possible and make every effort to increase energy efficiency and unlock renewable energy potential.' Chapter 10 of the CDP is clear in its focus on moving away from carbon-based fossil fuels including gas and the use of alternative non-polluting, low carbon and renewable energy sources such as wind, solar, hydro, and geothermal.

Whilst it is apparent that there is planning policy support for data centres, there is also a need to balance the demand for development with climate action as well as the capability of the national grid to provide for such developments. The Planning Authority has concerns in relation to the climate impact of the Energy Generating Plant and also the implementation of Action 20 in the Climate Action Plan.

In light of this, the applicant should be requested to clarify:

- The appropriateness of the proposal for an on-site gas plant based on national, regional and local policy in terms of energy requirements and climate change;
- provide more detail regarding the alternative sources of power generating assessed as part of the alternatives.
- consider whether it is possible to incorporate a portion of renewable energy generation.
- Information on whether the existing site is serviced in terms of utilities and if not the proposals for undertaking the development required to facilitate servicing.
- Its connection to the surrounding area and national gas grid

Furthermore, the applicant is advised that the Planning Authority is concerned in relation to the number and extent of large demand connections in this area and the demand for future grid reinforcements. The absence of power via Eirgrid and the use of gas powered generators does not align with all of the policies in the Development Plan in particular on Energy.

County Development Plan – Zoning

The majority of the site is in an area zoned EE: 'to provide for enterprise and employment related uses, where 'Industry – general', 'industry – light' and 'office – based industry' uses are permitted in principle within the zoning objective.

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Economic and Tourism Policy ET Enterprise and Employment (EE) states,

'It is the policy of the Council to support and facilitate enterprise and employment uses (high-tech manufacturing, light industry, research and development, food science and associated uses) in business parks and industrial areas'.

ET3 Objective 2 seeks 'To prioritise high tech manufacturing, research and development and associated uses in the established Business and Technology Cluster to the west of the County (Grange Castle and Citywest areas) to maximise the value of higher order infrastructure and services that are required to support large scale strategic investment.'

ET3 Objective 5 states:

'To ensure that all business parks and industrial areas are designed to the highest architectural and landscaping standards and that natural site features, such as watercourses, trees and hedgerows are retained and enhanced as an integral part of the scheme'.

The proposed demolition of the wastewater treatment facility is also considered acceptable in principle, given the zoning and the surrounding context.

It is noted that the floorplans are annotated with 'ancillary space' for the data centres. The applicant has provided floorplans which indicate the use of this space. The ancillary space is quite significant, providing the following floorspace:

DUB15:	DUB16
L0 – 940sq.m	940sq.m
L1 - 1049sq.m	1028sq.m
L2 – 131sq.m	133sq.m

It is noted that the majority of this space provides LV rooms, technical rooms and switchrooms. It is noted that 'customer offices' are provided. The applicant is requested to provide further details of this space, in terms of the sq.m and the functionality. The applicant is requested to address this matter via **additional information.**

The gas-powered generators are considered to fall under 'Public Services' as defined in Schedule 5: Definition of Use Classes & Zoning Matrix Table of the County Development Plan (CDP) which is permitted in principle within lands zoned EE.

A significant portion of the site (running along the southern boundary) is zoned 'RU' – 'To protect and improve rural amenity and to provide for the development of agriculture'. The applicant includes this rural zoned land within the parameters of the site, and it is proposed to provide a hydrant pump room and two tanks and landscaping on this section of the land alongside the rediversion/re-alignment of the historic stream. The applicant, in essence, is proposing the use of the rural zoned lands to provide for supporting infrastructure and landscaping relief for the proposed

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development. The proposed size, bulk, scale and mass of the development and the land coverage the buildings, including those previously granted to the north of the site, will take up is significant and can be deemed to be an overdevelopment of the site.

This issue was raised at Pre-Planning stage by the Planning Authority and the applicant was informed that this aspect would be looked upon unfavourably. Any development proposed on lands zoned for Enterprise and Employment is required to comply with policies and objectives contained within the current County Development Plan. Chapters 7 and 8 require natural solutions and significant green infrastructure to form planning proposals on EE zoned land. In this regards any landscaping and works proposed on the RU zoned land should comply with the zoning objective to protect and improve rural amenity and to provide for the development of agriculture. It is not considered that the security fence, hydrant pump and two tanks support the zoning objective. Furthermore, if this landscaped area is to be acceptable as part of the overall development lands it would only be considered over and above Green Infrastructure and natural solutions being provided within the EE zoned lands. ADDITIONAL INFORMATION.

A sliver of land running along the northern boundary of the site is zoned 'OS' with an objective 'To preserve and provide for Open Space and recreational activities'. This appears to be incorporated within the parameter of the site to provide for the realignment of the existing watercourse. This is noted and is assessed below.

Ten Year Permission

The applicant is seeking a ten-year permission. Having regard to the speed in which policy in relation to renewable energy, climate change and adaptation is changing and having regard to inroads being made into new technologies and evolving very quickly and a new County Development Plan in place in 2022 a permission of 5-years is considered an apt timeframe for the development of this type of development.

Connection to Grid

In addition to the assessment under Strategic Context above, connection to the grid is assessed in more detail. The applicant has stated that:

- The proposed generators would provide the first phase, DUB15, with power.
- Future phases would import from the grid, allowing the data centres 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.

The Planning Authority has concerns regarding the above. The applicant has not indicated what will happen to the onsite gas facility when it is no longer needed. Also, the applicant indicates that it would serve DUB15 only and has not indicated if it would have the capacity to serve DUB16.

The applicant states that, in the future, the site would be connected to the grid. No connection details have been provided. Further to this, the applicant states that the site will be reliant on a gas

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power plant at Profile Park as back up. The Planning Authority note that there is an ongoing application for such a facility, however, the site does not currently benefit from planning permission. The applicant cannot therefore rely on its implementation for power generation for this site.

An Taisce has raised the connection to the grid within their comments.

The Planning Authority has referred the application to the Commission for the Regulation of Utilities. However, no comments have been provided at the time of writing this report. The applicant has not indicated whether they have consulted with this body or with Eirgrid. It is not apparent that the applicant has considered renewable energy as a means of power generation. ADDITIONAL INFORMATION.

Residential Amenity – Environmental Health

The EHO has stated:

The subject development seeks permission for the following components:

- Two new data centre buildings
- Energy centre with gas turbines to power the proposed development
- Diesel generator yards to provide emergency power to the proposed
- development
- Roof top condensers
- Air Handling units

The main concern from Environmental Health relates to the potential impact with regards to operational noise. Should the background noise level in this area be increased this could lead to long term negative impacts for the surrounding residential receivers, the nearest of which is located closeby, approximately 60 – 70 meters from the proposed development.

The existing background noise level for the nearest receiver is reflected in the noise monitoring location "NMT2" which was located to the rear of the farmhouse. The background noise (LA90) level at this location is 39dB daytime and 34dB for the night time period as highlighted under Table 9. Table 14 of the acoustic report predicts the cumulative noise level at "NSR 1" will be 43dB. Whilst the report references this change as a 3dB increase in noise, this is not a true representation of the increase to the existing environment, as highlighted below:

Existing background noise level (LA90) at NSR1 = 34dB Night time (Table 9)
Predicted cumulative noise level at NSR 1 = 43dB Night time (Table 14)
An increase of 9dB for the night time period equates to a doubling of noise and therefore is likely to impact on the residential receiver. This impact would be particularly noticeable during the night time period when people are sleeping.

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It is noted that profile park is the subject of other planning developments of similar nature. It is therefore important to ensure that incremental noise increases to the background noise level do not occur as this can lead to "background creep" occurring.

The term "Background creep" refers to the process by which noise levels progressively become higher over time. This can occur in quite areas that have been developed for industrial use whereby there is a slow progression of development in the area which leads to an accumulation of noise sources. At an overall planning level it is also important to ensure that the integration of large commercial developments into quiet areas is done so without increasing the existing night time noise levels.

The proposal is not acceptable to the Environmental Health Department until the following information is submitted and reviewed:

Table 14 of the acoustic report predicts the cumulative noise level at "NSR 1" will be 43dB. Whilst the report refers to this change in noise level as a 3dB increase, this is not a true representation of the increase to the existing environment, as highlighted below:

Existing background noise level (LA90) at NSR1 = 34dB Night time (Table 9)

Predicted cumulative noise level at NSR 1 = 43dB (Table 14)

An increase of 9dB for the night time period equates to a doubling of noise and therefore is likely to impact on the residential receiver. This impact may be particularly noticeable during the night time period when people are sleeping. This increase must be mitigated against in order to prevent potential noise complaints arising in the future.

It should be noted that whilst the acoustic report advises that it will comply with the "identified" criteria, it is the role of the Environmental Health Department to assess the potential impact of a development on the existing environment. The proposed application highlights a potential for noise to impact on a residential receiver. The noise levels predict a moderate change in the noise level at the nearest receiver during the night time period.

- The applicant is required to assess and re-evaluate all noise emitting equipment proposed on site in this application.
- The applicant must undertake necessary modifications to the proposed structures and operations on site in order to reduce the predicted noise levels at the nearby receivers to an acceptable level during both day and night time.
- The development must not give rise to noise levels that exceed the background level for evening and night time periods.
- The applicant must demonstrate the development can meet the standards set out by South Dublin County Council as noted below:

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Noise due to the normal operation of the proposed development, expressed as Laeq over 15 minutes at the façade of a noise sensitive location, shall not exceed the daytime background level by more than 10 dB(A) and shall not exceed the background level for evening and night time. Clearly audible and impulsive tones at noise sensitive locations during evening and night shall be avoided irrespective of the noise level.

Further clarification required:

- Table 16 of the report indicates a significant impact is predicted to occur at NSR 1 during emergency testing however the report does not specify how frequent this scenario is likely to occur and its duration. This must be clearly specified in the amended report. If these events are likely to occur multiple times over the course of a month, mitigation measures will need to be put in place to reduce the noise emissions to a more appropriate level.
- The amended acoustic report must include the exact times for which noise monitoring was undertaken during both daytime and night time.

Additional information is therefore requested.

Design and Visual Amenity

Design Statement

Section 11.2.1 Design Statements of the CDP requires developments over 1,000sq.m to be accompanied by a Design Statement consisting of a site analysis, a concept plan and/or masterplan, a statement based on the design criteria listed in Section 11.2.0 and/or tables 11.17 and 11.18 and a statement or Quality Audit addressing street design as outlined within the Design Manual for Urban Roads and Streets.

The applicant has submitted a design statement. This sets out:

- Details of the proposal
- Details of the operator
- Existing site analysis
- Details of site constraints
- Site strategy / masterplan
- Proposed layout
- Landscaping details
- Transport, access and parking strategy
- Pedestrian and cycle access
- Security strategy
- Design and layout
- Height
- Elevations, design and materials

The design statement is considered adequate in this instance.

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Visual Amenity

The site is currently part greenfield, part has the wastewater treatment works to be demolished. Some of the site is currently hardstanding. It is located to the south of profile park and is currently hardstanding. The proposed development includes some tall features. It should be noted that, at the pre-planning meeting, the Planning Authority requested that the applicant carefully consider the visual impact of the proposal. Photomontages / CGIs were requested, to include detail on the impact on nearby protected structures.

The applicant has provided CGIs/photomontages. 7 viewpoints are detailed:

- 1. VP1: Within Profile Park, at access point to site structures highly visible but do not appear out of place in the context. Design detail on front elevations is apparent from this location and is welcomed
- 2. VP2: West of the site, within Profile Park. The proposal would, again, be highly visible. This elevation (west) does not incorporate the same design detail as the front elevation. Whilst it is noted that this is not the principal elevation and it is internal within the business park, the Planning Authority have concerns regarding the blank façade created, which is not improved by the proposed boundary treatment, which appears as a solid wall of the same colour as the building. There are flues on this elevation, but it is not apparent that they are significantly more prominent than the main building.
- 3. VP3: Southwest of the site, Baldonnel Road. The proposed development would not be visible from this location, due to the existing landscaping.
- 4. VP4: Also, Southwest of the site, Baldonnel Road, closer to Casement Aerodrome. The proposed development would not be visible from this location, due to the existing landscaping.
- 5. VP5: Immediately south of the site, Baldonnel Road. The site is highly prominent, with significant blank facades. The buildings are significantly taller than the landscaping. The Planning Authority has significant concerns regarding the visual impact of this element of the proposal, given it is adjacent to the rural zoning. The applicant is, therefore, requested to consider how the visual impact could be reduced at this location, in terms of both the design of the buildings and also the provision of additional landscaping. The Planning Authority suggest that green walls are provided at this location.
- 6. VP6: Southeast of the site, Baldonnel Road. The proposed development would not be visible from this location, due to the existing landscaping.
- 7. VP7: Further east of the site, Baldonnel Road. The proposed development would not be visible from this location, due to the existing landscaping.

It is noted that a limited range of views have been provided and the applicant is requested to provide additional views from Grange Castle Golf Club/R136 to the from Nangor Road, to the north and

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demonstrating clearly the site within the context of the protected structures and recorded monuments (from both east and west). This should be addressed via **additional information**.

The data centres and the flues would be 20m in height. This is taller than the existing development on the site, but in keeping with the scale of similar developments in the area. In terms of materials, there would be a significant level of metal cladding on the buildings. Glazing would be provided on some of the elements at the entrance to the building.

It is noted that the site is internal within Profile Park, however, it is immediately adjacent to both open space and rural zoned lands and in the immediate vicinity of protected structures and recorded monuments. The surrounding lands are predominantly undeveloped. It is noted that the land surrounding the proposed development would likely be developed in the future, however, it is considered that the proposal should be considered on its current impact. It is noted that the landscaping has been provided outside the EE zoned lands and within the RU zoned lands. Given the sensitive location of the site, it has potential to have a significantly greater impact visually on the surrounding area than other sites located within Profile Park and therefore requires high quality and sensitive design proposals. The Planning Authority do not consider that the existing proposals meet these requirements. ADDITIONAL INFORMATION.

Overall, the Planning Authority has concerns over the mass and bulk of the main building and the level of development overall on the site. The Planning Authority is of the opinion that the site represents an overdevelopment of the site, and the applicant is requested to address these concerns via **additional information**. Revised plans and photomontages should be provided.

The ancillary buildings do not appear prominent in the overall context of the site. However, it is noted that none of the viewpoints have been taken from the east.

For clarity, the other elements of the proposal consist of:

- Removal of wastewater plant (east of site, adjacent to golf course)
- Switch rooms and gas plant within site to the east, adjacent to golf course and existing data centres
- Car parking between energy centre compound and DUB16, as well as north of DUB15
- Pump house and hydrant tanks to the south of DUB16.

It is noted from the engineering plans that a retaining wall is proposed to the west of the site. It is noted that details of cut and fill have been provided on drawings IE-DUBZZ-ZZZZ-ZZ-ARP-DR-C-1100(1, 2,3, 4) The Planning Authority has concerns regarding the design of the proposed development and the extent of the proposed cut-and-fill. The applicant is requested to provide **additional information** as follows:

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- (i) Demonstrate how the siting and location of the proposed development responds appropriately to the natural topography of the site and to the historic fabric in the immediate vicinity of the site (Protected Structures and recorded monuments) and would improve upon and enhance natural characteristics. This should be based on a thorough site analysis and context review. The applicant is advised that in order to minimise ecological and visual impacts, development on sites with a steep or varying topography should utilise the natural slope of the landscape and avoid intrusive engineering features as per Section 2.3.6 of the 2016 2022 Development Plan.
- (ii) Provide details of any retaining structures.

The Planning Authority notes that security fencing is proposed. In addition to this a site boundary fence (1.2m high timber post and rail) is being provided. It is not evident that the proposed fencing has been included on contiguous elevations / visuals. It is also noted that in some instances, the 3m high security fence runs along the site boundary (to the south and west). The Planning Authority acknowledge that security fencing is necessary. However, it should be behind landscaping in all instances and pay specific regard to sensitivities in the area including rural zoned land and proximity to protected structures and recorded monuments — the applicant is requested to address this via **additional information.** This information should also be presented on visuals, where appropriate.

Parking, Transport and Access

The Roads Department has stated:

"Access & Roads Layout:

The access is from existing roads within profile park industrial estate. An auto track has been provided detailing fire tender access.

Permeability:

The overall permeability around the development is acceptable and pedestrian access is from existing footpath within the industrial park.

Car Parking:

The parking requirement is for 377 spaces considering the development can be warehousing, the applicant states this provision would be excessive for a data centre, therefore the number of car parking spaces has been reduced to 71 spaces based on the transport assessment, roads are satisfied with the justification.

Bicycle Parking:

A similar rational to the number of bicycle parking spaces has been applied as the carparking. The requirement is for 169 spaces, the applicant is rationalising to 26 bicycle spaces based on the transport assessment of 22% of staff using bicycles. This is acceptable to the Roads Department".

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There are no objections, subject to conditions.

Services and Drainage

The Water Services Department has assessed the proposal and in the initial report requested additional information relating to:

- attenuation calculations
- surface water drawing showing location of hydro-brakes and discharge rates of same.
- Distance between development and the top of the bank of the stream
- 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 a subsequent report, the following was stated:

The applicant should:

- Use SuDS systems to attenuate surface and not concrete tanks.
- Submit a report and drawing to show what surface water attenuation can be provided across the site.
- Provide a cross section and longitudinal section of existing and proposed stream realigning.

It is noted that Water Services has raised concerns regarding the 10m setback and the watercourse. It is noted that the design statement does indicate the 10m setback, however, the applicant is requested to clarify that the area does not include any built development and is taken from the top of the bank. The applicant is also requested to provide further details of the watercourse as existing and as proposed, providing an overlay and indicating culverts to be removed etc. The County Development Plan policy seeks to retain watercourses in situ and to protect them from development and culverting. Only in exceptional circumstances would the Planning Authority consider the diversion of streams. The applicant has not submitted a significant justification, which should include a substantial ecological upgrade of the existing realigned watercourse and also a demonstration that the realigned stream will act as an ecological conduit and achieve ecological maturity within a very short time. Maturity should be demonstrated within two years of its realignment. The Planning Authority welcomes the opening of culverts, and substantial ecological benefits. ADDITIONAL INFORMATION.

Attenuation tanks are proposed on the site. The Planning Authority notes that no natural solutions are proposed to manage surface water drainage. The following attenuation on site (outlined in red) is proposed:

- (a) DUB 14 reinstated reinforced concrete attenuation tank
- (b) DUB 15
 - i. Reinforced concrete tank No. 1 (586.1 cubic metres)
 - ii. Reinforced concrete tank No. 2 (640.2 cubic metres)

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- (c) DUB 16 Reinforced concrete tank (856.75 cubic metres)
- (d) Energy Centre reinforced concrete attenuation tank (396.3 cubic metres)

Each of these tanks are contrary to County Development policy and objectives. No effort has been put into incorporating natural solutions for this development, to include SUDS and Green Infrastructure. This is significant and unacceptable, especially when considering potential flooding to the north of the site and downstream. The applicant should be requested to revise the proposals to incorporate natural solutions, increased SUDS and Green Infrastructure and provide attenuation above ground in accordance with policy.

Irish Water has also requested **additional information** providing a report to show how existing sewage treatment plant on site will be dealt with or decommissioned.

Archaeology and Protected Structures

An Archaeological Assessment has been prepared by Reliqua Limited. The report set out that archaeological test excavations should be carried out on the site, prior to construction and that all sub-surface works on site should be monitored by a licensable archaeologist. These matters should be addressed via condition.

Notwithstanding the above, the importance of a high-quality-designed juxtaposition between the proposed development on the site and the Protected Structures/Recorded monument located directly to the south of the site, was raised at Pre-Planning Stage. The Planning Authority were not favourable of a hard transition at this very sensitive location and required that the applicant seek major design solutions to address these sensitivities, in particular green walls should be erected along the southern elevation of any proposed structures and significant planting along the southern boundary of the site should be achieved to soften the link. These have not been forthcoming in the proposed development and the hard transition, including a 3m high security fence, are therefore not considered to be satisfactory. This is particularly concerning to the Planning Authority because of the location of the proposed structures on site at the edge of the lands zoned EE and the overreliance on rural zoned land to buffer the development – this is not acceptable. ADDITIONAL INFORMATION.

Landscaping

Public Realm has made the following observations:

"Main Concerns:

- 1. Impacts of the proposed development on existing trees, hedgerows and local biodiversity: The proposed stream may cut through the rootzone of the hedgerow and trees along the eastern boundary. This hedgerow has not been included in the tree and hedgerow survey. The tree and hedgerow survey does not extend to the full extent of the red line boundary.
- 2. Impact on Green Infrastructure: The landscape proposals do not show the extent of the existing hedgerow along the eastern boundary with the golf course site/Kilcarbery development. Green infrastructure links have been broken and there are no proposals for

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green infrastructure along the western boundary.

- 3. Insufficient SUDs proposals: not compliant with the County Development Plan 2016-2022. Proposed SuDS are limited to permeable paving and swales. SDCC do not approve of underground tanks unless the full potential of the site to manage surface water using soft natural features has been assessed. The landscaped area to the south, zoned rural, would be an ideal location for SuDS features. The proposed swales should be included and detailed in the landscape proposals.
- 4. Visual Impact: The southern boundary lacks a berm. Although mentioned in the landscape design report, the landscape plans and sections do not show berms. There is a lack of hedgerow and tree planting along the western boundary. At preplanning the applicant was asked to consider living walls and green roofs".

In addition to the above the Planning Authority recognises the varying contours of the site and adjoining lands. These do not appear to have been considered and/or incorporated within the overall design. This is not acceptable. Cross sections (Sheet No. IEDUBZZ-STE1-E0-MAL-SE-L-91020) showing the landscaped area on the Rural zoned lands to the south do not appear to be accurate as they do not reflect the existing contours at this location as labelled on drawings submitted with this application. Furthermore, it appears that the realigned watercourse will be cut through a substantial level to ensure that the water runs downhills, this will result in substantial trenches being constructed requiring heavy engineered supports, which are not conducive to achieving ecological rich conduits. This is contrary to policy and objectives in Chapters 7 and 8 of the County Development Plan. **Additional information**.

Waste Heat Recovery & Utilisation

Policy 5 Waste Heat Recovery & Utilisation states "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 processes associated with the primary operation on site generates waste heat".

The applicant has provided a report entitle "Part L Planning Report". They have also indicated that a waste heat recovery building will be provided on the site.

The application is considered acceptable in this regard, subject to conditions.

Ecology / Heritage

The applicant has provided an Ecological Impact Assessment, prepared by Malone O'Regan Environmental. Surveys undertaken include desk, field, habitat, aquatic and protected/notable species. Bats have also been considered. A number of mitigation measures are set out. The proposal is considered acceptable in this regard, subject to conditions.

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Aviation Safety

The site is located within the Department of Defence Inner Zone. The Department of Defence has made the following observations:

- "1. Given the proximity to Casement Aerodrome, operation of cranes should be coordinated with Air Corps Air Traffic Services, no later than 28 days before use, contactable at airspaceandobstacles@defenceforces.ie or 01-4037681
- 2. Due to the proximity to Casement Aerodrome, the developer should implement adequate bird control measures during the construction phase to mitigate the effects of birds on Air Corps flight operations.
- 3. Due the proximity to Casement Aerodrome, Military Air Traffic Services requests an Aviation Impact Assessment on all potential emissions. The assessment should cover the possible effects of exhaust plumes or any other associated impact on flight operations at Casement Aerodrome.
- 4. Given the proximity to Casement Aerodrome this area may be subject to a high level of noise from aircraft operating in the vicinity of the aerodrome.
- 5. Given the proximity to Casement Aerodrome, the selection of trees and shrubs should avoid plants that produce fruit and seed desired by wildlife. Avoid the creation of are areas of dense cover for roosting by flocking species of birds".

The majority of these items should be addressed via <u>condition</u>. However, it is considered **additional information** should be sought to secure the Aviation Impact Assessment.

Environmental Impact Assessment Report

The applicant has submitted an Environmental Impact Assessment Screening Report. This sets out that the development does not require a mandatory EIAR nor does it meet the criteria where a subthreshold EIA would be warranted.

Having regard to the nature of the proposed development, and the distance of the site from nearby sensitive receptors, there is no real likelihood of significant effects on the environment arising from the proposed development. The need for environmental impact assessment can, therefore, be excluded at preliminary examination and a screening determination is not required.

Notwithstanding the above, the proposed development of an ecologically mature site, with remnants of a historic stream located to the south, would result in the removal of mature trees/vegetation and the disturbance of habitat, to provide for the substantial development and will have a significant impact on the short-medium term of the immediate and receiving environment. To lessen the impact of this disturbance the applicant should submit mitigating proposals within an ecological report and landscaping plan. Proposals and mitigating solutions should include the greening of all infrastructural elements of the design. This is in the interests of climate change and adaptation, which the Council must address.

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Appropriate Assessment

Information for the purposes of assisting in screening for Appropriate Assessment was prepared by Malone O'Regan Environmental. The report concludes

"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 submitted information, the Planning Authority has concluded that, having regard to the nature of the development, connection to public services and the distance of connections from the Natura 2000 sites, the proposed development would not require further Appropriate Assessment.

Planning Note:

- (i) The Planning Authority notes the proposal to remove the existing wastewater treatment from the site. The Planning Authority requires additional information on the works that this will entail and how the materials will be disposed.
- (ii) Historically substantial interventions have taken place on this landholding and watercourses and vegetation has been removed. Substantial hedgerow is to be removed to provide for the proposed development on the site. Mitigation measures are not considered to be significant.
- (iii)The previously historically aligned stream design is no longer acceptable and runs contrary to CDP policy.
- (iv)Flooding to the north, increased soil sealing on this land, hard landscaping and diverted stream may have potential for negative impact downstream.
- (v) The significant Hydraulic-Section of the proposed realigned stream, appears to denote water moving in a confined space under pressure. This needs to be clarified and redesigned. The Planning Authority requires more natural design solutions to slow the movement of water through the site and general area. These should be investigated. Additional information and details on this hydraulic section are required included method of construction and materials to be used. For example, engineered beds and materials on the stream bed will not be acceptable. The applicant should note that a 'drainage channel' design will not be acceptable.
- (vi)The impact on the widening of the watercourse to the north of the site should be submitted in a revised ecological report, which should clearly demonstrate significant mitigation measures to achieve ecological maturity within a short time.
- (vii) Details of swales should be submitted.
- (viii) Consent letters for works on lands for realignment of streams to be submitted, where land is outside the ownership of the applicant.

Development Contributions Assessment Overall Quantum

Data centre and ancillary structures 34,433sq.m

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SEA Monitoring Information

Building Use Type Proposed: Data Centre Floor Area: 34,433sq.m

Land Type: Greenfield (part) / Brownfield (part)

Site Area: 6.181

Conclusion

Overall, it is considered that although the application site is located within lands that are zoned EE in which a data centre would be acceptable in principle, the applicant has failed to provide sufficient information to enable the Planning Authority to make an informed decision or support the proposal. Based on the size, scale, and significance of the piece of infrastructure that is proposed, it is considered that additional information in relation to a number of matters to ensure the proposal is in keeping with the planning and sustainable development of the area.

Recommendation

I recommend that **ADDITIONAL INFORMATION** be requested from the applicant with regard to the following:

- The Planning Authority considers that there is a need to balance the demand for development with climate action and resilience as well as the capability of the national grid to provide for such developments. The Planning Authority is concerned with the current proposal to power the data centres with a gas generator due to the absence of capacity in the national grid.
 - The applicant is advised that the Planning Authority has concerns in relation to the number and extent of large demand connections in this area and the demand for future grid reinforcements. It is noted that Action 20 of the Climate Action Plan, 2019 states "Implement energy actions under the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy to ensure that large demand connections are regionally balanced to minimise grid reinforcements".

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. In this context, the applicant is advised that 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.

In light of this, the applicant is requested to address the following:

- (a) The applicant is advised that the Planning Authority 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. The applicant is requested to submit the following additional information in order for the Planning Authority to undertake a proper assessment of the proposed development:
- (i) Justification for the form of energy production proposed in relation to climate change

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and renewable energy policy.

- (ii) provide more detail regarding the alternative sources of power generating assessed as part of the alternatives.
- (iii) consider whether it is possible to incorporate a significant portion of renewable energy generation for the development.
- (iv) Information on whether the existing site is serviced in terms of gas utilities and if not, the proposals for undertaking the development required to facilitate servicing
- (v) Information on proposals to connect the power plant and site to the national gas grid and the source of gas proposed.
- (b) The applicant is requested to provide an assessment of the potential to serve the site with renewable energy. Where this is not possible, the applicant is requested to set out the following:
- (i) The ability of the on-site gas generation to serve both DUB15 and DUB16
- (ii) Proposal/timeframe for decommissioning on site generators
- (iii) Proposed route/location of grid connection
- (iv) Correspondence from the Commission for Regulation of Utilities/Eirgrid that connection is feasible and the timeline for the connection.
- 2. A significant portion of the site (running along the southern boundary) is zoned 'RU' 'To protect and improve rural amenity and to provide for the development of agriculture'. The applicant includes this rural zoned land within the parameters of the site, and it is proposed to provide a hydrant pump room and two tanks and landscaping on this section of the land alongside the re-diversion/re-alignment of the historic stream. The applicant, in essence, is proposing the use of the rural zoned lands to provide for supporting infrastructure and landscaping relief for the proposed development. The proposed size, bulk, scale and mass of the development and the land coverage the buildings, including those previously granted to the north of the site, will take up is significant and can be deemed to be an overdevelopment of the site. This issue was raised at Pre-Planning stage by the Planning Authority and the applicant was informed that this aspect was substandard. Any development proposed on lands zoned for Enterprise and Employment is required to comply with policies and objectives contained within the current County Development Plan. Chapters 7 and 8 require natural solutions and significant green infrastructure to form planning proposals on EE zoned land. In this regards any landscaping and works proposed on the RU zoned land should comply with the zoning objective to protect and improve rural amenity and to provide for the development of agriculture. It is not considered that the security fence, hydrant pump and two tanks and the realignment of the river support the zoning objective. Furthermore, if this landscaped area is to be accepted as part of the overall development lands it would only be considered over and above Green Infrastructure and natural solutions being provided within the EE zoned lands, which has not been proposed.
 - (a) The site is highly prominent, with significant blank facades. The buildings are significantly taller than the landscaping. The Planning Authority has significant concerns regarding the visual impact of the proposal, given its transitional location adjacent to rural zoning, designated open space, Protected Structures and a recorded monument. The

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applicant is, therefore, requested to consider how the visual impact could be reduced, in terms of both the design of the buildings, reduction in footprint of the buildings and also the provision of significantly additional green infrastructure and landscaping. The Planning Authority requires as a minimum that all southern elevations of the structures shall be provided with green walls.

- (b) The Planning Authority has concerns over the mass and bulk of the main building and the level of development overall on the site. The Planning Authority is of the opinion that the proposal represents an overdevelopment of the site and the applicant is therefore 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) The applicant is requested to:
- (i) 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. This should be based on a thorough site analysis and context review. The applicant is advised that in order to minimise ecological and visual impacts, development on sites with a steep or varying topography should utilise the natural slope of the landscape and avoid intrusive engineering features as per Section 2.3.6 of the 2016 2022 Development Plan.
- (ii) Provide details of any retaining structures.
- (iii) The applicant is requested to locate security fencing within the site. Security fencing should not be located on site boundaries or in RU zoned lands.
- (d) The importance of a high-quality-designed juxtaposition between the proposed development on the site and the Protected Structures/Recorded monument located directly to the south of the site, was raised at Pre-Planning Stage. The Planning Authority were not favourable of a hard transition at this very sensitive location and required that the applicant seek major design solutions to address these sensitivities, in particular green walls should be erected along the southern elevation of any proposed structures and significant planting along the southern boundary of the site should be achieved to soften the link. These have not been forthcoming in the proposed development and the hard transition, including a 3m high security fence, are therefore not considered to be satisfactory. This is particularly concerning to the Planning Authority because of the location of the proposed structures on site at the edge of the lands zoned EE and the overreliance on rural zoned land to buffer the development this is not acceptable.
- (i) The applicant is 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) Photomontages the applicant is 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.

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- (iii) Viewing the site from the west in its context with the Protected Structure and recorded monument.
- 3. The Planning Authority has serious concerns regarding the realignment of an historic stream to the south of the site and further interventions to the portion of stream previously realigned. The methods used in the previously aligned stream design are no longer acceptable and runs contrary to current County Development Plan policy. Heavy engineering solutions are not favourably considered. In this regards the applicant is requested to reconsider this proposal to realign the stream and to consider the reduction in structures on the site, otherwise the following is required:
 - (a) The significant Hydraulic-Section of the proposed realigned stream as notated on submitted drawings, appears to denote water moving in a confined space under pressure. This needs to be clarified and redesigned. The Planning Authority requires more natural design solutions to slow the movement of water through the site and general area. These should be investigated. Additional information and details on this hydraulic section are required including method of construction and materials to be used. For example, engineered beds (as well as man-made and materials on the stream bed) will not be acceptable. The applicant should note that a 'drainage channel' design will not be acceptable.
 - (b) The applicant is requested to submit 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. The hydromorphology of the stream diversion should be varied to create ecological diversity and enhanced amenity, water quality improvement and attenuation. A landscaped area with SuDS features should be provided as part of a treatment train that provides multifunctional benefit.
 - (c) The applicant is requested to clarify that the 10m riparian strip does not include any built development and is taken from the top of the bank. The applicant is also requested to provide further details of the watercourse as existing and as proposed, providing an overlay and indicating culverts to be removed etc.
 - (d) Gabions, concrete beds/supporting walls and other heavy engineering solutions should be avoided in all revised proposals.
 - (e) Significant reduction in soil sealing and hard surfacing across the entire site should be achieved within the revised design.
 - (f) The impact on the widening of the watercourse to the north of the site should be submitted in a revised ecological report, which should clearly demonstrate significant mitigation measures to achieve ecological maturity within a short time.
 - (g) Details of swales should be submitted.
 - (h) Consent letters for works on lands for realignment of streams to be submitted, where land is outside the ownership of the applicant.
- 4. (a) It is noted from the engineering plans that a retaining wall is proposed to the west of the site. It is noted that details of cut and fill have been provided on drawings IE-DUBZZ-ZZZZ-ZZ-ARP-DR-C-1100(1, 2,3, 4) The Planning Authority has concerns regarding the design of the proposed development and the extent of the proposed cut-and-fill. The

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applicant is requested to provide additional information as follows:

- (i) Demonstrate how the siting and location of the proposed development responds appropriately to the natural topography of the site and to the historic fabric in the immediate vicinity of the site (Protected Structures and recorded monuments) and would improve upon and enhance natural characteristics. This should be based on a thorough site analysis and context review. The applicant is advised that in order to minimise ecological and visual impacts, development on sites with a steep or varying topography should utilise the natural slope of the landscape and avoid intrusive engineering features as per Section 2.3.6 of the 2016 2022 Development Plan.
- (ii) Provide details of any retaining structures.
- (b) In addition to the above the Planning Authority recognises the varying contours of the site and adjoining lands. These do not appear to have been considered and/or incorporated within the overall design. This is not acceptable. Cross sections (Sheet No. IEDUBZZ-STE1-E0-MAL-SE-L-91020) showing the landscaped area on the Rural zoned lands to the south do not appear to be accurate as they do not reflect the existing contours at this location as labelled on drawings submitted with this application. Furthermore, it appears that the realigned watercourse will be cut through a substantial levels to ensure that the water runs downhills, this will result in substantial trenches being constructed requiring heavy engineered supports, which are not conducive to achieving ecological rich conduits. This is contrary to policy and objectives in Chapters 7 and 8 of the County Development Plan. The applicant is requested to address these issues.
- 5. In order for the Planning Authority to assess the principle of the proposal, the applicant is requested to set out the level of office provision in sq.m and ensure that it is in compliance with County Development Policy and zoning objective. The applicant is also requested to clarify the proposed use for the office space.
- 6. The Planning Authority has serious concerns regarding the minimal natural solutions, SUDS and Green Infrastructure proposed and incorporated within the proposed development.
 - (a) The proposed attenuation on site (as outlined in red) includes:

DUB 14 – reinstated reinforced concrete attenuation tank

DUB 15

- (i) Reinforced concrete tank No. 1 (586.1 cubic metres)
- (ii) Reinforced concrete tank No. 2 (640.2 cubic metres)

DUB 16 Reinforced concrete tank (856.75 cubic metres)

Energy Centre reinforced concrete attenuation tank (396.3 cubic metres)

Each of these tanks are contrary to County Development policy and objectives. This is significant and unacceptable, especially when considering potential flooding to the north of the site and downstream. The applicant is requested to revise the proposals to incorporate natural solutions, to substantially increase SUDS and Green Infrastructure throughout the site and provide attenuation above ground in accordance with policy. Please note that above ground SuDS (Sustainable Drainage Systems) such as green area detention areas, or other such SuDS are required at this location and the applicant is

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requested to submit information of areas m2 and runoff coefficients in table format for each attenuation area.

- (b) The applicant is requested to submit a report showing surface water attenuation calculations for the proposed new development. If the development will share an existing attenuation system then this should also show the surface water attenuation calculations for the existing and proposed development. The calculations shall include, SAAR value, Qbar, Soil factor, areas of buildings, roads, pathways permeable paving and green areas in m2 and their respective run off coefficients. Include the area of site in Hectares.
- (c) The applicant is requested to submit a revised surface water drawing showing location of hydro-brakes and discharge rates of same. Include the surface water layout and attenuation systems.
- (d) The applicant is requested to provide revised a surface water drawing and report and is requested to contact water services to discuss same.
- (e) The applicant is requested to show further proposed SuDS features (to include details of same) for the development such as green roofs, living walls, further natural swales, channel rills, integrated tree pits, bioretention, above ground attenuation, detention basins, reed bed/wetland etc. and other such SuDS and show what attenuation capacity is provided by such SuDS. The SuDS features should be integrated into the landscape proposal and details provided on how they work.

7. The applicant is requested to:

- (a) submit a report showing surface water attenuation calculations for the proposed new development. If the development will share an existing attenuation system then this should also show the surface water attenuation calculations for the existing and proposed development. The calculations shall include, SAAR value, Qbar, Soil factor, areas of buildings, roads, pathways permeable paving and green areas in m2 and their respective run off coefficients. Include the area of site in Hectares.
- (b) submit a revised surface water drawing showing location of hydro-brakes and discharge rates of same. Include the surface water layout and attenuation systems. Note concrete tanks are not generally acceptable and an arched type attenuation system shall be used. Consideration shall be given to above ground SuDS (Sustainable Drainage Systems) such as green area detention areas, or other such SuDS. The applicant is requested to submit information of areas m2 and runoff coefficients in table format for each attenuation area.
- (c) provide revised a surface water drawing and report and is requested to contact water services to discuss same.

8. The applicant is requested to:

- (a) extend the tree survey, arboricultural assessment and tree protection plan to incorporate all of the area within the redline boundary and immediately adjacent and to include hedgerows as well as trees. The location of tree protection fencing should be shown on the plans. A tree and hedgerow bond will be required.
- (b) revise the landscape proposals to include:
- (i) existing hedgerows, particularly along the eastern boundary with the golf

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course/Kilcarbery development. It is impossible to assess the impact of the proposed stream diversion on these trees and hedgerows. The stream diversion appears to be dug within the root protection zone of trees and hedgerows. We require an arborist method statement and an arborist to be appointed to oversee these works.

- (ii) proposed swales on the landscape plan, sections and details. These are mentioned in the Engineering Report but not included in the landscape proposals. All proposed SuDS features to be included in the landscape proposals.
- (iii) boundary screening: berms along the southern boundary to be shown on the landscape plans and sections. (Although the landscape design report mentioned berms, these are not shown in the landscape plans and cross sections). Mixed native hedgerow planting to be shown along the western boundary.
- (iv) varied hydromorphology of the rerouted stream to create ecological diversity and amenity. Section 5.3 of the Ecological Impact Assessment sets out ecological enhancement measures to include 'a stepped bank and occasional boulders in the stream' to 'allow for varied flow and subsequently create a variety of habitats'. This should be reflected in the landscape plan and detailed landscape proposals.
- 9. (a) Table 14 of the acoustic report predicts the cumulative noise level at 'NSR 1' will be 43dB. Whilst the report refers to this change in noise level as a 3dB increase, this is not a true representation of the increase to the existing environment, as highlighted below: Existing background noise level (LA90) at NSR1 = 34dB Night time (Table 9) Predicted cumulative noise level at NSR 1 = 43dB (Table 14) An increase of 9dB for the night time period equates to a doubling of noise and therefore is likely to impact on the residential receiver. This impact may be particularly noticeable during the night-time period when people are sleeping. This increase must be mitigated against in order to prevent potential noise complaints arising in the future.
 - It should be noted that whilst the acoustic report advises that it will comply with the 'identified' criteria, it is the role of the Environmental Health Department to assess the potential impact of a development on the existing environment. The proposed application highlights a potential for noise to impact on a residential receiver. The noise levels predict a moderate change in the noise level at the nearest receiver during the night-time period.
 - (i) The applicant is requested to assess and re-evaluate all noise emitting equipment proposed on site in this application.
 - (ii) The applicant is requested to undertake necessary modifications to the proposed structures and operations on site in order to reduce the predicted noise levels at the nearby receivers to an acceptable level during both day and night time.
 - The development must not give rise to noise levels that exceed the background level for evening and night time periods.
 - (a) The applicant is requested to demonstrate the development can meet the standards set out by South Dublin County Council as noted below:
 - Noise due to the normal operation of the proposed development, expressed as Laeq over 15 minutes at the façade of a noise sensitive location, shall not exceed the daytime background level by more than 10 dB(A) and shall not exceed the background level for evening and night time. Clearly audible and impulsive tones at noise sensitive locations

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during evening and night shall be avoided irrespective of the noise level.

- (b) Table 16 of the report indicates a significant impact is predicted to occur at NSR 1 during emergency testing however the report does not specify how frequent this scenario is likely to occur and its duration.
- (i) The applicant is requested to clearly specify this in an amended report. If these events are likely to occur multiple times over the course of a month, mitigation measures are required to be put in place to reduce the noise emissions to a more appropriate level.
- (ii) The amended acoustic report should include the exact times for which noise monitoring was undertaken during both daytime and night time.
- 10. Due the proximity to Casement Aerodrome, Military Air Traffic Services requests an Aviation Impact Assessment on all potential emissions. The assessment should cover the possible effects of exhaust plumes or any other associated impact on flight operations at Casement Aerodrome.
- 11. The applicant is requested to submit:
 - (a) a confirmation of feasibility letter from Irish Water of proposed development (for both water and foul).
 - (b) a report to show how existing sewage treatment plant on site will be dealt with or decommissioned.
- 12. The Planning Authority notes the proposal to remove the existing wastewater treatment from the site. The Planning Authority requests additional information on the works that this will entail and how the materials will be disposed of.

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REG. REF. SD21A/0217 LOCATION: Profile Park, Nangor Road, Clondalkin, Dublin 22

Tracy McGibbon,

A/Senior Executive Planner

Eoin Burke, Senior Planner

ORDER: I direct that **ADDITIONAL INFORMATION** be requested from the applicant as

set out in the above report and that notice thereof be served on the applicant.

Date: 28th September 2021

Mick Mulhern, Director of Land Use,

Planning & Transportation