

PLANNING CONSULTANCY

The Secretary An Bord Pleanála 64 Marlborough Street Dublin 1

15th August 2023



Our Ref: 16008

RE: Planning and Development Act 2000-2023 and the statutory regulations (as amended). First Party Appeal by EdgeConneX Ireland Limited against the decision of South Dublin County Council to refuse permission for development that includes the development at this site of 5.14hectares that is located within the townland of Ballymakaily to the west of the Newcastle Road (R120), Lucan, Co. Dublin (the "Decision"). The development will consist of the construction of two no. adjoined single storey data centres with associated office and service areas with an overall gross floor area of 15,274sqm.

South Dublin County Council Reg. Ref. SD22A/0333 (the "Proposed Development")

Date of Decision: 20th July 2023

Four-week period for making appeal on or before: end of 16th August 2023

Dear Sir / Madam,

We, Marston Planning Consultancy, 23 Grange Park, Foxrock, Dublin, D18 T3Y4; are instructed by Edgeconnex Ireland Limited (the "First Party"), 6th Floor, South Bank House, Barrow Street, Dublin 4 to lodge this first party appeal against the Decision made by South Dublin County Council (the "Planning Authority") to refuse permission on two grounds. In compliance with the statutory regulations, we enclose herewith a cheque payable to An Bord Pleanála for the sum of €3,000.00 as the appropriate appeal fee in this instance, as an Environmental Impact Assessment Report (EIAR) was submitted with the application and within the statutory four-week period for making the appeal.

1. Executive summary

We respectfully submit that the Proposed Development is fully in accordance with both local and national policy as they relate to data centres. The Planning Authority have taken an unduly rigid approach and have misunderstood two parts of the First Party's response to issues raised in relation to Policy EDE7, Objective 2 of the South Dublin County Development Plan 2022-2028 (the "County Development Plan") as set out under the Additional Information ("Al") request. We respectfully submit that the Decision of the Planning Authority is inherently flawed and we therefore request that the Board issue an Order to overturn the Decision and to grant permission for the Proposed Development.

The following briefly summarises the facts which clearly demonstrate that the reasons for refusal provided by the Planning Authority should not stand, as the Proposed Development does achieve compliance with the relevant policies and objectives of the County Development Pla, as well as all relevant regional and national policies.

It is not in question that some significant length of hedgerow will be removed under the Proposed Development. It is also not in question that together with the previously granted application South Dublin County Council Planning Ref. SD19A/0042 / ABP Ref. PL06S.305948 and Ref. SD21A/0042 (the "Permitted Development") it will mean that overall some 760m of hedgerow will be removed on this extensive site. However, it is also not in question that 1,362m of hedgerow will be retained in and around the site and that 1,052m of new hedgerow is proposed. There will be, irrespective of the significant tree planting throughout that there will be a net biodiversity and ecological gain on this site.

The overall Permitted Developments have sought and have previously been permitted to achieve a net green infrastructure gain within the overall site, and there is no basis for reason no. 2 of the refusal. The Proposed

Development, in combination with the already Permitted Development on the overall site that have recently commenced, will improve biodiversity connections to the canal corridor and surrounding environment, and will significantly improve and contribute to the established and permitted green infrastructure network in this part of the County fully in accordance with the various GI objectives and policies of the County Development Plan.

Reason no. 1

The first reason for refusal comprises five key points on the basis of which permission was refused. Each of these points has been addressed fully in the appeal. The response to the five points within the first reason is summarised below and set out in detail within section 8 of this document.

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

We can confirm that the First Party has an existing connection agreement. The connection agreement between Edgeconnex Ireland Limited (i.e., the First Party) and EirGrid plc ("EirGrid") (Ref. D48-BM-CL) (the "Edgeconnex Grid Connection Agreement") is in line with Commission for Regulation of Utilities ("CRU") policies. It is a matter solely for EirGrid as Transmission System Operator (TSO) in accordance with the CRU policies and regulatory framework pertaining to determine who should get a demand connection agreement in light of capacity constraints to the electricity network1. In this instance the First Party has successfully met EirGrid's connection offer requirements and EirGrid deemed it appropriate for them to connect to the grid. Furthermore, the Proposed Development does not give rise to any capacity issues and on the contrary the permitted Power Plant will benefit the stability of the electricity grid.

The Permitted Development and the Proposed Development (together the "Facility Campus") will connect via a connection into the future ESB substation that will be known as the Kishoge 110kV Gas Insulated Switchgear (GIS) substation that was permitted under Planning Ref. SD22A/0105 that will connect to the national grid via its 110kV transmission lines that are the subject of a concurrent Strategic Infrastructure Development ("SID") application to the Board and which was made in consultation and agreement with EirGrid and ESB on the 7th September 2022 under ABP Ref. VA06S.314567.

This SID application includes 110kV transmission lines from the proposed substation into the national grid infrastructure via connections to the permitted Aungierstown – Castlebaggot underground transmission lines, which runs between the permitted Aungierstown substation and the existing Castlebaggot 110kV / 220kV substation. The SID development will therefore provide a loop in connection to serve the Kishoge substation via the creation of a new Aungierstown – Kishoge 110kV circuit and a new Castlebaggot-Kishoge 110kV circuit. The SID project is designed to support the power demand of the Facility Campus. These connections have been agreed and designed in accordance with and following review by EirGrid and ESB.

The Edgeconnex Grid Connection Agreement and the permitted Power Plant will provide power to the already Permitted Development and the Proposed Development, without negatively impacting on the resilience of the National Grid.

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

As set out above, we can confirm that the First Party already has an executed 'connection agreement' with EirGrid (Ref. D48-BM-CL), the Edgeconnex Grid Connection Agreement. The Proposed Development will operate under the same Edgeconnex Grid Connection Agreement which, together with the already Permitted Development, forms part of the Facility Campus within the First Party's landholding.

This appeal is accompanied by a legal opinion (Appendix A) from Mason Hayes & Curran LLP, setting out how the connection agreement process works, from a legal perspective, that it is EirGrid's function as TSO to determine capacity in the electricity network and that the Proposed Development accords with national policy in this regard. On this basis, the aspect of the first reason for refusal provided by the Planning Authority in relation to the absence of a fixed connection agreement to connect to the grid is unfounded.

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

<u>1</u>ESB as Distribution System Operator (DSO) maintains this role in relation to the Distribution System network, with both System Operators (SOs) required to comply with the CRU policy directions.

EDE7 Objective 2 of the County Development Plan, which this aspect of the refusal reason relates to, makes it clear that in circumstances where on site renewable generation cannot be achieved, an applicant must demonstrate engagement with PPAs. Therefore, lack of significant on-site renewable energy isn't a reason for refusal on its own. As required by the objective, the First Party has demonstrated such engagement, as set out under item 4 below.

Additionally, as set out in detail within section 8 of this appeal, while the subject site does not provide an opportunity to deliver adequate solar or wind generation to power the Proposed Development, the permitted Power Plant is designed to have the capacity to run off green gas and/or hydrogen in the future, and a requirement of the First Party to review the potential of the Power Plant to operate using these fuels under condition 3(ii) and (iii) of Planning Ref. SD22A/0289. At present, the quantities of green gas and hydrogen produced in Ireland are low, however, GNI and the Climate Action Plan / Government policy, anticipate these volumes increasing materially up to 2030. The green gas / hydrogen produced can be injected into the grid and therefore the First Party would not need to retrofit the existing infrastructure to convert the gas engines from natural to renewable gas. It is proposed that this will be completed when sufficient volumes of renewable gas are available.

iv. Lack of evidence provided in relation to Power Purchase Agreements (PPAs) in Ireland

We wish to place on record as part of this appeal that the First Party has engaged with brokers of renewable PPAs in Ireland. As part of this appeal, we submit evidence of this engagement (see Appendix D). Appendix D comprises a letter from KPMG (who are the First Party's main partners in brokering PPAs), which confirms ongoing and extensive engagement by the First Party with regard to entering into a PPA for the Proposed Development and already Permitted Development. This is submitted to represent unequivocal evidence of the First Party's intent and commitment to securing a renewable PPA in respect of the Proposed Development. We can also confirm that the First Party has an extensive history of entering into renewable PPA's across its various campuses across Europe and elsewhere.

The First Party will engage further with renewable PPA providers and brokers in respect of the Proposed Development and would welcome a condition from the Board in this regard to submit utilisation of renewable energy under a PPA to the Planning Authority prior to the operation of the Proposed Development.

v. Reliance of on a predominately gas-powered plant to provide energy to the development

As set out in more detail in section 8 of this appeal, the First Party submits that it has satisfied the Planning Authority's requirements in relation to on-site generation particular under EDE7 Objective 2 and this reason should not have been taken into account by the Planning Authority as a separate ground for refusal.

In accordance with EirGrid's policy requirements, the Proposed Development utilises an already contracted flexible power arrangement whereby it can be powered by the extant Edgeconnex Grid Connection Agreement and the consented onsite generation via the Power Plant The Power Plant, located on the Facility Campus, is already permitted under the Permitted Development (Planning Ref. SD21A/0042) and its scale and capacity encapsulates the Proposed Development. The Power Plant is scaled to serve the Facility Campus and represents already permitted development, which must be considered as such by the Board. The principle, use, scale and capacity of the Power Plant is established in planning terms and is not open for reconsideration as part of the current application or appeal.

The provision for direct support to the grid by the permitted Power Plant is a positive aspect of the overall development of the First Party's Facility Campus, which directly aligns with the CRU Direction to the System Operators related to Data Centre grid connection processing" decision (CRU/21/124) ² (the "CRU Direction") and can support the increased penetration of intermittent renewable energy on the grid in line with the 2021 and 2023 Climate Action Plans³.

As set out above and detailed in Section 8, the Power Plant is also designed to enable generation from renewable energy sources, including green gas and/or hydrogen in the future as these fuel sources become widely available.

² https://www.cru.ie/publications/27076/

³ Climate Action Plan 2021 outlines the target for 2,000 megawatts of additional gas generation in the short term, in order to stabalise the grid as intermittent renewables represent an increasing share of the grid mix, while concurrently allowing for the phasing out of more carbon intensive fuel sources.

Therefore, each of the aspects of the first reason for refusal are considered to be fully addressed in this appeal, supported by the requisite information and documentation. On that basis, we consider that it has been demonstrated that the Decision on Reason no. 1 is unfounded and flawed and it should be overturned by the Board.

Reason no. 2

This appeal is accompanied with further detail on the already permitted green infrastructure within the Facility Campus, as well as a comparison of the identified green infrastructure corridors and blue corridors in the form of riparian corridors as identified under Appendix 4 and Map 13 of the County Development Plan.

A review of Map 13 clearly indicates that the riparian corridor runs to the east of the R120, and the Grand Canal corridor is limited in width to the south of the canal. Therefore, it is reasonable to conclude that no aspect of the Proposed Development is located within any blue corridor as identified under the County Development Plan. Figure A 4.1 of Appendix 4, indicates the Green infrastructure Strategy Map for the County that specifies large swathes of the County as being within Green Infrastructure corridors.

We respectfully submit that the green infrastructure approach of the First Party, even prior to the adoption of the current Development Plan was to undertake a landscape masterplan of the overall site under the knowledge that hedgerows within the site would be required to be removed to facilitate each phase of the Proposed Development of the Facility Campus. In addition the northern 80-90m corridor adjacent to the canal was permitted to be developed as a public park and green infrastructure buffer between the Grand Canal corridor and the Facility Campus that will materially and significantly improve the green infrastructure of the Grand Canal corridor.



Green Infrastructure Plan at site

The implementation of the majority of this permitted green infrastructure will be in place by early 2024, and therefore will be maturing by the time the First Party proposes to undertake the Proposed Development in 2025 – 2027. We submit that the Proposed Development must be considered under the overall and already permitted green infrastructure under the Permitted Development. The current application will significantly supplement this, and ensure both green and blue corridors within the site that connect into the wider green infrastructure surrounding the site.

The site is not located within a defined riparian corridor as identified under Map 13 of the County Development Plan. The Grand Canal is located to the immediate north and the approach of the design team has always been to protect and enhance the canal as a GI asset, and to connect it into other surrounding GI corridors in accordance with the principles of section 12.4.2 of the County Development Plan.

The approach of the design team has been to create enhanced ecological corridors that will create pathways for wildlife into the nearest designated GI corridors, as well as creating an amenity asset. The Proposed Development will enable the planting of 484 new semi-mature trees (c. 5m in height) with the Permitted Development providing for 1,854 new semi-mature trees on the Permitted Development site.

In addition to this it is permitted to plant 3,843 standard trees (c. 2m in height) under the two main permitted developments already granted (under Planning Ref. SD19A/0042 and SD21A/0042) on site with another 912 of these trees proposed to be planted within the application boundary of the Proposed Development. In addition to this, it is permitted to plant 18,458 saplings (c. 0.5m in height) across the permitted site and with a further 3,586 proposed under this application.

It is not in question that a significant length of hedgerow will be removed as part of this application. However, due the varying quality hedgerow to be removed, it was only the western hedgerow that was of concern to the Planning Authority and was comprehensively responded to under point 7 of the Additional Information request. It is against this background that we request the Board to consider this matter.

Other considerations

We can also confirm that the Proposed Development is fully aligned and in accordance with government policy set out under the government's revised "Statement on the Role of Data Centres in Ireland's Enterprise Strategy" on the 27th July 2022 (the "Government Statement"). The First Party is committed to advancing the goals behind the Six Principles set out within this document, and the Proposed Development and Permitted Developments are fully aligned with, and supportive of, Government policy.

Current SID Application

It is noted that high voltage transmission line connections to serve the overall campus at this location are subject to a current SID application before the Board under section 182A of the Planning and Development Act 2000 (as amended) (the 'Act') (ABP Ref. VA06S.314567). Whilst we acknowledge that the SID application is associated with the Proposed Development, we submit that the SID case can and should, in accordance with the proper planning and sustainable development of the area, be determined separately from the current appeal, and there is no requirement for both cases to be considered and determined concurrently. Irrespective of the already delayed determination of the SID application, there is no basis for it to be linked and determined at the same time as the current appeal given that the SID application is fundamental and linked to the already Permitted Development (i.e., the first two phases of the Facility Campus) and the third phase of the Facility Campus under the Proposed Development.

Prior to addressing the Decision in totality it is important given the complexity of the application to set the appeal in context.

2. The appeal in context

The location and description of subject site

The Proposed Development is to be located on a site of c. 2.14hectares to the immediate west of the recently realigned R120 within the townland of Ballymakaily, Lucan, Dublin 22. The site in terms of its current use forms open grassland to the south of the Grand Canal.

The site forms the expansion and third phase of the First Party's own consented data centre campus that has recently commenced construction having been granted permission, with conditions, under the Permitted Development. The details of these permissions are fully set out under section 3 of this appeal.

Prior to the commencement of construction, the overall site was situate in grassland and contained field boundaries in the form of a hedgerow and small trees that cut across the site along and adjacent to its western boundary; to the north-east along the boundary of the former access to the former farm buildings to the north; and diagonally across the site.

The majority of the hedgerow crossing across the overall site has already been permitted to be removed, and replaced with additional hedgerows and planting under SDCC Planning Ref. SD19A/0042 / ABP Ref. PL06S.305948 and SDCC Planning Ref. SD21A/0042. A former agricultural access road leads from the realigned R120 within the north-east of the application site to the former agricultural buildings.



Aerial view of application site (refer to architectural drawings of Existing Site Plan and all buildings to be demolished that accompany the application for greater detail)

The eastern boundary of the Facility Campus site has been subject to a compulsory purchase order by South Dublin County Council to facilitate the Adamstown / Newcastle Road improvement scheme (R120). This has resulted in a significant length of hedgerow being removed by the Council to facilitate the road works for some 430m of the overall eastern boundary. The Permitted Development will provide a planted biodiversity corridor along the entire eastern boundary of the site, to the west of the R120 to replace the removed planting and the poor quality lengths of hedgerow that remained of 100m to the south-east, and 60m to the north-east along the realigned road that is within the site, with the hedgerow in very poor condition to its north. The former road remains in situ at the south-east corner of the overall site.

The Proposed Development site is bounded by land in the ownership of the applicant to the south of the Grand Canal, and a lane along part of its south side and planting, to the north. A dormer type property and both the original and new bridge over the Grand Canal lie to the north-east and outside the site. The realigned R120 bounds the application site to the east with a number of residential properties bounding the road to its east. The First Party's original data centre campus as granted under SDCC Planning Ref. SD16A/0214, SD16A/0345 and SD17A/0141/SD17A/0392 as well as SD18A/0298 is located to the rear of these residential properties to the east of the R120.

The Proposed Development site is bounded by the permitted substation as granted under SDCC Planning Ref. SD22A/0105; and the data centres granted under SDCC Planning Ref. SD21A/0042 to the west. The Proposed Development site is bounded by the permitted data centres granted under SDCC Planning Ref. SD19A/0042 / ABP Ref. PL06S.305948 to the west. The permitted three Power Plants are to be located to the south-west of the overall site. The enabling works permitted under SDCC Planning Ref. SD19A/004 have recently commenced on part of the overall site at the time of drafting this EIA Report. There is agricultural land

zoned for development to the south and west. A traveller site is located some 180m to the south-west of the overall site.

A large electricity pylon is situated in the northern portion of the overall site. They run across the Proposed Development site and Facility Campus on a west-north-west to east-south-east axis.

3. Planning history

Planning Ref. SD19A/0004

This planning application was lodged with South Dublin County Council for enabling works on the southern part of the Facility Campus site to carry out required earthworks and site preparation works to facilitate the development proposed under this application. This application was granted permission in 2019. The enabling works permitted under SDCC Planning Ref. SD19A/004 have recently commenced on part of the overall site at the time of making this application.

SDCC Planning Ref. SD19A/0042 / ABP Ref. PL06S.305948

Permission was granted on the 5th October 2020 for the first part of the phased development within the southeast corner of the Facility Campus site as well as a substation that was centrally located within the site. The development had an overall gross floor area of 17,685sqm. The development also included a temporary gaspowered generation plant within a walled yard that was permitted to the west of the permitted data centre.



Permitted landscape plan under Planning Ref. SD19A/0042

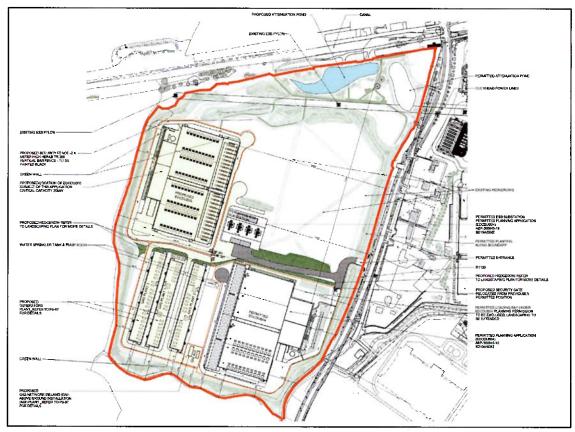
Following a request for Additional Information, the number of generators within the Temporary Power Plant was reduced to only 8 operating with two back up units and limited to a lifespan of two years. The decision of

the Council was appealed by a third party and upheld by the Board in a decision that was dated the 5th October 2020. The decision of the Board was subject to 19 conditions. This first phase of the Facility Campus was permitted to be enclosed by landscaping to all boundaries (see previous page). This established the biodiversity and green infrastructure setting of the campus.

SDCC Planning Ref. SD21A/0042

This application forms the second permitted phased development of the Facility Campus, and received a grant of permission from the Council on the 19th January 2022, following a request for Additional Information and a Clarification of that Additional Information. The permission was granted to be undertaken on lands to the west and south-west of the appeal site, and is for the development of two single storey data centres with associated office and service areas; and three gas powered generation plant buildings with an overall gross floor area of 24,624sqm.

The primary issue raised by the Planning Authority in requesting additional information was confirming the availability of power, grid constraints and the compatibility of the application with the Climate Action Plan 2021, as well as the inclusion of green walls and improvements in the public park access and design within the north of the site. All these issues were comprehensively addressed and most notably the response to the issues relating to power and grid connections were considered as acceptable, and this led to the positive decision from the Planning Authority.



Permitted site plan under Planning Ref. SD21A/0042 shaded in cream, as well as the original permission as granted under SD19A/0042 also (noted as EDCDUB04 on drawing)

Under this application, it was outlined that the purpose of the three gas powered plants within the south-west of the Facility Campus, were to:

"...enable the applicant to provide flexibility in their demand for power by reducing consumption from the wider national grid when requested to do so in times of system constraint. The nature of the gas plant is designed to meet the appropriate availability and other technical requirements in order to reinforce the national grid that will ensure the security of supply of electricity to the wider national grid if and when required."

This 2021 application clearly sets out that the third power plant was required, and was permitted to provide power to the Proposed Development that is subject of the current appeal. The Power Plants replaced the temporary power plant granted permission under the 2019 application. The landscape master plan was modified slightly under this application that created a public park created on the lands within and to the immediate north of the appeal site.

Condition 3 of the permission stated:

"3. GAS Plants - Temporary

i. Prior to the commencement date of the first operation of the first gas plant, the Planning Authority shall be contacted in writing to confirm the date on which the first gas plant shall first commence operation.

ii. Five (5) years from the date the first gas plant first commences operation, the gas plants and all associated and related ancillary structures shall cease operation unless prior to the end of the five-year period, planning permission has been sought and granted for its continued use.

iii. All structures related/associated with the gas plants shall be removed from the entire site within a year of the ceasing of operation, unless prior to the end of the five-year period, planning permission has been sought and granted for its continued use.

REASON: To enable the impact of the development to be reassessed having regard to changes in technology, climate action and energy supply options." (own emphasis)

The wording of part ii and iii of the condition created significant uncertainty from the applicant's perspective and therefore was subject of a first party appeal. However, as no third party appeal was lodged the appeal was withdrawn, and the final grant of permission, which was subject to 21 conditions, was issued on the 24th March 2022 and has not yet commenced on site.

An application to amend part ii and iii of condition 3 was lodged on the 27th June 2022 under Planning Ref. SD22A/0289 and received its Final Grant on the 10th February 2023, following the lodgement of an invalid appeal by a third party. The revised condition 3(ii) and (iii) states:

Condition no. 3(ii)

Within four (4) years from the date the first Gas Plant commences operation, the applicant or operator shall undertake a review with GNI of the ability to serve the Gas Plant with green gas and / or hydrogen (or similar fuels) shall be investigated and reported to the Planning Authority. Any ability for the Gas Plant to be operated with green gas and / or hydrogen (or similar fuels) shall be implemented within an agreed timeline agreed with GNI.

Condition no. 3(iii)

If the applicant receives a firm offer from Eirgrid under which the Gas Plant is not required, and the connection has been realized with capacity onsite from Eirgrid, then the Gas Plants shall be removed from the entire site within a year of the ceasing of operation."

The change in the wording of this condition is critical to the consideration of this appeal as it indicates a commitment by the application to utilise green gas and / or hydrogen (or similar fuels) in the future if they become available.

SDCC Planning Ref. SD22A/0105

Permission was granted on the 8th June 2022 for amendments to the substation compound and structures that are located to the immediate west of the current application site.

ABP Ref. ABP-314567 - SID application

This SID application was lodged with the Board on the 7th September 2022. The application solely seeks permission for a connection to the national grid via the proposed 110kV transmission lines, which was made in consultation and agreement with EirGrid and ESB. The application includes 110kV transmission lines from the permitted substation into the national grid infrastructure via connections to the permitted Aungierstown — Castlebaggot underground transmission lines, which runs between the permitted Aungierstown substation and the existing Castlebaggot 110kV / 220kV substation. The SID development will therefore provide a loop

in connection to serve the Kishoge substation via the creation of a new Aungierstown – Kishoge 110kV circuit and a new Castlebaggot-Kishoge 110kV circuit. The SID project is designed to support the power demand of the Facility Campus. These connections have been agreed and designed in accordance with the specifications of, and following review by, EirGrid and ESB. The decision on this application is overdue and is likely to be made imminently.

4. Nature and extent of the Proposed Development

The application that was made to the Planning Authority on the 16th August 2022 set out within the public notices as follows:

"We, EdgeConneX Ireland Limited are applying for permission for development at this site of 5.14hectares that is located within the townland of Ballymakaily to the west of the Newcastle Road (R120), Lucan, Co. Dublin.

The development will consist of the construction of two no. adjoined single storey data centres with associated office and service areas with an overall gross floor area of 15,274sqm that will comprise of the following:

- Construction of 2 no. adjoined single storey data centres with a gross floor area of 12,859sqm that will
 include a single storey goods receiving area / store and single storey office area (2,415sqm) with PV
 panels above, located to the east of the data centres as well as associated water tower, sprinkler tank,
 pump house and other services;
- The data centres will also include plant at roof level; with 24 no. standby diesel generators with associated flues (each 25m high) that will be located within a generator yard to the west of the data centres;
- New internal access road and security gates to serve the proposed development that will provide access to 36 no. new car parking spaces (including 4 no. electric and 2 no. disabled spaces) and sheltered bicycle parking to serve the new data centres;
- New attenuation ponds to the north of the proposed data centres; and
- Green walls are proposed to the south and east that will enclose the water tower and pump house compound.

The development will also include ancillary site works, connections to existing infrastructural services as well as fencing and signage. The development will include minor modifications to the permitted landscaping to the west of the site as granted under SDCC Planning Ref. SD19A/0042 / ABP Ref. PL06S.305948 and Ref. SD21A/0042. The site will remain enclosed by landscaping to all boundaries. The development will be accessed off the R120 via the permitted access granted under SDCC Planning Ref. SD19A/0042 / ABP Ref. PL06S.305948 and SD21A/0042.

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

Additional Information (Al) request

A request for Al was made by the Planning Authority having originally considered the application, on the 10th October 2022. Following receipt of the Al request the First Party undertook a comprehensive review of the key aspects of the request in seeking to balance the zoning of the site for development with the need to retain, wherever possible, and ultimately enhance the green infrastructure setting of the site and its connections into the surrounding green infrastructure of the area.

The First Party undertook a comprehensive review of the overall master planning of the site in particular the request to retain the western boundary hedgerow as listed under point 7 of the AI request. It is notable that the AI request **only** requested that the western hedgerow be retained. There was an acceptance that the other hedgerows could be removed, as there was no explicit request for them to be retained in any way.

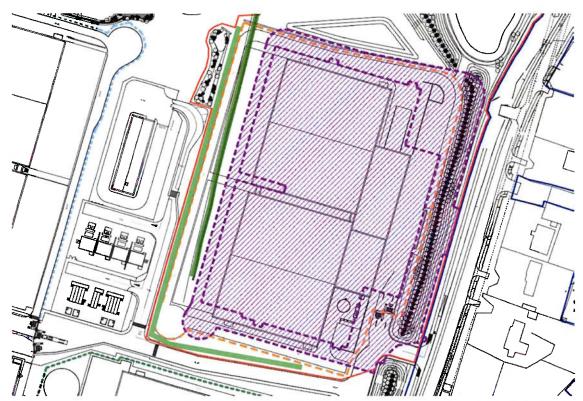
This internal review concluded that in order to retain the western hedgerow, there would be a need to move the Proposed Development eastwards. This would require the removal of the berms and extensive planting permitted on the eastern side of the site, alongside the R120 and to make the Proposed Development and Permitted Development far more visible, as well as removing the permitted strong north – south green infrastructure along the east of the site that connects with the canal corridor to the north.

This would be contrary to good planning principles established for the site under Planning Ref. SD19A/0042 (recently commenced) and SD21A/0042; as well as the green infrastructure policies and objectives of the County Development Plan.

The implications of attempting to keep the western hedgerow is shown in the drawing at the top of the following page, with the relocated development outlined in magenta, that indicates the clear conflict with the permitted green infrastructure on the eastern side of the site, and the western hedgerow shown in green.

The conflict of retaining the hedgerow and loss of the already permitted visual mitigation and green infrastructure associated with the previous permissions was discussed with the case planner. At this point, it was explained that as a data centre is designed to maximise the efficiency of the end user requirements and whilst it was discussed and assessed, it was concluded that it would not be possible to reduce the footprint of the Proposed Development without severely compromising the end user requirements. It was concluded that the western hedgerow would therefore still need to be removed.

In order to re-establish a new north-south biodiversity link, the First Party reduced the external areas around the data centre to enable them to plant a new native hedgerow (see bright green line below) that runs parallel to the existing hedgerow, and which will also extend along the southern side of the data centre creating stronger biodiversity links within the site, as well as around the periphery of the site, which were requested to provide under the original 2019 application. A full and robust justification for this was provided as part of the Al response.

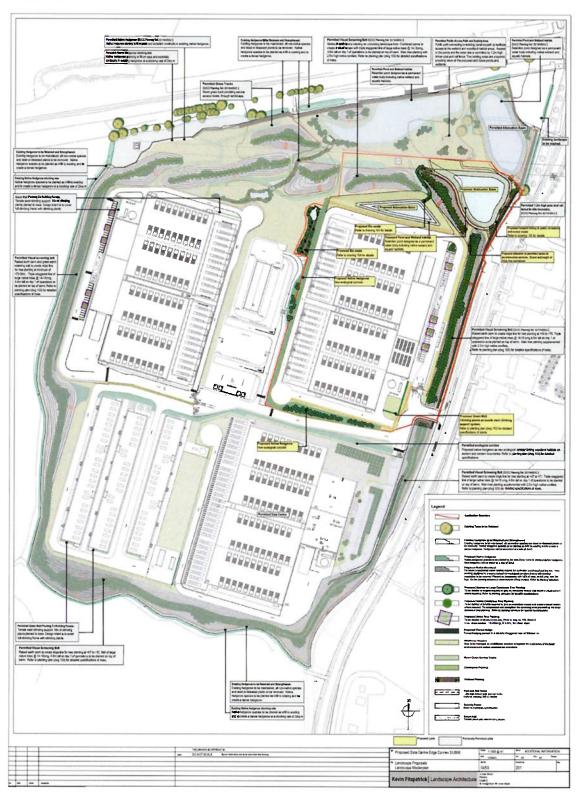


Plan showing alignment of western hedgerow, proposed development as applied for (outlined in orange), and the indicative position of the proposed development (magenta shading) if the hedgerow were to be retained, and new hedgerow shown in bright green

No other material elements were amended under the AI response apart from the addition of an open bio-swale that will connect the two proposed attenuation ponds to the north of the site. Despite the minimal changes and due primarily to point 17 of the AI request, the Environmental Impact Assessment Report was reviewed and where required was amended and updated.

In addition the AI response focussed on setting out how the Proposed Development has positively addressed design, green infrastructure and SUDS policies and objectives of the County Development Plan.

The modified landscape scheme submitted as part of the Al response, and the changes to it are clearly set out below.



Al proposed site layout indicating changes

The request for AI also included a range of other issues that included the need to demonstrate compliance with Policy EDE7 Objective 2 of the County Development Plan, which forms a primary ground of this appeal.

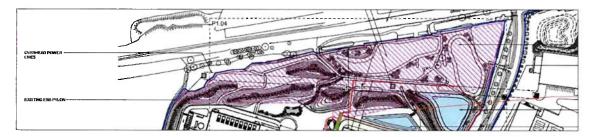
Under the First Party's response on this issue the Edgeconnex Connection Agreement was set out, and further details and clarifications are set out under section 6 of this appeal. The Board are referred to the Data Centre Connection Offer Process and Policy ("DCCOPP") Document published in July 2019 and updated in June 2020 by EirGrid and the appended documents, which confirms existence of the Edgeconnex Grid Connection Agreement.

We refer the Board to the table on page 27 of this appeal that sets out that all aspects of the points raised, as part of the AI request, were comprehensively and adequately addressed to the satisfaction of the Planning Authority, apart from the two reasons set out under this appeal that relate to insufficient capacity in the network, connection offer, significant on site renewables, evidence of PPA engagement and reliance on predominantly gas; and the impact on green infrastructure objectives. These are all comprehensively addressed under this First Party Appeal.

5. Assessment of the application having regard to the policies and objectives of the South Dublin County Development Plan 2022-2028

The County Development Plan is the statutory planning document that covers the entire South Dublin administrative area. The County Development Plan was adopted in June 2022 and came into effect on the 3rd August 2022. The data centre element of the Proposed Development is to be located within an area zoned EE (Enterprise and Employment) under the County Development Plan. The zoning Objective EE seeks: "To provide for enterprise and employment related uses".

The northern part of the Facility Campus is zoned RU, and this aspect of the site contains no element of the Proposed Development beyond part of the new attenuation pond. The demarcation between both zonings is clearly shown below, with the RU zoning marked by a pink hatching.



The status of data centres within the EE zoned lands has been subject to significant debate and consideration by both the Planning Authority, and recently the Office of the Planning Regulator (the "**OPR**") and the Minister for Housing, Local Government and Heritage (the "**Minister**").

The OPR recommended to the Minister in a letter dated the 19th July 2022, to issue a Direction under section 31 AM (8) of the Planning and Development Act 2000 (as amended) to reinstate the data centre use class from being 'not permitted' to being an 'open for consideration' use within the EE zoning. The Draft Direction from the Minister to the Planning Authority was issued on the 29th July 2022. This Direction highlights that the designation of data centres as not permissible would be contrary to Regional Policy 8.25 in the RSES for the East Midland Regional Authority, which includes clear policy support for the location of development of this nature within the area of the Regional Authority, including South Dublin.

This Final section 31 Direction issued in November 2022, on the same terms as the Draft Direction, is deemed to be included within the adopted County Development Plan as per section 31AN (11) of the Planning and Development Act 2000 (as amended). This First Party Appeal is therefore made on the basis that a data centre is an "open for consideration" use under the EE zoning.

Open for consideration uses are defined under the County Development Plan as:

"Land uses that are listed as 'open for consideration' in the land use zoning tables may be acceptable to the Planning Authority subject to detailed assessment against the principles of proper planning and sustainable development, and the relevant policies, objectives and standards set out in this Plan. Proposed uses in this category will be subject to full assessment on their own merits and particularly in relation to their impact on the development of the County at a strategic and a local level. Such uses may only be permitted where they do not materially conflict with other aspects of the County Development Plan"

It is pertinent as the use is now considered as being open for consideration under the EE zoning, to also consider it in relation to the other policies and objectives of the County Development that are relevant in this instance. These relate to compliance with Policy EDE7 (other objectives that do not form a reason for refusal), and particularly Objective 2 under that Policy; employment policy; and green infrastructure policies as follows:

i. Compliance with Policy EDE7, Objective 2

The current County Development Plan recognises the need for Space Extensive Land Uses, such as data centres, to be located at appropriate locations having regard to infrastructural, transport and environmental considerations as well as the need for orderly growth (Policy EDE7). These same principles are replicated as a requirement under section 12.9.4 of the County Development Plan. The Proposed Development, which forms part of a wider data centre campus (the Facility Campus), fully complies with Objective 1 of this Policy as it is located outside of the M50. Whilst the site is accessible by public transport the capacity of such services are not such that would warrant a higher density employment use on the site, which are already achieved due to the fact that the Proposed Development site forms the third phase of the development of the First Party's Facility Campus. We respectfully submit that the Proposed Development is therefore fully in accordance with Objective 1 of this Policy, as was accepted by the Planning Authority.

Objective 2 of this policy sets out a list of requirements that space extensive enterprises need to demonstrate, and two aspects (in bold) of these form a reason for refusal that are subject of this appeal, as follows:

"To require that space extensive enterprises demonstrate 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 onsite renewable energy generation to ensure as far as possible 100% powered by renewable energy, where on site demand cannot be met in this way provide evidence of engagement with power purchase agreements (PPA) in Ireland;
- Sufficient capacity within the relevant water and 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."

We have already set out the reasons behind why and how the application is fully in accordance with the first objective. The following sets out how the First Party is meeting the requirements of Objective 2 of this Policy EDE7. We refer the Board to the fact that the Planning Authority has accepted that the Proposed Development is fully in accordance with all other aspects of this Policy.

Strong energy efficiency measures to reduce carbon footprint

Energy efficient measures starts at site selection, where the First Party focuses on building orientation to maximise opportunities from the prevailing wind direction and reducing solar gain. This is followed by the design and construction of highly efficient data centre campuses yielding industry leading Power Usage Effectiveness ("PUE") and low water use - measured as Water Usage Effectiveness ("WUE"). We can confirm that the First Party has committed to achieving net zero carbon emissions by 2030 and are creating interim reduction targets that are in alignment with the Science Based Target Initiative ("SBTi") methodology.

The overall design has introduced energy efficiency measures that are detailed within the Energy Statement prepared by Ethos Engineering that accompanied the application and Al submission.

We can confirm that the First Party is committed to driving emission reductions across all of its activities through investment in technology; sourcing renewable energy, wherever possible; and in funding carbon removal projects. At the Facility Campus, energy efficiency measures have been integrated into the design as outlined in the AI response energy statement.

The site is also future proofed to take advantage of cleaner fuels as they become available. The amended condition 3 of the permission granted for the gas powered plant will, as put forward by and accepted by the Planning Authority under Planning Ref. SD22A/0289, enable, if it becomes available a transition to it using green gas and / or hydrogen (or similar fuels) within an agreed timeline with Gas Networks Ireland (GNI). Sourcing renewable energy is a key enabling strategy to meeting the applicant's global net zero goals.

Maximise onsite renewable energy generation

In order to maximise onsite renewable energy generation, the already permitted Power Plant, which is scaled to serve the Proposed Development, has capacity to be fuelled by green gas and / or hydrogen (or similar fuels).

The Power Plant is already permitted as part of the Permitted Development and is designed with capacity to support this proposed third phase of development (i.e., the Proposed Development does not result in any change to this already permitted infrastructure, which was subject to a previous grant of permission by the Planning Authority).

The permitted Power Plant is scaled in accordance with the CRU Direction and DCCOPP, to provide onsite energy production. It has a dual permitted purpose that was permitted under this previous permission (Planning Ref. SD21A/0042), as follows:

- to provide continuous power to the permitted and proposed data centres should the EirGrid connection not be realised at the time of commissioning of the Facility Campus. This is expected to be a maximum of two years at the time of this appeal.
- 2. once the EirGrid connection is realised the gas plant will only ever be utilised to reinforce the national grid. In that scenario the plant is only envisaged to run at the request of EirGrid in response to a grid event as per their flexible demand policy.

This is not in conflict with condition 3(iii) of SDCC Planning Ref. SD22A/0289, as this requires there to be no need for a back-up for the national grid. The permitted Power Plant will therefore provide security of supply to the national grid, where currently renewables cannot, by providing additional capacity under the terms of the flexible connection arrangements under the Edgeconnex Grid Connection Agreement. Subject to the requirements of the CRU Direction, currently all Data Centre connections being offered by EirGrid in the Dublin region are being offered on a flexible basis and in accordance with the CRU Direction. Flexible demand is electrical load for a data centre that must be reduced on instruction from EirGrid via the National Control Centre (NCC).

By providing the already permitted Power Plant at the immediate point of demand, this actually reduces the requirement for future grid reinforcements and relieves constraints in the locality. This is fully in accordance with the Climate Action Plan 2023 (the "Climate Action Plan") that recognises the need for a diversified portfolio of generation up to 2030 and beyond in order to deliver grid stability and system services arising from increasing renewable energy penetration.

High efficiency Power Plants (such as has been permitted in this instance), along with storage and interconnection are recognised by EirGrid and CRU as contributing to this solution and facilitating greater levels of renewables as a manner in which to supplement the transition to renewables as the mainstay of Ireland's energy supply.

By bringing new flexible generation to the point of demand, not only does this ease grid constraints, it will also provide much needed flexible capacity on the grid to facilitate the increased level of renewables aspired to in the Climate Action Plan.

Due to the unreliability and intermittency of solar and wind as a permanent source of power, it is not currently possible for the Proposed Development to be permanently powered by these traditional renewable energy generation sources alone. There is also insufficient land on the site to accommodate sufficient onsite solar and/or wind generation to serve the entire development.

Nonetheless, we also refer the Board to the fact that the Proposed Development contains a number of PV panels to generate on site renewable electricity to be compliant with nZEB "Nearly Zero – Energy Buildings" requirements and Part L of the Building Regulation in accordance with the requirements of section 12.10.1 of the County Development Plan.

While the location of significant quantities of solar or wind energy generation is not feasible on the subject site, the already permitted Power Plant will support the short-term increased penetration of more intermittent renewable generation on the grid by providing for stable energy supply as and when required. In addition, the generation of energy on site via renewable sources has been maximised so that it can utilise green gas and hydrogen gas as these fuel sources become widely available. This is tied into and is a condition of the Power Plant permission.

In addition, the First Party is committed to engaging in renewable PPAs to offset energy use associated with the Proposed Development as explained in detail in later sections of this appeal response. This will further support the increased resilience and sustainability of the national grid, and directly encourage net additional renewable energy generation in line with the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy. As on-site demand cannot be completely achieved by renewable energy, the evidence of engagement with PPAs meets SDCC requirements under EDE7 Objective 2.

Sufficient capacity

We can confirm that the First Party has received and executed a grid connection agreement with EirGrid (i.e. the Edgeconnex Grid Connection Agreement). The long-term primary supply of electricity will come from the national grid infrastructure with the permitted on-site Power Plant (which is unchanged by the current phase of development) feeding the national grid, as and when deemed necessary by EirGrid as TSO.. The Proposed Development therefore obtains sufficient capacity by means of its grid connection and the already permitted Power Plant, which is already scaled to serve the Proposed Development. Please see Appendix Awhich contains a legal note by Mason, Hayes & Curran LLP noting that it is not within the remit of the planning authority to be able to determine "sufficient capacity" allocation or connection to the electricity grid, or indeed the operation and management of contracted grid capacity. This falls squarely within the remit of the System Operators EirGrid (TSO) and ESB (DSO). Nevertheless, the First Party has the benefit of a flexible connection agreement and the requirement by SDCC for a fixed connection agreement has no legal or planning basis.

The First Party also has a gas connection agreement from Gas Networks Ireland (GNI) to supply the permitted Power Plant. Further details on this issue are provided under the Grounds of Appeal section of this appeal document.

The Power Plant will play a part in decarbonising the grid – as acknowledged in the Climate Action Plan adopted by government, which targeted the delivery of 2GW of new gas generation to provide stability on the grid as significantly increased intermittent renewables are introduced, while concurrently allowing for the urgent phasing out of more carbon intensive fuel sources. Therefore, the permitted Power Plant, which is scaled as permitted to support the Proposed Development by providing for stable energy supply in support of increasing renewable penetration represents a timely support for the grid in the area in the context of this and other developments in the wider vicinity.

Given the above, the First Party has demonstrated that it has met the requirement of demonstrating sufficient capacity for the proposed use as required under EDE7 Objective 2.

Measures to support the just transition to a circular economy

The Proposed Development seeks to support the transition to a Circular Economy. The application included an outline construction and demolition waste management plan (Chapter 15 of the EIAR), that addressed construction waste and a number of the factors required under the transition to a circular economy. This Outline Plan seeks to lower embodied carbon; conserving resources; sustainable material sourcing; designing to eliminate waste; longevity of design, flexibility and adaptability in design; and indicates design for disassembly.

We would request that an updated version of this Plan is requested as a condition of a permission to be provided prior to the commencement of development. This was considered by the Planning Authority as adequately addressing this part of the objective.

Measures to facilitate district heating

In accordance with section 12.10.3 of the County Development Plan, the design has ensured that there is sufficient space on site to connect to a waste heat recovery building in such a scenario. The development of the Clonburris SDZ Planning Scheme is recognised in the SDCC Climate Change Action Plan as having been developed in conjunction with the Clonburris Energy Master Plan. This Master Plan identifies a range of delivery mechanisms that include the creation of local heat networks. It is notable that the Clonburris SDZ Planning Scheme boundary runs to the new bridge over the Grand Canal to the immediate north-east of the site. The implementation of such a scheme within Clonburris, or elsewhere, would enable heat rejected by the processes on the application site, to be provided to the surrounding area should sufficient demand exist for this.

The use of the VRF heat pump provides the opportunity to provide all heating and cooling efficiently using electricity. This reduces the reliance on fossil fuels and is a 'green' technology under the TGD Part L 2021, listed as one renewable energy option to meet the requirements of NZEB.

This ensures that the Proposed Development is fully in accordance with section 12.10.2 Low Carbon District Heating Networks and section 12.10.3, Energy from Waste of the County Development Plan. This was considered by the Planning Authority as adequately addressing this part of the objective.

The provision within the Proposed Development design for district heating also ensures compliance with the relevant part of the Government Statement, which is dealt with in further detail below.

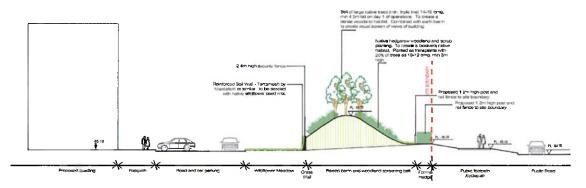
High quality design

The design of the Proposed Development is predicated on the experience and precedent that was accepted under SDCC Planning Ref. SD19A/0042 and SD21A/0042 within the Facility Campus. The nature of the overall design has been informed by a site analysis of environmental issues prior to the original application on the Facility Campus in 2019; and the enhancement and creation of new bio-diversity corridors to fully integrate the scheme into the surrounding environment to ensure that direct and cumulative effects on biodiversity are addressed in the overall master planning of the site.

Suitable attenuation and sustainable drainage systems (SUDS) have also informed the design. This mitigation of design as already permitted, also significantly increases native tree planting within the site from its current position. The design incorporates SUDS fully in accordance with the policies of the County Development Plan. The already permitted landscaping around the site will be in place significantly prior to the commencement of construction of the Proposed Development.

The scale and form of this single storey data centre was informed by the site position. The highest element of the Proposed Development are the flues that are associated with the back-up generators that are located to the west of the data centre, and will therefore only be visible from distant views. A parapet is proposed around any plant at roof level so that the majority of the building will read as being 12.9m in height, with the office element to the east being 9.33m in height, and the generator screen being 9.2m in height.

The highest element is set-back from the eastern boundary along the R120 by over 65m; with the lower office admin element being set-back by 41.77m. These significant set-backs help to reduce the visual scale and massing of the building, which is further aided by the permitted planting that includes low tree and other planting either side of a row of triple staggered semi-mature trees planted along the top of the 4-5m berms (see below). This provides a high degree of visual screening of the Proposed Development from local and medium distance views. The removal of this visual screening, by retaining the western hedgerow would be wholly unjustified as outlined within this First Party Appeal.



In addition vertical shaded cladding elements are provided to the north, south and east elevations (that face the internal road, canal and the R120 that help to create a higher end finish to the data center and extend from the upper level that help to visually integrate and break down the scale of the Proposed Development. This design approach has been accepted under the previous permissions granted on the Facility Campus.

In addition, a green wall is proposed to the east and south of the plant to the south of the admin element to help to further visually integrate the development.

The high quality design and plan approach is reflected and outlined in the Design Statement that accompanied the AI Response. This outlined the context of the area, and how the Proposed Development will connect into the existing public realm, and is being undertaken at an appropriate building height (similar to that already granted permission on the Facility Campus), as well as including detail on materials, colours and textures that were accepted by the Planning Authority under the 2019 and 2021 applications fully in accordance with section 12.5.2 of the County Development Plan.

The architects have also taken a universal design approach as required under section 12.5.1 of the County Development Plan. This ensures adequate disabled car parking spaces, and a level of access into the site, and the Proposed Development that caters for all.

The application through its massing and design, and use of materials has provided a scheme that complies with the objectives of the County Development Plan under its various QDP policies and objectives.

Employment once operational

The data centre, once operational will generate the equivalent of 30 full time jobs as well as support services, with the Facility Campus providing employment for c. 180 employees across a range of employment activities, as well as sustaining a range of support services in the data centre industry. The colocation nature of the First Party means that it provides further incentive to IT companies to establish in Ireland in accordance with national government policy. This was considered by the Planning Authority as adequately addressing this part of the objective.

Once operational, c. 30 full time employees will be present on site daily in the Data Centre facilities. Security staff (6 no. total) will be required at all times as well as service staff from outside the data centre facility particularly in relation to the Power Plant creating employment of up to 40 people. During the night shift a reduced number of staff will be required with 10 in the data centre facilities with similar.

The facility will operate on 3 no. 8 hour shift basis (8am to 4pm; 4pm-12am and 12am-8am). Working hours are expected to be 24 hours a day, 7 days a week. The total persons anticipated to travel to and from the site over a 24 hour period, and therefore employed directly on site, is therefore c. 100. Additional service staff and other deliveries etc. would be addition to this.

Levels of traffic during construction and operational phases of the development

The details in relation to the level of traffic that the construction and operational phase of the Proposed Development are fully set out within Chapter 12 of the EIAR undertaken by Pinnacle that accompanied the application, and now form Chapter 13 of the updated EIAR. This concludes that the peak demolition and construction period would generate a maximum of 20 demolition and construction vehicle movements per day

10 arrivals and 10 departures each day. The effects of the demolition and construction traffic would be temporary, medium, negative and not significant. Subject to a grant of permission, the Proposed Development would once fully operational would be anticipated to generate a maximum of 60 vehicle trips (arrivals and departures) during the am peak and none during the pm peak each day, and its impact is not considered to be significant on the surrounding road network. This was considered by the Planning Authority as adequately addressing this part of the objective.

Climate Neutral Data Centre Pact

We can confirm that Edgeconnex (of which the First Party is a group company) are signatories of the Climate Neutral Data Centre Pact. We refer the Planning Authority to https://www.climateneutraldatacentre.net/signatories/ that identifies that Edgeconnex are a signatory fully in accordance with this element of this objective. This was considered by the Planning Authority as adequately addressing this part of the objective.

ii. Compliance with Policy EDE7 Objective 3

We respectfully submit that the landscaping and site layout of the Proposed Development, in line with what was established and permitted under the two main permissions under SDCC Planning Ref. SD19A/0042 and SD21A/0042 for the Facility Campus has fully ensured, that the overall landscape and biodiversity strategy enables its integration into the existing and permitted Green Infrastructure (GI) network. The permitted Landscape Master Plan by Kevin Fitzpatrick Landscape Architecture (Drawing no. 201) submitted as part of the AI Response indicates the native woodland planting, medium or large native deciduous and coniferous tree planting; wildflower and wetland meadows; native hedgerow planting; existing native hedgerow being retained as well as existing trees to be retained within the application site and the overall Facility Campus site,

We respectfully submit that the biodiversity quality of the site prior to development commencing was poor. The applicant's approach has always been to maximise biodiversity enhancements within the site, and particularly along the north RU zoned lands adjacent to the canal; as well as along the boundaries of the site and has included substantial green walls and a west to east hedgerow that passes centrally within the site, to further enhance the permitted biodiversity corridors already granted under previous permissions.

The Proposed Development will incorporate further biodiversity measures that will include a new hedgerow to the west of the Proposed Development that will link from the planting within the RU zone and canal corridor to the north, and will extend to the west and south of the Proposed Development, providing a strong link to the permitted east - west hedgerow that passes to the south of the centrally located access road within the Campus, as well as the permitted boundary planting. This will improve biodiversity corridors within the overall site, and its connections to surrounding green infrastructure.

In addition, and in accordance with best practice all security fencing is proposed internally to the landscaping with only post and rail fences to the boundaries. This enables full biodiversity corridors with no need for mammal connections within fence lines. The permitted and proposed landscaping and green infrastructure will therefore create improved green infrastructure connectivity within and through the site. Additional bird boxes and bat boxes will be provided, by condition if it is deemed appropriate.

In addition, the planting and ponds being proposed will help to support both the local bat population and the wider local ecology. This will ensure that the overall scheme is fully in accordance with the Green Infrastructure Strategy set out in Chapter 4 and Policy EDE7, Objective 3 of the County Development Plan.

iii. Compliance with Green Infrastructure and Development Management policies and objectives
The Proposed Development as amended as part of the Al response, provided a comprehensive response to
all green infrastructure issues. This forms the second part of the grounds of this appeal.

iv. Protection and enhancement of green infrastructure

The Proposed Development will positively contribute to the protection and enhancement of Green Infrastructure (GI) in the County. This follows on from the principles of the permitted landscape plans as granted under Planning Ref. SD19A/0042 and SD21A/0042.

In accordance with this a green infrastructure plan (Drawing no. 203 prepared by Kevin Fitzpatrick Landscape Architecture) indicated as part of the AI Response how the green infrastructure of the Proposed Development will integrate with surrounding Green Infrastructure both immediately adjacent and within the wider GI network. Chapter 3 and 12 of the EIAR that accompanied the AI response addressed and sets out in detail how the Proposed Development complies with the various Green Infrastructure objectives of the new County Development Plan. The five objectives raised in the second reason for refusal are comprehensively addressed under the grounds of appeal.

The site is not located within a defined riparian corridor as identified under Map 13 of the County Development Plan. The Grand Canal is identified as a Primary GI corridor (Figure A 4.1) and is located to the immediate north of the Facility Campus. The approach of the First Party has always been to protect and enhance the canal as a GI asset, and to connect it into other surrounding GI corridors in accordance with the principles of section 12.4.2 of the County Development Plan.

The First Party has created enhanced ecological corridors that will create pathways for wildlife into the nearest designated GI corridors, as well as adding positively to the GI asset within the RU zoned lands by the use of open attenuation ponds and planting, as well as the creation of a public park.

In accordance with the requirements of section 12.4.2 of the Development Plan a Green Infrastructure Plan and Landscape Master Plan drawings were submitted with the AI Response by Kevin Fitzpatrick Landscape Architecture (Drawings 203 and 201). The GI Plan indicates how the Proposed Development will link into the surrounding wider GI network (see below).



Green Infrastructure Plan indicating entire Facility Campus

The Proposed Development will include the planting of 484 new semi-mature trees (c. 5m in height) with the already Permitted Development providing for 1,854 new semi-mature trees on the Facility Campus. In addition to this it is permitted to plant 3,843 standard trees (c. 2m in height) under the Permitted Development with another 912 of these trees proposed to be planted as part of the Proposed Development. In addition to this, it is permitted to plant 18,458 saplings (c. 0.5m in height) across the Facility Campus and with a further 3,586 proposed under this application.

The western hedgerow, which was the only hedgerow sought to be retained under the AI Request of the Planning Authority, is some 200m in length. The AI Response outlined that the western hedgerow will be replaced by 250m of new native hedgerow, with significant lengths of hedgerow already permitted under the previous two permissions. We respectfully submit that there will be a significant net hedgerow and tree cover gain as a result of the Proposed and Permitted Developments.

The approach to Green Infrastructure within the site will ensure that the highest possible biodiversity provision is secured for the overall development of the site in accordance with Policy NCBH11, Objective 3. The GI Plan (Drawing no. 203) indicates the key links that the proposed new planting will provide in linking the green infrastructure proposed with the surrounding green infrastructure that contribute positively to the biodiversity and landscape character as well as the overall amenity of the area in accordance with Policy NCBH11, Objective 4 of the County Development Plan.

The already approved landscape approach in providing berms, mature native planting of new hedgerows and planting, will provide wildlife and biodiversity corridors around the site that will connect with existing planting and hedgerows that form surrounding green infrastructure, but also will provide a natural screen to the Proposed Development, even at year 1 of operations. However, given the already permitted landscaping around the site, which will be implemented as part of the permission granted under SDCC Planning Ref. SD19A/0042, which has recently commenced, the majority of the landscaping may well have been in place for 5 years or more prior to the Proposed Development coming into operation. The concerns raised by the Parks Department in relation to the planting not being acceptable mitigation for any hedgerow removal does not stand up.

The landscape plan already permitted and under the Proposed Development proposes mature and heavy landscaping throughout with initial tree planting being in rows of three trees at c. 5m height across the top of the landscape berms. The maturity of the trees at planting will aid the visual integration of the Proposed Development within this commercial area.

The Green Space Factor for the overall site is 0.4, which whilst just below the suggested 0.5 for such lands, contains a public park and significant new planting on a very large site, and it has already been established under the Permitted Development that the landscape features are above the minimum requirements. The applicant proposes in addition to the mitigation measures outlined in the EIAR to undertake a bat and bird box programme within the overall site to further improve biodiversity and the green space factor interventions as set out under page 462 of the County Development Plan in addition to the public park and significant GI interventions already permitted on site.

Existing hedgerows and other vegetation will be retained wherever possible and strengthened with native planting. This will create commuting and foraging corridors within the Proposed Development site for a range of fauna species that will connect into existing GI surrounding the site. This will be further aided by proposed bat boxes and bird boxes. All of these measures, will ensure that the Proposed Development fully accords with green infrastructure policies and objectives of the County Development Plan and provide a net biodiversity gain for the site.

6. National and Regional Planning context

Regional Spatial and Economic Strategy for the Eastern and Midlands Regional Assembly
 The Regional Spatial and Economic Strategy (RSES) for the Eastern and Midlands Regional Assembly
 (EMRA) includes Regional Policy Objective (RPO) 8.25 which states the following:

"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 storage facilitys and associated economic activities at appropriate locations.
- Promote Dublin as a demonstrator of 5G information and communication technology."

The site is therefore considered to be an appropriate location for the development of data centres under this Strategy. This is highlighted in the OPR outlining to the Planning Authority, during its review of its own County Development Plan in 2022, that this should be reflected by data centres being open for consideration under the EE zoning which applies to the subject site under the County Development Plan, in order to ensure compliance and alignment with the foregoing provisions of the RSES.

ii. National Planning Framework

The National Planning Framework (NPF) was published in February 2018 setting out a vision for Ireland in land use and planning terms to 2040. The NPF replaced the National Spatial Strategy once it was adopted as the long-term land use and planning vision for Ireland.

National Strategic Outcome 5 of the NPF relates to the creation of "A Strong Economy Supported by Enterprise, Innovation and Skills". This strategic outcome is underpinned by a range of objectives relating to job creation and the fostering of enterprise and innovation, and is reflected in the recent new Government Statement, as outlined below.

The following objective, relating to Information and Communications Technology (ICT) infrastructure (including data centres) is included under National Strategic Outcome 5:

"Promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities."

The NPF also states under National Strategic Outcome 5:

"Ireland is very attractive in terms of international digital connectivity, climatic factors and current and future renewable energy sources for the development of international digital infrastructures, such as data storage facilitys. This sector underpins Ireland's international position as a location for ICT and creates added benefits in relation to establishing a threshold of demand for sustained development of renewable energy sources."

The NPF is favourably disposed to the location of ICT infrastructure in Ireland, and the Proposed Development, which comprises of such ICT infrastructure, is therefore considered to be wholly in accordance with this key body of national planning policy.

iii. Government policy

We note that the government issued a revised "Statement on the Role of Data Centres in Ireland's Enterprise Strategy" on the 27th July 2022 (the "Government Statement"). This document sets out "Principles for Sustainable Data Centre Development" which will inform applications for future data centre development over the coming years.

The Government Statement acknowledged that all demand for such development will not be capable of being accommodated, however, it also stated that:

"Data centres are core digital infrastructure and play an indispensable role in our economy and society. Data centres provide the foundation for almost all online aspects of our social and work lives, including video calling, messaging and apps, retail, banking, travel, media, and public service delivery such as healthcare and welfare."

The Government Statement provides a pathway towards new data centre development subject to the following considerations:

"Within the constraints of sectoral emissions obligations, these principles set out the positive role that data centres can play, subject to meeting the requirements set out under the applicable planning and grid connection processes."

The Proposed Development falls under the extant Edgeconnex Grid Connection Agreement with EirGrid in respect of the Campus Facility. Additionally, the Permitted Development establishes the Power Plant, which is scaled as permitted to cover the Proposed Development, and which does not fall to be reconsidered under the current application.

Notwithstanding that the power strategy for the campus is already established, as set out below, the Proposed Development is considered to align fully with the Government Statement, and Edgeconnex (of which the First Party is a group company) continues to pursue its commitment to reaching net zero provision of data services, including as a signatory of the Climate Neutral Data Centre Pact.

The Government Statement sets out six principles that should inform and guide future data centre development. The First Party and the Proposed Development meets these on the following basis:

Economic impact

"The Government has a preference for data centre developments associated with strong economic activity and employment."

Edgeconnex (of which the First Party is a group company) is a leading, highly experienced developer and provider of data centres worldwide. As well as having already commenced development on the first phase of the already Permitted Development on the Facility Campus, creating c. 250 construction jobs over a prolonged construction period, the Proposed Development in combination with the Permitted Development will create c. 200 full time positions in the areas of IT, finance, project management and security on this campus, with further employment based on the eastern campus. Both the Permitted Development and the Proposed Development will support future Irish investment by the First Party in Ireland creating resilient IT infrastructure and will further support the attractiveness of Ireland as a location for ongoing foreign direct investment.

The Government Statement itself specifically recognises the major economic impact of data centres and cloud infrastructure in Ireland, stating the following:

"Data centres represent a core digital infrastructure for both Ireland's and Europe's digital economies and for strengthening Ireland's position as a strategic international location for IT services. This is the infrastructure that lies behind all digital aspects of our social and work lives, including video calling, messaging and apps, retail, banking, travel, media, and public service delivery in areas such as healthcare and welfare.

Data centres enable digital economies through hosting critical software and data that allows the world's leading companies to run their businesses, organise their supply chains, pay their staff, and host video conferencing applications. These are the suite of technologies and services that have facilitated the digitalisation of our economy, our work lives and many of the online applications, services and platforms widely used across society. During the pandemic, they enabled business and communities to quickly move to a remote model. Data centres also host and deliver entertainment and content services into homes.

More broadly however, data centres are also the means by which Ireland's major technology companies process and store companies' most sensitive and strategic assets. They are also the means by which they are transitioning their businesses to the cloud, making Ireland critical to their global presence. Investments by technology multinationals in large, long-life assets such as data centres further secures the presence of the global technology sector in Ireland.

Ireland is home to a significant cluster of digital infrastructure and service providers. To maximise the benefits of technology advancements including from 5G, Al [Artificial Intelligence] and virtual reality, Ireland will need to continue to facilitate sustainable data centre development and the associated technological and economic spillovers."

The Government Statement, under this principle, also notes that any data centre development should accord with the provisions of the relevant Regional Spatial and Economic Strategy and the NPF. The Proposed Development is aligned with the policies of the Regional Spatial and Economic Strategy for the EMRA and the NPF.

National Strategic Outcome 6 of the NPF relates to the creation of "A Strong Economy Supported by Enterprise, Innovation and Skills". This strategic outcome is underpinned by a range of objectives relating to job creation and the fostering of enterprise and innovation.

The following objective, relating to ICT infrastructure (including datacentres) is included under National Strategic Outcome 6:

"Promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities."

The current application proposes the provision of a new data centre building, in a location which is well suited and serviced to accommodate such a use. The NPF further states under National Strategic Outcome 6:

"Ireland is very attractive in terms of international digital connectivity, climatic factors and current and future renewable energy sources for the development of international digital infrastructures, such as data centres. This sector underpins Ireland's international position as a location for ICT and creates added benefits in relation to establishing a threshold of demand for sustained development of renewable energy sources."

Having regard to the above, the NPF is clearly favourably disposed to the location of ICT infrastructure in Ireland, and the Proposed Development, which comprises of such ICT infrastructure, is therefore considered to be wholly in accordance with this key body of national planning policy, and as set out in section 6(i)also with regional planning policy under RSES.

It is submitted that the subject site is an appropriate location for the development of new ICT infrastructure development having regard to the site's zoning, its strategic and accessible location in close proximity to the national road / motorway network.

In the context of this first criteria, it is important to first note that the Government Statement itself highlights the positive national economic impact that data centre development has had (and consequently can continue to have) in Ireland. It states the following:

"Digital Infrastructure such as data centres underpins our technology sector, which is increasingly cloud based. Ireland's technology sector accounts for €52 billion (16%) of gross value added and employs 140,000 people — equivalent to 6 per cent of total national employment with 40 per cent growth over the last five years.

A CSO publication, Information and Communications Technology: A Value Chain Analysis 2019, highlights the economic contribution of the ICT sector. In 2019, output for the ICT sector amounted to €128bn. Total exports of services from the sector were some €121.4bn from both foreign and domestic firms, with domestic ICT companies exporting 37 per cent of their output. Technology companies invested €46bn in fixed capital assets in 2019, with R&D investment of €1.392 bn."

The Government Statement also sets out that data centres do not represent 'optional economic infrastructure', and states the following:

"Data centres are not a separate or optional economic infrastructure — they are integrated into our datadriven knowledge economy and information society. Digital infrastructure should be assessed in the context of the total economic value it gives rise to, including employment across the value chain, as well as its role in underpinning the evolving data economy. Our data-driven technology sector drives innovation, productivity, and overall economic activity. The data stored in Irish data centres underpins an increasing base of employment intensive businesses."

In addition, the Proposed Development will support an extensive ecosystem of equipment suppliers, operations, maintenance and service providers, a significant proportion of which will be based in Ireland.

Global cloud service providers employ thousands of highly qualified professional staff in Ireland, in well paid employment. The Proposed Development would therefore contribute towards maintaining Ireland's position as a leading exporter of cloud-based IT services, as recognised within the Government Statement.

Therefore, the Proposed Development fully aligns with this principle of the Government Strategy.

Grid capacity & efficiency

"The Government has a preference for data centre developments that make efficient use of our electricity grid, using available capacity and alleviating constraints."

This matter is comprehensively addressed under Section 8 of this appeal.

Edgeconnex (of which the First Party is a group company) is an industry leader in data centre energy efficiency. They have enabled waste heat reusage and are in discussions with various Irish and international energy providers specializing in providing solutions in Ireland to maximise opportunities for renewable energy use onsite.

The development is subject to an existing connection agreement with EirGrid as detailed within this appeal, which was modified in 2022. The already permitted Power Plant is designed and scaled to alleviate constraints on the grid, and provides for reliable, dispatchable energy supply in line with the provisions of the Government Statement and the CRU direction to system operators requiring generation capacity of this nature for new data centre developments.

The permitted power plant as granted under SDCC Planning Ref. SD21A/0042, and as amended under Planning Ref. SD22A/0289 has a dual permitted purpose, as follows:

- to provide continuous power to the permitted and proposed data centres should the EirGrid connection not be realised at the time of commissioning of the facility. This is expected to be a maximum of two years.
- once the Eirgrid connection is realised the gas plant will only ever be utilised to reinforce the national grid.
 In that scenario the plant is only envisaged to run at the request of EirGrid in response to a grid event as per their flexible demand policy.

This is not in conflict with condition 3(iii) of SDCC Planning Ref. SD22A/0289 as that condition requires for the Plant to be removed in totality, for there to be no future need by Eirgrid for the Plant as a back up to the national grid. The permitted plant will therefore provide security of supply to the national grid, where currently renewables cannot, by providing additional capacity under the terms of the flexible connection agreement. Subject to the requirements of the CRU Direction, currently all Data Centre connections being offered by EirGrid in the Dublin region are being offered on a flexible basis. Flexible demand is electrical load for a data centre that must be reduced on instruction from Eirgrid via the National Control Centre (NCC).

The applicant also has a gas connection agreement from Gas Networks Ireland (GNI) to supply the permitted Power Plant.

The Power Plant and Edgeconnex Grid Connection Agreement that will serve the Proposed Development are established and extant, and do not fall to be reconsidered as part of the current application or appeal. The Proposed Development, representing the third phase of an overall data centre campus, will make use of the available capacity in the existing Edgeconnex Grid Connection Agreement and the already permitted Power Plant, which is wholly in accordance with the foregoing principle of the Government Statement.

As part of their wider development, the First Party has also submitted a SID application for and committed to the delivery of a new high voltage substation and grid connection, representing a direct contribution to and development of the national high voltage electricity grid in the area.

Based on the foregoing, full compliance with this principle of the Government Statement is achieved.

Renewables additionality

"The Government has a preference for data centre developments that can demonstrate the additionality of their renewable energy use in Ireland."

Edgeconnex (of which the First Party is a group company) goal is to achieve a goal of being net zero carbon by 2030. In order to do so, they are making technology investments that reduce emissions. For example, Edgeconnex (of which the First Party is a group company) has a public commitment to ensure that by 2025 they no longer just offset but ensure that their PPAs match their consumption on an hourly basis.

The First Party is committed to engaging in positive developments for the Irish energy market through their engagement with PPAs. The First Party demonstrates this commitment in the current appeal by noting their willingness to accept a condition attached to any grant of permission for the Proposed Development, requiring that details of PPA's to be submitted to the Planning Authority prior to the operation of the Proposed Development, to demonstrate further engagement in a PPA for renewable energy in respect of the Proposed Development's energy use.

Customers at all their campuses globally can take advantage of renewable energy to reduce their carbon emissions. In Ireland, Edgeconnex (of which the First Party is a group company) is in discussions with potential renewable project providers that will provide additionality to the Irish electric grid.

In addition to the foregoing, it should be noted that the previously permitted Power Plant for the campus, which will also serve the Proposed Development, has been designed to accommodate biogas and hydrogen as fuel sources. The permitted Power Plant thereby directly supports and aligns with this pillar of the Government Statement.

Further details in this respect are provided in the latter sections of this appeal document, and it is confirmed that the Proposed Development complies with the foregoing principle of the Government Statement.

Co-location or proximity with future proofing 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 Corporate Power Purchase Agreements, private wire, or other arrangement."

In relation to this principle, it is noted that the Facility Campus (which the current development will form part of) entails the permitted Power Plant which is designed to accommodate operation on renewable fuel sources.

The Government Statement sets out the following in relation to this principle:

"Where the combination of technologies at a generation facility is built to match the demand capacity factor (e.g., endeavouring to match the maximum import capacity with export capacity), the same infrastructure may be able to assist both demand customers and generation facilities (wind/solar/battery farm). This would make efficient use of grid investments, reduce curtailment and potentially enable significant decarbonisation of the data centre. The Government also encourages the co-location of downstream value-adding activities that can make use of carbon, excess heat and other outputs from the data centre activity, such as for horticultural activities or district heating schemes."

As set out in detail later in this appeal document, the First Party is committed to, and would accept a condition requiring, their engagement in CPPAs for renewable energy to support the proposed data centre development in direct compliance with this principle of the Government Statement.

Additionally, the Permitted and Proposed Development makes provision for district heating in addition to reusing waste heat on site, which further demonstrates compliance with this principle. We refer the Board to section 8 of this document which sets out the grounds of appeal for further details in relation to the First Party's commitment to securing PPAs, as further evidenced by the correspondence with PPA providers included at Appendix D to this appeal document. The Proposed Development aligns with this principle of the Government Statement on this basis.

On this basis, the development fully complies with the foregoing principle.

Decarbonize data centres by design

"The Irish Government has a preference for data centres developments that can demonstrate a clear pathway to decarbonize and ultimately provide net zero data services."

Edgeconnex (of which the First Party is a group company) is committed to a clear pathway to achieving net zero carbon emissions for operations by 2030 and to drive emission reductions across the entire value chain. In energy, Edgeconnex (of which the First Party is a group company) guiding principles are to minimize energy use through efficient design and operations, and to decarbonize energy supply. The First Party, as recognised under the Permitted Development seeks to utilise cleaner fuels for on-site backup power generation, when they become available.

As set out in further detail below, the First Party is also committed to pursuing PPAs to offset the energy usage of the Proposed Development with new renewable energy generation. It is proposed that the First Party will ensure that long term PPAs for renewable areas and Guarantees of Origin (GOs) as described in Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 will be put in place to promote the decarbonization of the Facility Campus.

Additionally, the permitted Power Plant for the overall data centre campus is designed to use biogas and hydrogen as these fuel sources become widely available. Furthermore, as set out in this appeal document, Edgeconnex (of which the First Party is a group company) is a signatory of the climate neutral data centre pact, which entails binding commitments to achieving decarbonisation and net zero data services.

The proposals are in line with this principle of the Government Statement and the First Party has demonstrated concrete commitment and steps to proactively decarbonise their operations.

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."

Edgeconnex (of which the First Party is a group company) is committed to prioritise engagement with local communities to develop innovative solutions to proactively address opportunities and mitigate negative impacts. These include investment in schools, training, and education; sponsorship; support programmes to develop the technology workforce and skills required by its workforce; support local business both directly and indirectly; and supporting creativity and the arts.

In response to this principle, it should be noted that the delivery of the Proposed Development on the subject site will give rise to significant direct and indirect benefits for SMEs in the area during the construction process. Additionally, the operation of the development will give rise to the need for a range of support services and secondary employment, including benefits to SMEs in South Dublin and the wider area.

The Proposed Development will support an extensive ecosystem of equipment suppliers, operations, maintenance and service providers, a significant proportion of which will be SMEs based in Ireland. These SMEs will benefit from the Proposed Development both during the construction and operational phases of the Proposed Development.

The impact of the Proposed Development in terms of the geography of the area, and on the local population in terms of amenity and environmental quality (as referenced within the Government Statement in the context of this principle) will be mitigated in line with the contents of the EIAR. We refer to the EIAR for further details in this regard.

The Proposed Development will give rise to significant benefits for SMEs and the First Party is committed to actively benefiting the local community, in line with this principle.

The First Party is engaging extensively with the local community and is committed to continuing this engagement and involvement going forward.

The First Party have already committed to establishing a public park within the northern part of the Facility Campus as part of phase 2 of the Permitted Development on the overall site. This will establish an amenity for all local residents and visitors to use adjacent and connecting with the canal.

The First Party is committed to advancing the goals behind the Six Principles, as the examples above demonstrate. The First Party's strategy, developments, and operations are aligned with, and supportive of, government policy.

As a responsible company, committed to sustainability and decarbonisation, the First Party wishes to continue to work with the Irish government, all stakeholders and our neighbouring communities, to continue growing Ireland's position as a leader in the digital age for cloud computing, and to maximise the benefits of this investment for society and the economy. Their investment in Ireland will aid revitalisation and progress in the digital age that will support current businesses and attracting new ones, preparing the current and future workforce for high-tech careers at home in Ireland.

The Proposed Development therefore fully conforms to this current government policy and will adhere to any future government policy.

iv. Climate Action Plan 2023 (the "Climate Action Plan")

The First Party recognises the need to balance the demand for development with climate action and resilience that is reflected in both the Council's own Climate Action Plan 2019; as well as the national Climate Action Plan 2023. This Climate Action Plan has replaced the Climate Action Plan 2021, that contained policies and long term aims that were based on continuing to facilitate data centre development, subject to certain criteria, and future reviews, up to 2030. The Climate Action Plan 2023 recognised and took account of the changes in demand for electricity over the next 10 years; and that this will alter the profile for demand and recognises that the forecast growth in data centres will represent a challenge to Ireland's emissions targets.

Government policy set out under the Climate Action Plan, states that the strategy in the short and medium term on 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.

We respectfully submit that the County Development Plan, following the Ministerial Direction reflects this and requires data centre applications, such as the Proposed Development, to be considered on their individual merits having regard to EirGrid and CRU policy but also the criteria set out under Policy EDE7 Objective 2 of the County Development Plan.

7. Decision of the Planning Authority

The decision of the Planning Authority to refuse permission was made on the 20th July 2023, following the above AI request and our comprehensive response. It is notable that all other aspects of this complex application were considered as acceptable or able to be addressed via a condition of planning. The two reasons for refusal cited by the Planning Authority were:

- 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.
- The proposed development does not comply with GI1 Objective 4, GI2 Objective 2, GI2 Objective 4, NCBH11 Objective 3 and GI5 Objective 4 the South Dublin County Development Plan 2022-2028 in relation to the retention and protection of existing green infrastructure and provision of green infrastructure.

We respectfully submit that the two reasons for the refusal of permission relate to Policy EDE7, Objective 2, and the impact on green infrastructure, both of which we will comprehensively address under the following section of this appeal.

8. Grounds of appeal

The full grounds of appeal together with the arguments, reasons and considerations upon which these are based are set out below. For clarity and ease of reference we propose to deal with each individual element of the decision to refuse permission as stated in the Notification of Decision to Refuse Permission of South Dublin County Council and outline our response to each element in turn.

REASON FOR REFUSAL NO. 1

The first reason for refusal was 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.

This reason for refusal stems from Policy EDE7, Objective 2 and section 12.9.4 of the County Development Plan. We note that this policy objective contains ten objectives that are required to be demonstrated. In their assessment of the AI submitted in relation to the application, the Planning Authority concluded that all other elements were acceptable but that the application should be refused based on elements that related to:

- i. having regard to the existing insufficient capacity in the electricity network (grid);
- ii. the lack of a fixed connection agreement to connect to the grid;
- iii. the lack of significant on-site renewable energy to power the Proposed Development;
- iv. lack of evidence provided in relation to Power Purchase Agreements (PPAs) in Ireland, and
- v. the reliance on a predominately gas-powered plant to provide energy to the development

We respectfully submit that their conclusions relating to the above matters were both incorrect and indicate a misunderstanding of how connection agreements and PPA's work and operate. In addition to this planning response to this aspect of the decision, we include a legal advice note from Mason Hayes & Curran LLP (Appendix A).

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

The Planning Authority in its decision has stated that it has had regard to the "existing insufficient capacity in the electricity network (grid)" in relation to making its decision. The First Party submits that it is not within the planning authority's remit to determine whether there is sufficient capacity on the national grid. Nevertheless the First Party has obtained a connection agreement from EirGrid in respect of the Facility Campus (which includes the Permitted Development and Proposed Development) - i.e. the Edgeconnex Grid Connection Agreement.

EirGrid, in accordance with policy directions from the CRU, develop policy criteria that grid connection applicants are required to satisfy in order to obtain a grid connection agreement. These policy criteria are largely designed to take into account capacity constraints on the National electricity grid.

In this regard, it is respectfully submitted that the only reasonable interpretation of this policy criteria is demonstration of compliance with national policy in this area, specifically EirGrid policy, as determined in accordance with policy directions from the CRU.

The First Party has satisfied these policy criteria, which is clearly evidenced by the Grid Connection offer and subsequent Edgeconnex Grid Connection Agreement and the First Party respectively submits that the Planning Authority should be satisfied that EirGrid (as TSO for the Irish transmission system electricity grid and therefore the appropriate authority on this matter) has determined that the Facility Campus can connect to the grid and the Planning Authority should not have its own regard to this matter in its assessment of the First Party's Planning Application.

We have set out EirGrid's policy criteria in more detail below.

In addition, we refer the Board that the original Edgeconnex Grid Connection Agreement of the First Party was made in 2019, and entered into in 2020 and was subsequently amended in 2022 that were primarily technical changes but that the terms of the Agreement remained the same. We can confirm that the Edgeconnex Grid Connection Agreement has been signed, the Bond paid, and all connection charges are fully paid.

The permitted Power Plants are scaled to ensure that the Permitted Development and the Proposed Development being progressed by the First Party will not result in further capacity issues on the electricity network, the overall development will in fact add to the resilience and stability of the grid.

Are there constraints that warrant a refusal of permission?

It is not in question that there are restrictions and constraints, outside of the planning process, that govern the ability of a data centre to operate, including in relation to connections to the national grid. Currently all Data Centre connections being offered by EirGrid in the Dublin region are being offered on a flexible demand basis where dispatchable energy generation is provided on site.

EirGrid have also noted the following in relation to Data Centre Connections under DCCOPP:

- 1. Flexible demand will be available to customers seeking to connect in constrained areas.
- Capacity review to be performed following the annual T-4 capacity auction to determine if additional firm access can be made available.
- Firm capacity will be provided for data centres where on-site dispatchable generation is made available to EirGrid.
- 4. Connection offers are based on planning permission for a site and must line up with the capacity sought.
- 5. Flexibility will be allowed for MIC ramping in constrained areas.

These policies of EirGrid are driving the need for on-site dispatchable generation on all data centre sites to ensure security of supply for the grid as a whole (see point 3), until such time as transmission and generation capacity short-falls are addressed.

On-site dispatchable energy generation capacity is already provided to the Proposed Development by the permitted Power Plant granted under the Permitted Development, which is unaffected by the current proposals representing the third logical phase of the overall development of the First Party's landholding. Therefore, the overall dispatchable generation element of the overall Facility Campus is established under the extant permission and does not fall to be reconsidered as part of this application or appeal process.

This is a critical point to consider when assessing any new application for a data centre, and even more critical when considering the Proposed Development, given that the Facility Campus is already permitted for an on-site dispatchable generation plant (the Power Plant) with capacity to initially provide continuous power to the Permitted and Proposed Development should the EirGrid connection not be realised at the time of commissioning of the facility. The Power Plant also has the capacity once the EirGrid connection is realised to reinforce the national grid. In that scenario the plant is only envisaged to run at the request of EirGrid in response to a grid event as per their flexible demand policy.

EirGrid have stipulated that this generation must be capable of running continuously for an extended period of time and not limited by fuel reserves. Currently, this policy rules out the ability for renewables to fully power any data centre development in Ireland and is reflective of the EirGrid policy for allowing connection agreements where on-site dispatchable power is provided.

The First Party has sought to maximise use of renewables through the design and future proofing of the Power Plant so that it has capacity to accept biogas and hydrogen when it becomes available. The Power Plant therefore complies with the current EirGrid policy requirements, while also providing for net additional renewable generation on site in the future. This approach ensures that the grid will not be negatively impacted by the Proposed Development.

This policy was further confirmed by the CRU and their Direction CRU21/124 that was issued on the 23rd November 2021 (and post-dates the DCCOPP and Edgeconnex Grid Connection Agreement) that set out the future regulation of the electrical connection of data centres in Ireland.

The Direction by the CRU acknowledged the value of allowing the data centre market to continue to develop and grow in Ireland, while also recognising the role that they need to play in the stabilisation of Ireland's electrical grid. The CRU Direction requires EirGrid to apply the following assessment criteria on a case-by-case basis, in determining whether a connection offer should be made to an applicant data centre in this location:

The ability of the data centre applicant to provide flexibility in their demand by reducing consumption when requested to do so by EirGrid in times of system constraint. This includes both with, and without, the use of dispatchable on-site generation and/or storage, which meets appropriate availability and other technical requirements as may be specified by EirGrid.

The Government Statement recognised that data centre operators, such as the First Party, in accordance with the above cited policies, have an opportunity to play a pivotal, and positive role in the development and stabilisation of Ireland's electrical grid infrastructure while also allowing the development of the Irish data centre hosting market, and its role within Ireland's Enterprise Strategy to continue.

The Government Statement recognises this in conjunction with the CRU Direction and states:

"...allows the data centre industry to continue to connect to the electricity grid, subject to certain conditions. New data centre connections are required to have on-site generation (and/or battery storage) that is sufficient to meet their own demand and, to assist in full decarbonisation of the power system, this generation should also be capable of running on renewably sourced fuels (such as renewable gas or hydrogen) when supplies become more readily available."

We respectfully submit that the processing of the Edgeconnex Grid Connection Agreement, reflects EirGrid's assessment that a connection offer can be made to the applicant who are the First Party in this instance, as their proposed connection will be consistent with the needs and constraints of the electricity system and National Grid, as set down by their own policy and that of the CRU. The connection is currently due to be operational in 2024/5 and will be phased.

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

We respectfully refer the Board to the legal opinion by Mason Hayes & Curran LLP on the role of EirGrid, rather than SDCC, in determining sufficient grid capacity, the Government policy on grid connections, and the meaning of a flexible arrangements. We refer the Board to the fact that the reason for refusal cited by the Planning Authority raised the question of whether the First Party had a grid connection agreement in place to serve the Proposed Development. Notwithstanding that it is EirGrid's role to determine grid capacity, the First Party has the benefit of contracted capacity through the Edgeconnex Grid Connection Agreement.

This aspect of the refusal cited "the lack of a fixed connection agreement to connect to the grid" as a ground for rejecting the Planning Application. In considering this matter, rather than seeking a Clarification of the Additional Information, the Planning Authority reached a conclusion that the Edgeconnex Grid Connection Agreement that was used for both previous planning applications under Planning Ref. SD19A/0042 and SD21A/0042, was not sufficient to demonstrate connection to the electricity grid for the purposes of the current application.

We respectfully submit that *EDE7 Objective 2* does not require a fixed connection agreement to be in place. Rather it notes that the Applicant must demonstrate sufficient capacity in the electricity network. In this regard, we would note that EirGrid makes this determination and the Proposed Development is in accordance with EirGrid and the Government's policy for the use of the grid by data centres.

Explanation of the wider connection offer process

We respectfully submit that the decision of the Planning Authority indicates a complete misunderstanding of EirGrid's current data centre policy as set out in the DCCOPP, the CRU Direction and the First Party's own connection agreement. It also, in our considered opinion, outstretches the role of the Planning Authority above and beyond its remit.

Notwithstanding the planning authority's approach in this regard, the First Party complies with national policy on energy provision for data centres. As part of this, the First Party's Facility Campus already has a connection

agreement that will be facilitated by a connection from the transmission lines and substation that are subject of the concurrent SID application. This was the situation previously when the Permitted Development was granted on the site, and remains the position.

Who provides connection agreements?

It is without doubt the role of EirGrid to provide connection agreements to data centre operators in Ireland. Under current EirGrid policy Flexible Demand Offers are the only offers being provided to data centre operators in constrained network areas such as the subject site.

The importance of the flexibility in demand both for the enterprise economy that forms a corner stone of government policy but also facilitating the transition to decarbonisation is recognised in the recent government document in that it states:

"Securing flexibility in demand from a data centre is more straightforward than getting the same flexibility from a similarly sized block of demand made up of a diverse set of small businesses, public facilities, and domestic users. As renewables grow in importance, a more flexible pattern of data centre demand can reduce the need for fossil-fuel generated electricity and help with decarbonisation."

Progress to this stage of the connection agreement has been facilitated by the granting of two valid planning permissions on the First Party's site that forms Phase 1 and 2 of the development of their Facility Campus, as well as the grant of permission for the substation.

As the primary fuel of the Power Plant is gas, this plays a part in decarbonising the grid – as acknowledged in the Climate Action Plan adopted by government. The Power Plant will provide stable power to the grid in order to facilitate the greater resilience of the grid and to enable the penetration of additional intermittent renewables in the short term. This in turn will contribute to helping Ireland meet its required 2GW of flexible gas fired generation as identified in the 2021 Climate Action Plan and endorsed in the 2023 Climate Action Plan, which is a key enabler for the continued increase in renewable penetration on the grid.

We respectfully submit that this fourth objective of Policy EDE7, Objective 2 has been interpreted in a manner that is beyond the remit of SDCC. Current national policy is to facilitate new data centre development by ensuring that on-site dispatchable energy of the same or equivalent is available on the same site, as well as other considerations as set out within this appeal that influence the acceptability of new data centre development, that the First Party meets in full, including the Government Statement.

We respectfully request the Board to conclude that the First Party is in compliance with the need to demonstrate that there is sufficient capacity in the network. Any demand not met by the flexible connection agreement, will be met by the onsite Power Plant.

The adjacent UBC Properties and nearby VDC campuses within Grange Castle and Profile Park, have similar arrangements. The Planning Authority were therefore incorrect to cite the lack of a fixed connection as a reasonable reason for refusal in this instance. We therefore request the Board to overturn this aspect of the Decision and grant permission in this instance.

iii. Lack of significant on-site renewable energy to power the proposed development We understand that this refusal ground relates to the following requirement under Policy EDE7 Objective 2:

"Maximise onsite renewable energy generation to ensure as far as possible 100% powered by renewable energy, where on site demand cannot be met in this way provide evidence of engagement with power purchase agreements (PPA) in Ireland;"

There are two elements to the above requirement, first the applicant must maximise onsite renewable energy generation to ensure as far as possible it is 100% powered by renewable energy. Where an applicant cannot do this, it can satisfy the requirement by providing evidence of engagement with PPA in Ireland. The First Party submits that it can meet the second element of this requirement (in relation to providing evidence of engagement with PPAs in Ireland) and in this regard refers the Board to point 4 below and the KPMG letter within Appendix D where the First Party demonstrates that it has satisfied this requirement.

On review of the specific wording of EDE7 Objective 2, it is clear that the objective seems to promote on site renewable generation as far as possible, however, in circumstances where this is not possible, evidence of engagement in PPAs will be sought as an alternative. The Planning Authority's Chief Executive's Report also made it clear that evidence of engagement with PPA's was relevant on the basis that the primary energy source would not be on-site renewable energy.

As set out previously in this appeal document, in the context of the Government Statement, while the subject site does not provide for an opportunity to power the Proposed Development via on site solar or wind generation, it is noted that the Facility Campus (which the current development will form part, and the third and final phase of) entails the permitted Power Plant which is designed to accommodate operation on renewable fuel sources.

The Proposed Development and the wider Facility Campus do provide for on-site generation which is designed to accommodate renewable fuel sources, however notwithstanding this, this appeal document also sets out robust evidence of engagement with renewable PPAs in Ireland in respect of the Proposed Development.

The requirements of EDE7 Objective 2 are clearly satisfied by the Proposed Development, on the basis of which the Decision ought to be overturned.

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

We refer the Board to the consideration of the third objective of Policy EDE7, Objective 2 of the County Development Plan in the Chief Executive's Order (page 63 and 64). In this, the Planning Authority outline that, in their considered opinion, the use of natural gas to power the already permitted Power Plant, which will aid the security of the National Grid in the longer term, and ensure no notable impact on it in the short-term, is not renewable and therefore that the applicant should provide evidence of engagement with PPA providers to be fully in accordance with this part of this Policy under the County Development Plan.

It is worth noting the purpose of a PPA in a practical context. A PPA is an agreement between two parties, typically a power producer and a buyer, regarding the purchase and sale of electricity. The power producer, often a renewable energy company or a generator, agrees to produce a certain amount of electricity over a specified period. The buyer, who could be a corporation, a government entity, or even an individual, agrees to purchase that electricity at a predetermined price.

As PPAs are commercial agreements, they must work for both parties and may be renegotiated from time to time. For example, the power producer is generally looking to ensure a steady or secure income. While the buyer is looking to secure best value of the power they are purchasing. As a result, PPAs are generally utilised to cover a baseline energy requirement.

As a relatable example, a homeowner would look at their baseline electricity usage – i.e., items that are run in a predictable pattern such as the refrigerator, heating system, internet router, etc. – and would then look to cover that usage via a PPA. Unpredictable usage – such as boiling the kettle, charging phone, watching TV, etc. – would then be considered using "spot" price purchasing. To ensure the spot purchase is also from a renewable source, Guarantee of Origin certificates could be sought.

We refer the Board to the fact that as part of this appeal correspondence from KPMG (a broker for PPAs and the First Party's main partner in the sourcing of PPAs) is submitted, which confirms that the First Party has been engaging actively in the pursuit of a PPA in respect of the Proposed Development, and we can also confirm that they are actively pursuing a PPA for the Power Plant.

It is standard and common practice in Ireland for large energy users, such as data centre operators, such as the First Party, to utilise brokers in engaging with renewable energy providers in sourcing PPAs. The brokers have the expertise and contacts in the Irish PPA market; is a faster process for the First Party rather than having to deal with several renewable PPA providers and it enables them to get access to a number of net additional renewable projects rather than having to negotiate with each one.

This represents clear and unequivocal evidence of the First Party's engagement with Power Purchase Agreements in Ireland. We can also confirm that the First Party has directly engaged with owner operators of renewable energy infrastructure assets in Ireland on terms of PPAs.

Due to the fact that the design of the permitted Power Plant allows for the use of biogas and hydrogen in the future, the overall campus being progressed by the First Party will also provide a direct opportunity for additional renewable energy generation on site.

This therefore confirms that the Proposed Development is fully in accordance with this third objective of Policy EDE7, objective 2 of the County Development Plan.

As outlined above the wording of this objective of the County Development Plan can only reasonably be interpreted as requiring a confirmation that discussions have taken place between the First Party and PPA providers. In our view, there is no requirement under this objective beyond this. Indeed, it is an issue that could easily have been addressed by a condition of permission that would have been reasonable in terms of ensuring both compliance with this objective, and a greater certainty of the Proposed Development entering into PPA's with renewable energy providers. We can confirm that the First Party would welcome such a condition from the Board. We would suggest the following as suitable wording:

"Prior to the commencement of operation of the development hereby permitted, the developer shall submit to the Planning Authority details of a Corporate Power Purchase Agreement that the developer has entered into which demonstrates that the energy consumed by the development on site is offset with renewable energy generation."

The Government Statement identified the preference for data centre developments to be supported by renewable generation facility to be supported by PPAs, private wire or other arrangements.

As noted previously, the Facility Campus at this location includes the permitted Power Plant which is designed to accommodate power generation via renewable fuel sources, allowing for transition towards carbon neutrality. Finally, as outlined above, the First Party is actively pursuing and committed to sourcing PPAs and to powering the development using renewable energy.

With regard to private wire arrangements, the necessary legislation does not currently exist to facilitate such an arrangement (albeit the First Party would welcome the option to avail of such an arrangement in the future, if legislation were to permit it).

The Government Statement outlines that PPAs have a key role to play in decarbonising the electricity sector and ensuring demand growth from large energy users, such as data centres, reduces the cost of reaching renewable energy targets. It recognises that data centre operators purchasing PPAs that add additional renewables, and use our electricity grid efficiently, can play a positive role in Ireland's renewable energy transformation. The First Party is committed to facilitating this transition by entering into PPAs with renewable energy providers fully in accordance with government policy and the policy of the County Development Plan. We respectfully submit that the reasonableness of the first reason for refusal as it relates to PPAs must be questioned by the Board given the wording of this objective. The objective indicates intent only (given the need for permission to have been granted for a development), as it would not be feasible to enter into / finalise a binding commercial agreement like a Corporate PPA in the absence of certainty provided by a grant of permission and is not a reasonable ground for refusal. As outlined in this appeal, it is a matter that could have been addressed by a condition of permission.

We respectfully submit that the First Party is committed to reducing carbon emissions and procuring carbonfree energy whenever possible, which is a requirement of the First Party under their signatory of the Climate Neutral Data Centre Pact. They have provided evidence of engagement with renewable energy PPA suppliers in Ireland, and in addition are willing to be conditioned that any grant of permission requires them to provide further evidence of this fact prior to the occupation of the development (see wording of suggested condition above). We can confirm that the First Party are committed to procuring electricity from 100% renewable sources.

The First Party fully commits to continuing their positive engagement in procuring PPAs in Ireland to support the ongoing development of renewable energy capacity. The First Party is also investigating how the previously permitted Power Plant and the capacity for it to run on green gas or hydrogen can encourage the investment in their supply in Ireland.

We respectfully submit that this appeal indicates undeniably that the First Party has provided evidence of engagement with PPA's in Ireland fully in accordance with the third objective of Policy EDE7 Objective 2 of

the County Development Plan and the Government Statement. We therefore request the Board to overturn this aspect of the Decision and grant permission in this instance.

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

It is unclear what application criteria this refusal ground relates to. Having an on-site generation plant that is predominately powered by natural gas is not, of itself, a ground for refusal. This would be contrary to the requirement relating to on-site energy generation under Policy EDE7 Objective 2. As explained further above, under this requirement, where an applicant cannot maximise its on-site generation by 100% renewable energy, it can still satisfy the requirement of this policy, if it provides evidence that it has been engaging with renewable PPAs in Ireland. In this regard, the First Party has provided evidence of engagement with PPA's and refers the Board to its responses to points ii and iv above for further detail, and Appendix D.

On this basis, the First Party submits that it has satisfied the requirement relating to on-site generation under Policy EDE7 Objective 2 (as per its responses to points ii and iv above) and that this refusal ground should not have been considered by the Planning Authority. Policy Objective EDE7 Objective 2 does not restrict the use of onsite gas as an energy source where 100% onsite renewable energy is not viable.

Furthermore, as set out previously, the Proposed Development is covered by the existing Connection Agreement. The First Party intends to procure renewable energy under the Edgeconnex Grid Connection Agreement and will not solely rely on the on-site generation plant (i.e. the Power Plant) to provide energy to the Proposed Development (as this refusal ground eludes to).

In addition, the Permitted Development encompasses the Power Plant, which is scaled to cover the Proposed Development also (the Power Plant should not be reconsidered under the current application). The principle, use, scale, and capacity of the Power Plant is established in planning terms, and is not open for reconsideration as part of the current application or appeal.

As noted in the appeal document, the Power Plant will reinforce the national grid, once the EirGrid connection is realised. In that scenario the plant is only envisaged to run at the request of EirGrid in response to a grid event as per their flexible demand policy. This directly aligns with the CRU Direction to system operators and can support the increased penetration of intermittent renewable energy on the grid in line with the 2021 and 2023 Climate Action Plans.

It should also be noted that the Power Plant is designed to allow for the use of renewable biogas, and hydrogen to provide electricity. The First Party is committed to increasing its use of these renewable energy resources when they become more available at scale in the Irish market. As set out above, the First Party is also committed to engagement with renewable PPAs in Ireland and the securing of renewable energy to power the Proposed Development.

Having regard to the foregoing responses to each of the individual points raised within the first reason for refusal, it is submitted that the Decision should be overturned, and that the Board should proceed to grant permission for the Proposed Development, which complies fully with EDE7 Objective 2 of the County Development Plan.

REASON FOR REFUSAL NO. 2

The second reason for refusal was as follows:

 The proposed development does not comply with GI1 Objective 4, GI2 Objective 2, GI2 Objective 4, NCBH11 Objective 3 and GI5 Objective 4 the South Dublin County Development Plan 2022-2028 in relation to the retention and protection of existing green infrastructure and provision of green infrastructure.

We refer the Board to the fact that Policies GI1 Objective 4; GI2 Objective 2; GI2 Objective 4, NCBH11 Objective 3; and GI5 Objective 4 all informed the overall approach to the Proposed Development, and as amended as part of the AI response.

We refer the Board to our response to each of the cited objectives as a single response as follows. However, prior to outlining our response to each, it is useful for the clarity of the Board to set out each policy and objective,

apart from Policy GI5 Objective 4 (which relates to Green Space Factor), which we will deal with separately, as follows:

Gl1 Objective 4: To require development to incorporate Gl as an integral part of the design and layout concept for all development in the County including but not restricted to residential, commercial and mixed use through the explicit identification of Gl as part of a landscape plan, identifying environmental assets and including proposals which protect, manage and enhance Gl resources providing links to local and countywide Gl networks.

GI2 Objective 2: To protect and enhance the biodiversity and ecological value of the existing GI network by protecting where feasible (and mitigating where removal is unavoidable) existing ecological features including tree stands, woodlands, hedgerows and watercourses in all new developments as an essential part of the design and construction process, such proactive approach to include provision to inspect development sites post construction to ensure hedgerow coverage has been protected as per the plan.

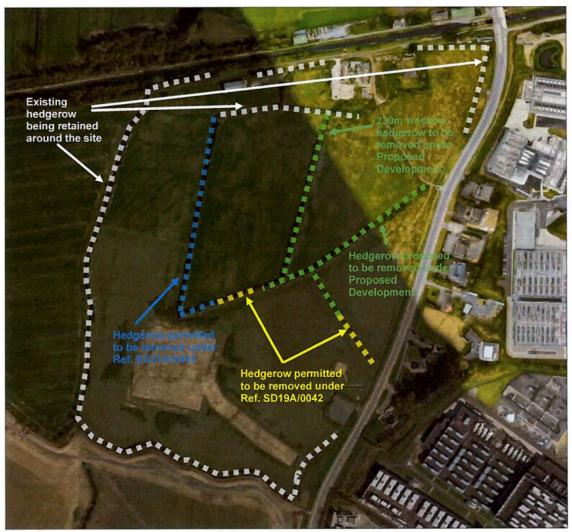
Gl2 Objective 4: To integrate Gl, and include areas to be managed for biodiversity, as an essential component of all new developments in accordance with the requirements set out in Chapter 12:Implementation and Monitoring and the policies and objectives of this chapter.

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

We respectfully submit that these new policies and objectives set a clear vision for protecting, and enhancing the green infrastructure of the County. In order to assess this correctly, there is a need to consider the current application against the baseline environment under which the now Permitted Development was sought. The overall site was enclosed by a strong and mature hedgerow to the west and south, and part of the south-east of the site, that measured over 900m in length. This is to be retained and enhanced as a result of the Permitted Development that will create a wildlife and biodiversity corridor that ranges from 30-50m in width around the perimeter of the site.

The additional internal lengths of hedgerow were located primarily within and centrally within the site, and following the R120 road widening, the eastern hedgerow bounding the site, was removed by South Dublin County Council that left some 2,122m of hedgerow prior to the first application on this overall site. The removal of the vast majority of this eastern hedgerow by the County Council has removed this north-south green infrastructure link that connected with the internal hedgerow of the site along the eastern side of the site, albeit that one of these connections was very weak and was broken by the permitted access road.

The current application, and already Permitted Development will remove 760m of hedgerow (noted in white, yellow and green below), of which some 50% is already permitted to be removed (yellow and blue). This element of the refusal of permission appears to be based on one 230m length of hedgerow (indicated below). This formed a specific instruction under point 7 of the AI request of the Planning Authority that sought its retention. No requirement to retain other parts of the hedgerow were requested in the AI Request beyond providing a justification for works to green infrastructure relative to the various policies and objectives of the County Development Plan. The significant length of some 1,362m of hedgerow (c. 66% of the total hedgerow within the original site) that will be retained is notable, and we would suggest is wholly and categorically in accordance with the principles of aforementioned GI policies and objectives. In addition to this, some 1,052m of new hedgerows are either permitted or proposed around the site.



Original site prior to works commencing indicating length of hedgerow being retained and removed under each application

In addition to the degree of hedgerow retention within the overall site, the transformation of the site into a heavily landscaped site formed the starting point for the master planning of the site. The Proposed Development will enable the planting of 484 new semi-mature trees (c. 5m in height) with the already permitted development providing for 1,854 new semi-mature trees on the Permitted Development site. The original site was almost devoid of any trees of note. In addition to this it is permitted to plant 3,843 standard trees (c. 2m in height) under the two main permitted developments (Planning Ref. SD19A/0042 & SD21A/0420 already granted on site with another 912 of these trees proposed to be planted within the application boundary. In addition to this, it is permitted to plant 18,458 saplings (c. 0.5m in height) across the permitted site and with a further 3,586 proposed under this application.

The approach of the design team has been to create enhanced ecological corridors that will create improved pathways for wildlife into the nearest designated GI corridors along the Grand Canal Corridor as well as GI pathways in all directions.

It is not in question that a significant length of hedgerow will be removed as part of this application. However, due to the varying quality hedgerow to be removed, it was only the western hedgerow that was of concern to the Planning Authority under point 7 of the Al request. It is against this background that we request the Board to consider this issue. It is also notable that the Al request was made following the adoption of the County Development Plan.

The premise of the approach to the development of this Facility Campus and Proposed Development under this application and appeal, was to explicitly protect, manage and enhance green infrastructure resources on the site that links to local and countywide green infrastructure networks. This approach has been accepted as reflecting the proper planning and sustainable development of the area under the Permitted Development already granted on the site.

The consideration of this matter by the Planning Authority, and in particular the Parks and Public Realm Section of the Council appears to have had no consideration of the original site, and its poor ecological habitat and green infrastructure connections. Having reviewed the Parks and Public Realm Section report on the Additional Information there was no justification for their conclusions that "the subject site is going to be significant impacted and compromised as a result of the proposed development in an area of such high importance". It would appear that no cognisance of the material improvements being made to the overall site had been taken.

Has the development incorporated GI as an integral part of the design and layout, and incorporated proposals that protect, manage and enhance GI resources providing links to local and county wide GI networks?

We respectfully submit that the overall site development, has from day one, incorporated green infrastructure into the design and layout of this site. This has been enhanced at every phase, but in cognisance of the phased nature of the site, a comprehensive landscape plan was proposed and accepted under the 2019 application (Planning Ref. SD19A/0042). This improved links to the Grand Canal, as well as replacing GI removed by the County Council, and widening and improving biodiversity corridors within an 80-100m strip adjacent to the canal but also in a 30-50 strip around the site. This has been enhanced further by the permitted east-west hedgerow across the centre of the site, as well as the new hedgerow that is proposed under this application that borders the new data centre to its west and south. We respectfully submit that the design approach is fully in accordance with Policy GI1, Objective 4 of the County Development Plan.

Has the development protected and enhanced the biodiversity and ecological value of the existing GI network by protecting where feasible, and mitigating where removable in unavoidable?

Policy GI2, Objective 2 and 4 is critical for the Board to consider this second part of the appeal. As outlined to the case planner prior to the AI Response being made, and set out earlier in this appeal, the retaining of the western hedgerow is unavoidable in this instance. This forms the third phase of an already committed and commenced Facility Campus. There is no potential for it to be developed for any other purpose.

The First Party examined, as requested, the potential of keeping the western hedgerow. However, it generated a clear conflict as a result of moving the data centre to the east with the permitted green infrastructure on the eastern side of the site. This would, as well as being contrary to the GI policies of the Development Plan, would be contrary to the principles of the Permitted Development, and the proper planning and sustainable development of the area.

In order to mitigate this, as is allowable in certain circumstances under this policy, the First Party reduced the external areas around the data centre to enable a new native hedgerow to be planted that would run parallel to the existing hedgerow, and which would also extend along the southern side of the data centre creating, in our considered opinion, stronger biodiversity links within the site. The retention of the western hedgerow would create a hedgerow that failed to connect to any other GI.

In addition, we refer the Board to the technical note that accompanied the AI response that was undertaken by Scott Cawley in relation to the ecological value of this western hedgerow. The technical note concludes that the effects of hedgerow loss on commuting and foraging bats has been determined not to be significant at any geographic scale, and there was not a requirement to provide mitigation. However, the First Party chose to provide additional mitigation in the form of the new western hedgerow, which as already outlined this western hedgerow could on receipt of permission by the Board be a number of years old at the time the Proposed Development commences or comes into operation.

The Permitted Development and Proposed Development has proposed 1,052m of new hedgerow in addition to the 1,362m of hedgerow that will be retained. The northern part of the site will be transformed from agricultural lands with a few hedgerows to a wildlife area, with ponds and a significant increase in planting with public park. The provision of new hedgerows, tree shelter belts, ponds and wet meadows will enhance the suitability of these parts of the Proposed Development site for foraging bats.

The provision of shelter belts and hedgerows is likely to have a neutral effect on common species such as common pipistrelle bat, soprano pipistrelle bat and Leisler's bat, as their installation is not anticipated to result in a change to the number of bats of these species that will use the site for foraging and commuting.

The provision of 2 no. attenuation ponds within the Proposed Development site, and associated riparian planting will enhance the site for bat species associated with waterways and open water, specifically Daubenton's bat *Myotis daubentonii* which are known to occur along the adjacent Canal. Upon their establishment, which is likely to take 2-3 years following construction, the ponds will provide stepping stone sites for this species, which uses the adjacent Grand Canal ecological corridor for foraging. The effects of enhancement of the Proposed Development site for this species is likely to be significant at the local scale, e.g. the Proposed Development site will contain high quality habitat for this species that was not present prior to its development.

We respectfully submit that when all of this is considered there is no basis for the Planning Authority taking a view that the Proposed Development would be contrary to of the County Development Plan Policy GI1 Objective 4, GI2, Objective 2 and 4 as well as Policy NCBH 11, Objective 3. The Proposed Development is fully in accordance with these Policy objectives of the Plan.

What is the implication, if any, of the Judge Humphreys judgement cited by Public Realm and Parks? We respectfully submit that the consideration of the Judge Humphreys judgment [2023] IEHC 335 21 June 2023 cited by the Public Realm and Parks Section is notable, as it would seem on an initial review to be in conflict with Policy GI2, Objective 2 of the Plan, that allows mitigation where removal of hedgerow is unavoidable, as is the case in this instance. However, we would refer the Board to the fact that this referred to judgment was the conclusion of a Judicial Review case of a Strategic Housing Development application in considering whether there was a material contravention of the development plan. This issue was considered between the parties of Four Districts Woodland Habitat Group, BCM Residents Association, Rathcoole Park Residents Association and Forest Hill Residents Association and An Bord Pleanála, The Attorney General as well as Romeville Developments Limited.

Its use in this instance also includes no consideration of the overall master planning of the site from a landscape and green infrastructure perspective, and the Public Realm and Parks Section make no attempt to consider this judgment in its true context and apply it to the Permitted Development and Proposed Development. The judgment related to the objectives in that development plan, and the consideration in this appeal relates to the objectives in the County Development Plan.

It is recognised by the First Party that new hedgerows do not have the same ecological value as existing mature hedgerows. This is why in terms of the master-planning of the site, it was decided that the majority of the green infrastructure being proposed would be implemented as early as possible. This will be planted within the next 6 months and will be maturing well before the Proposed Development comes into operation.

The parks report refers to this site as being along a primary Green / Blue Corridor, and that the removal of hedgerows is in conflict with the Council's own Green Infrastructure policies. This is both an incorrect interpretation of matters but also a failure to recognise the content of Policy Gl2, Objective 2 of the County Development Plan. The very rigid interpretation put forward by the Council would in essence remove the ability to develop large swathes of zoned lands within the County. This was clearly not the aim or objective of these Green infrastructure policies.

Irrespective of this, in retaining 1,362m of the 2,122m of hedgerow on the overall site, and in proposing or have permitted 1,052m of new hedgerows around the site, that the First Party has made every effort to retain existing hedgerows and trees within the development site, and to provide suitable mitigation planting and created ecological and biodiversity corridors around and through the site.

The Permitted Development includes some removal of existing hedgerows but also include the provision of significant shelter belts of trees and new hedgerows that will provide enhanced connectivity between the development site and the surrounding landscape.

In addition, it is worthy of note that the eastern boundary will now form a 30-40m wide biodiversity corridor that is currently bounded primarily an agricultural fence, prior to work commencing recently. The external (eastern side) of this eastern corridor was to be bounded, and is already permitted to be bound by a formal hedge of

590m along the R120. The First Party would welcome a condition that required this to be replaced by a native planted hedgerow, if there Board were to overturn the decision of the Planning Authority.

We respectfully submit that when all these matters are considered it is without doubt that the Proposed Development, in conjunction with the Permitted Development will result in a net Green Infrastructure and biodiversity and ecological gain for the site, in the short, medium and long term, and we request the Board overturn this aspect of the Decision.

Has the Proposed Development adequately met the Green Space Factor under Policy GI 5, Objective 4 of the County Development Plan?

The calculation of the Green Space factor for the overall site accompanied the AI response. As already outlined by Scott Cawley, Consulting Ecologists, under the AI Response the Proposed Development will result in a net biodiversity gain for both the Proposed Development and overall site.

Given the landscape master planning approach to the overall site, which were made prior to the current County Development Plan being adopted, we remain of the opinion that the principles of that approach should be upheld, with the noticeable inclusion of a new hedgerow to the west and south of the Proposed Development, in calculating the Green Space Factor in this instance.

Kevin Fitzpatrick Landscape Architecture, in consultation with Pinnacle, Consulting Engineers and Henry J Lyons Architects have calculated that the Green Space Factor for the site would be **c. 0.4**. The method of calculation for the overall site was undertaken on the basis of this large 22.1ha. site. The method of calculation set out under the County Development Plan is both unclear and leaves no allowance for whether a development is a commercial entity on an EE zoned site; or a development such as this, that has by its very nature a large footprint. We respectfully submit that it is both unreasonable and is not in accordance with the proper planning and sustainable development of the area for the Proposed Development to narrowly fall below the 0.5 suggested, when such little guidance is provided on so many factors in calculating Green Space Factors. We note that a range of additional mitigation measures can be provided in lieu of failing to reach the 0.5. Some of these are suggested below, and in addition the First Party would be willing to be conditioned to amend the formal hedgerow to a native hedgerow bounding the east of the site.

The Proposed Development will contribute positively to the urban greening of the area and has sought to retain some 1,362m of existing hedgerow, proposed new hedgerow; and the planting of 484 new semi-mature trees (c. 5m in height) with the Permitted Development providing for 1,854 new semi-mature trees on the Permitted Development site.

In addition to this it is permitted to plant 3,843 standard trees (c. 2m in height) under the Permitted Development with another 912 of these trees proposed to be planted within the application boundary. In addition to this, it is permitted to plant 18,458 saplings (c. 0.5m in height) across the Permitted Development site with a further 3,586 proposed within the Proposed Development site. In addition, it is proposed to utilise green roofs, green walls, permeable paving etc.

The First Party is conscious that the green space factor calculation tool is not a perfect mechanism but wishes to outline that already within the overall site for the Facility Campus they have provided in accordance with best practice, a public park, and a level of unprecedented tree planting both mature and young, and new hedgerows that will materially improve the biodiversity of the site, and its linkages to surrounding GI network.

In order to maximise the level of connectivity of GI and biodiversity corridors, all planting is proposed outside of the security fencing and with only a post and rail fence proposed at the boundary of the site. The applicant has also utilised bioswales and tree pits throughout the application site; and there is clearly a significant tree and hedgerow gain (albeit some hedgerow is new, although 66% of hedgerow is to be retained) within the overall site. In addition, the applicant would be willing to accept a condition under the Proposed Development that requires bird and bat boxes to be provided, within the site. These measures will ensure that the Proposed Development is in accordance with the section 12.4.2 and Policy GI5 Objective 4 of the County Development Plan.

9. Conclusion

We respectfully submit that this appeal has comprehensively addressed the two reasons that led to the refusal of permission by the Planning Authority, which in our considered opinion was inherently flawed.

We submit that no aspect of the Decision related to concerns relating to the scale, form and massing of the Proposed Development. Reason no. 1 related to technical issues relating to connection agreements and power; whilst Reason no. 2 of the Decision, related to the impact of the Proposed Development on Green Infrastructure.

In terms of reason no. 1 we can confirm the following which addresses each of the five constituent parts of the reason, as addressed in detail within section 8 of the appeal:

- With regard to the existing capacity in the electricity grid, the appeal confirms that it is beyond the remit of the planning authority to be able to make this determination. In any event, the First Party's proposed use for energy demand is in accordance with EirGrid and wider national policy requirements. The Proposed Development and the adjacent Permitted Development are subject to an existing connection agreement, and it is further noted that the permitted Power Plant is scaled to ensure that not only will the permitted and Proposed Development being progressed by the First Party not result in further capacity issues on the electricity network, the overall development will in fact add to the resilience and stability of the grid in the longer term.
- With regard to the aspect of the first reason relating to on-site renewable generation, it is noted that the Facility Campus entails the Power Plant, which is designed to operate on renewable fuel sources, when they become available, and has a GNI connection agreement in the shorter term. Furthermore, this item is not required to be met where the First Party has provided clear evidence in engaging with PPAs.
- With regard to the absence of a fixed connection agreement purported by the Planning Authority, this goes beyond the planning authority's remit as it is a matter for EirGird to determine. Nevertheless, the First Party already has a 'connection agreement' with EirGrid (i.e. the Edgeconnex Grid Connection Agreement). The Proposed Development will operate under the same connection agreement as the already Permitted Development.
- With regard to the requirement for evidence of engagement with PPAs, the First Party has confirmed and
 provided evidence under this appeal that they have engaged with PPAs in Ireland. As part of this appeal,
 we submit evidence of this engagement.
- With regard to the aspect of the first refusal reason relating to the predominate reliance on gas generation, it is submitted that this form of energy is not prohibited under Policy EDE7, objective 2 and such a prohibition would not be in accordance with national policy. In addition, the First Party has satisfied the Planning Authority's requirements in relation to on-site generation and that this reason should not have been considered as a ground for refusing the Proposed Development. The Power Plant is already permitted with capacity to serve the Proposed Development. Furthermore, the Power Plant will also support the grid, and is a requirement under EirGrid / CRU policy. It is also noted that the Power Plant is designed to accept renewable fuels.

We respectfully submit that the decision of the Planning Authority is inherently flawed. We respectfully submit that the Planning Authority have taken an unduly rigid and have misinterpreted two parts of the First Party's response to issues raised in relation to Policy EDE7, objective 2 of the County Development Plan.

We respectfully submit that the Proposed Development is fully aligned and in accordance with government policy set out under the Government Statement. The First Party is committed to advancing the goals behind the Six Principles set out within this document, and the Proposed Development and Permitted Development are fully aligned with government policy.

In conclusion, for all of the foregoing arguments, reason and considerations, An Bord Pleanála are invited to overturn the Decision of the Planning Authority and to grant permission on the basis that the Proposed Development is in accordance with EirGrid / CRU policy and has a connection agreement; that the First Party has engaged in seeking PPAs; and has demonstrated sufficient capacity within the electricity network; and therefore is fully in accordance with Policy EDE7, Objective 2 of the County Development Plan as well as National Data Centre Policy and is therefore fully in accordance with the proper planning and sustainable development of this area including the preservation and improvement of amenities thereof.

We look forward to an early and favourable response on this matter.

Yours faithfully,

Anthony Marston (MIPI, MRTPI)
Marston Planning Consultancy



CLIENT: EDGECONNEX IRELAND LIMITED1

ADVISORY NOTE AS PART OF APPEAL AGAINST DECISION OF SOUTH DUBLIN COUNTY COUNCIL IN RELATION TO PLANNING REFERENCE SD22A/0333

10 AUGUST 2023

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¹ This advice note is intended for EdgeConnex Ireland Limited. No reliance by any other person should be placed on the advice contained herein.

ADVISORY NOTE AS PART OF APPEAL AGAINST DECISION OF SOUTH DUBLIN COUNTY COUNCIL IN RELATION TO PLANNING REFERENCE SD22A/0333

1 Appeal

- 1.1 We have been instructed by EdgeConneX Limited (the "Applicant") regarding its appeal to An Bord Pleanála (the "Board") of a refusal by South Dublin County Council (the "planning authority") of planning application reference SD22A/0333 for DUB06 dated 20 July 2023 (the "Decision").
- 1.2 This advisory note addresses that part of the reasoning set out in the Decision which is underlined and highlighted in bold text in the below extract from the Decision. The other reasons provided in the Decision are addressed separately in the substantive appeal document
 - 11. 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 EDET 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."
- 1.3 The CE Report concludes that the alleged existing insufficient capacity in the electricity network (grid) and lack of a fixed connection agreement to connect to the grid was contrary to EDE7 Objective 2. At page 24 of the CE Report, it states:

"In terms of EDE7 Objective 2 the applicant states in their submission that this has been fully complied with, however, the applicant has not demonstrated this. It is noted that EDE7 Objective 2 requires detailed consideration and assessment under each relevant section of the policy. Particular concern is maintained in relation to the third and fourth sub point of this policy as the development plan places a key emphasis on the requirement for a Data Centre to be sustainable, with a key requirement for the applicant to demonstrate that there is sufficient capacity within the relevant water, wastewater and electricity network to accommodate the use proposed.

Concerns are especially maintained in respect to electricity and the Planning Authority notes that the Government, within the recently published a statement titled "Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy -July 2022". The document sets out that while fully acknowledging the vital role Data Centres play in the modern economy, in the short term, there is only limited capacity for further data centre development, as the key state bodies, regulators and the electricity sector work to upgrade our infrastructure, connect more renewable energy and ensure security of supply."

1.4 While it is clear that the planning authority has had regard to grid capacity in relation to section 34(2)(a)(i) of the PDA, the provisions of the South Dublin County Development Plan 2022 – 2028 (the "Development Plan") (in particular EDE7 Objective 2), the planning authority's

MHC-32223640-1

- interpretation and application of this Objective goes beyond its statutory remit in consideration of proper planning and sustainable development.
- 1.5 It is clearly not within the remit of the planning authority to determine capacity allocation or connection to the electricity grid, or indeed the operation and management of contracted grid capacity. This falls squarely within the remit of the two state licensed entities which determine applications to connect to the grid and maintain and operate the grid, namely ESB Networks Limited at distribution level as the licensed Distribution System Operator ("DSO") and EirGrid plc at transmission level as the Transmission System Operator ("TSO").
- 1.6 The planning authority further appears to conflate a determination by the DSO and TSO that the greater Dublin area is constrained by a determination that there is insufficient capacity for the proposed development.
- 1.7 In June 2020, version 2.0 of the Data Centre Connection Offer Process and Policy¹ ("DCCOPP") was published, which updated the July 2019 version following consultation with industry. Section 4.1 of DCCOPP is titled 'Data Centre Flexible Demand' and it provides clarity on the flexible arrangements entered into by data centre operators in what are identified as "constrained areas". This section provides clarity on the definition of a "constrained area", as follows:

"EirGrid identify constrained areas as areas where there is a risk or potential risk that the level of demand may be greater or has the potential to become greater than the level of supply currently available or that will be available in the coming years. At present, EirGrid has identified the greater Dublin region as constrained."

- 1.8 Section 3 of DCCOPP sets out the connection offer process for data centres which includes an overview of the process and confirms:
 - "5. The connection offer then issues to the customer after Stage 2 and if accepted will book that customer's required capacity on the transmission system."
- 1.9 This was the process and policy in place when the Applicant entered into its connection agreement for the connection of the Grangecastle Business Park Extension, Dublin 22 (the "Facility") to the transmission system in August 2020² (the "Connection Agreement"). The Connection Agreement represents contracted capacity within an identified constrained area which the TSO saw fit to allocate to the Applicant in accordance with its statutory duties and functions.
- 1.10 This is a regulated agreement which is subject to the 'General Conditions of Connection and Use of the System' and which provides for the connection of the Facility to the transmission system and to transfer electricity to the Facility through the transmission system.
- 1.11 The TSO is responsible for connection to the transmission system and allocation of capacity by way of Connection Agreement. Section 34 of the Electricity Regulation Act 1999 (as amended) (the "1999 Act") provides:

"Terms for connection to and use of transmission or distribution system.

34(1) Subject to subsection (4), where an application is made to the Board by any person, the Board shall offer to enter into an agreement for connection to or

¹ https://www.eirgridgroup.com/site-files/library/EirGrid/Data-Centre-Connection-Offer-Process-and-Policy_v2_July_2020.pdf

² granted under SDCC Planning Ref. SD21A/0042.

use of the transmission or distribution system, subject to terms and conditions specified in accordance with directions given to the Board by the Commission under this section from time to time."

- 1.12 However, the TSO is not required to offer terms, and indeed by virtue of its obligations under Regulation 8(1)(a) SI No 445/2000 - European Communities (Internal Market in Electricity) Regulations 2000 (the "2000 Regulations") should not offer terms, if it is not in the public interest to do so, as set out in Section 34(4) of the 1999 Act, which provides:
 - "(4) The Board shall not be required under subsection (1) to enter into an agreement where
 - (a) it has demonstrated to the satisfaction of the Commission that it is not in the public interest to provide additional capacity to meet the requirements to be imposed by that agreement..."
- 1.13 The Commission as defined under the 1999 Act is the Commission for Regulation of Utilities (the "CRU"). It is the CRU that is statutorily responsible for security of electricity supply in accordance with Regulation 28 SI No 60/2005 - European Communities (Internal Market in Electricity) Regulations 2005.
- 1.14 On 29 September 2021, the CRU published a 'Security of Supply Programme of Work',³ which was a programme to increase generation capacity to provide additional stability and resilience to the Irish energy system in the short to medium term. This referenced and was followed in November 2021 by the 'CRU Direction to the System Operators related to Data Centre grid connection (CRU/21/124)', directing them to implement a set of assessment criteria by which the system operators will process data centre grid connection applications. This was not a moratorium on data centre connections.
- 1.15 Also in November 2021, the Government released a 'Policy Statement on Security of Supply'⁴ in which it approved that:

"the connection of large energy users to the electricity grid should take into account the potential impact on security of electricity supply and on the need to decarbonise the electricity grid."

1.16 In this context, it is recognised by the Applicant that grid capacity is constrained in terms of the connection of data centre projects that are not yet contracted, as set out in 'Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy -July 2022', 5 which provides:

"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.

Electricity Grid Capacity and Energy System Transformation

EirGrid predicts that if all contracted capacity were connected, data centres would make up between 25% and 33% of Ireland's electricity demand by 2030. These

³ https://www.cru.ie/publications/27388/

⁴ https://www.gov.ie/en/publication/a4757-policy-statement-on-security-of-electricity-supply/

^{5 &}lt;u>https://www.gov.ie/ga/foitsiuchan/5e281-government-statement-on-the-role-of-data-centres-in-irelands-enterorise-strategy/</u>

forecasts are based on data centre projects already contracted to connect to the electricity system, which are all located in the Greater Dublin region. New data centre projects, not yet contracted to the electricity system, would only further increase electricity demand. EirGrid is aware of up to 1GW of these prospective data centre projects. This would present additional challenges for grid capacity and the emissions targets set for the electricity sector in the Climate Action Plan.*6

- 1.17 While the Applicant recognises that the TSO has identified such constraints, it is important to note that the Applicant is contracted to connect to and use the electricity system and does not fall to be considered as a 'prospective data centre project' in this respect. The Connection Agreement was entered into in advance of the above policy measures. However, the Connection Offer was received and the Connection Agreement entered into following introduction of DCCOPP and the identification of the greater Dublin area as a constrained area.
- 1.18 The Government statement on the role of data centres goes on to consider the extensive energy management efficiencies of data centres, as are demonstrable in the proposed development:

"In addition, many of these data centres require significantly large loads at a specific site. The average size of a data centre connection request to EirGrid is for a capacity of 80 MW. This has ramifications not only for the resilience of transmission network in those regions, but also to power system adequacy at a national level.

Extensive planning is required when commissioning the infrastructure to provide for data centres' energy needs. Data centres are typically large facilities with extensive energy management capability. As such, they may have the potential to provide local flexibility services, assisting the secure and efficient operation of the local electricity system. 'Flexibility services' means that a site can after its electricity demand or generation, either by controlling its internal processes (e.g. heating and cooling demand), or using on-site storage or generation.

Some data centres have scope to flexibly reduce their electricity demand at times when the local or national power system is under pressure, either by shifting demand to other sites, or through the use of on-site storage or power back up facilities. <u>Data centres can support the operation of the local system, in partnership with the transmission or distribution system operator.</u>

- 1.19 In this respect, there appears to be a clear lack of understanding by the planning authority as to the requirement for a 'fixed' Connection Agreement to demonstrate capacity.
- 1.20 The application of flexible demand arrangements provides the TSO with measures to effectively manage stability in the capacity of an area and was introduced on this basis, with mechanisms to 'turn down' a customer should any issues with capacity be identified.
- 1.21 This clearly falls within EirGrid's function as TSO "to operate and ensure the maintenance of and, if necessary, develop a safe, secure, reliable, economical and efficient electricity transmission system".8

⁶ at pages 9 - 10

⁷ at pages 15 - 16

⁶ Regulation 8(1)(a) S.I. No. 445/2000 - European Communities (Internal Market in Electricity) Regulations, 2000

1.22 DCCOPP introduced flexible demand arrangements to ensure effective management of capacity in constrained areas. Section 4.1 of DCCOPP provides:

"Flexible demand is the portion of a data centre's electrical load that must be reduced on instruction from EirGrid via the National Control Centre (NCC). Where capacity availability in a particular area is constrained, EirGrid will reserve the right to apply flexible demand arrangements and this will be reflected as a requirement for connection offers for new data centres in that area.

- 1.23 Further, these flexible demand arrangements are subject to review following annual capacity auctions and where new on-site dispatchable generation is made available to EirGrid.
- 1.24 Such contracted capacity is considered by the TSO and the CRU when preparing their capacity forecast statement⁹ and identifying the transmission system requirements and demands in planning grid development, among other matters.
- 1.25 The Generation Capacity Statement 2022 2031 (the "GCS") provides:

"As part of the demand forecast process EirGrid examines the status of data centres and new large energy users using a range of factors. This process creates three credible low, median and high forecast scenarios.

There is very strong growth in this sector out to 2024, with continued growth towards the end of the decade.

This growth is from contracted projects only. As per the directive from the Commission for the Regulation of Utilities in November 2021, data centre projects that do not currently have connection agreements will be assessed on new criteria. 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. This does not constitute a moratorium for data centres but according to CRU's direction¹⁰. EirGrid can 'determine whether a connection offer can be made within the system stability and reliability needs of the electricity network.' It also means that any new data centre demand must also bring equivalent capacity with it which would be intended to largely offset any further growth in data centre."

1.26 The GCS concludes:

"This changing demand and generation supply landscape for the island will require coordinated management of both the volume and type of new capacity, alongside new ways of managing increasing demand to ensure security of supply."

- 1.27 The approach taken by the planning authority in the instant appeal was misguided and outside its statutory remit on the following basis:
 - The proposed development is linked to a Facility which has a Connection Agreement and is therefore contracted capacity on the National Grid; and
 - The Connection Agreement is subject to terms which provide the TSO, EirGrid, with
 effective flexible demand management controls in the management of capacity on the
 National Grid; and

⁹ https://www.eirgridgroup.com/newsroom/eirgrids-generation-capac/

https://www.cru.ie/wp-content/uploads/2021/11/CRU21124-EirGrid-Direction-1.pdf

- 1.28 The planning authority acted outside its remit in considering 'existing grid capacity issues' without recognising that capacity has been contracted and so allocated to the Applicant.
- 1.29 The CE Report quotes the Applicant's response to the planning authority's request for further information as follows:

"the applicant has received and executed a grid connection agreement with Eirgrid to connect their permitted substation (known as Kishogue) into the national grid. This offer was made by Eirgrid on the 21st of August 2020 in the full knowledge of the constraints within the Greater Dublin area. Given this was made following both the 'Data Centre Connection Offer Process and Policy' Document published in July 2019 by Eirgrid and the National Climate Action Plan 2019, it is only reasonable to conclude that the locational requirements and other criteria in place at the time, were considered to have been met. The nature of this offer is that it will facilitate the gas plants permitted under the previous permission, as granted under SDCC Planning Ref. SD21A/0042 to supply and reinforce the national grid in c. Q1, 2024. The applicant also has a gas connection agreement from Gas Networks Ireland (GNI) to supply the permitted Power Plant."

- 1.30 The planning authority has erred in determining that the Connection Agreement, which is subject to flexibility mechanisms employed by the TSO to effectively manage capacity on the grid, demonstrates that sufficient capacity is not available in the electricity network. This is contrary to the purpose of the Connection Agreement which is subject to flexible demand arrangements.
- 1.31 Further, in its interpretation of this part of EDE7 Objective 2, the planning authority appears to place a burden on the Applicant that is entirely arbitrary and unattainable if demonstration of contracted capacity by way of a Connection Agreement to the transmission system is not an acceptable form of evidence for electricity capacity.
- 1.32 Indeed, as noted in the CE Report, it was accepted by the planning authority that:

"it appears that the proposed development was generally taken into account when designing and assessing the power plants (short-medium term power supply) and the GIS Substation (permanent power supply).

Notwithstanding this there are a range of significant technical and environmental fectors that would also need to be considered in relation to demonstrating sufficient capacity within the electricity network. In order for the Planning Authority to consider that there is 'sufficient capacity in the network' in line with EDE7, a fixed EirGrid connection should be demonstrated. As the applicant has failed to demonstrate this and has also failed to demonstrate compliance with the third criterion of Objective 2 of EDE7, it is considered that planning permission should be refused".¹¹

- 1.33 It is not clear what "significant technical and environmental factors" the planning authority refers to or how these could be demonstrated by way of a 'fixed' Connection Agreement.
- 1.34 It is a fact that the Applicant has a Connection Agreement for the connection of the Facility to the transmission system.¹² The flexible demand arrangements that apply to this Connection Agreement provide the TSO, the party responsible for the operation of a 'safe, secure and reliable' electricity grid, with effective controls for managing capacity in the area.

¹¹ at page 65

¹² granted under SDCC planning reference SD21A/0042

The Applicant has the necessary contracted capacity and the requisite access to secondary, back-up power should such flexibility be required or called upon by the TSO.

1.35 Furthermore, it appears that the requirement in EDE7 Objective 2 to demonstrate "sufficient capacity within the relevant water and wastewater and electricity network to accommodate the use proposed" is not to be applied in isolation as has occurred here. Rather the policy requirements are to be read together with the Applicant setting out that if the energy demand may not be met in full by the electricity network, or on site renewable energy, then evidence of engagement with PPAs must be provided

2 Conclusion

- 2.1 In reaching its Decision, the planning authority has had regard to grid capacity including under section 34(2)(a)(i) of the PDA and the provisions of the Development Plan (in particular EDE7 Objective 2). However, the planning authority's interpretation and application of this Objective goes beyond its statutory remit, which is limited to the consideration of proper planning and sustainable development.
- 2.2 As demonstrated above, it is clearly not within the remit of the planning authority to determine capacity allocation or connection to the electricity grid, or indeed the operation and management of contracted grid capacity. This falls squarely within the remit of the TSO and the DSO.
- 2.3 The planning authority's Decision is fatally flawed in determining that the DSO and TSO's recognition of the greater Dublin area as a constrained means that there is insufficient capacity for the proposed development.
- 2.4 The Applicant has a Connection Agreement to provide the Facility with grid capacity and therefore, notwithstanding that the consideration of grid capacity is beyond the remit of the planning authority, there was no factual basis for the planning authority to determine that there is insufficient grid capacity to service the Facility.
- 2.5 Moreover, there is no reasonable basis for the planning authority to base its Decision on concerns that the Facility will place too much demand on the grid in circumstances where the TSO is empowered under the Connection Agreement to avail of flexible demand arrangements.
- 2.6 In all the circumstances and in consideration of all the above, the planning authority has erred in fact and in law in making the Decision and the Decision ought to be overturned by the Board.

MASON HAYES & CURRAN LLP

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MHC-32223640-1

APPENDIX B - EirGrid Connection Agreement letter



www.eirgrid.com
The Oval, 160 Shelbourne Road
Bailsbridge, Dublin D04 FW28, Ireland
Telephone +353 1 677 1700
Email info@eirgrid.com

Our Ref: D48-BM-CL

Re: Connection Offer for a facility with a Maximum Import Capacity ("MIC")

at Grangecastle Business Park Extension, Dublin 22

Please find enclosed EirGrid's (the "Company") connection offer (the "Offer") with reference D48 issued to the "Customer") to connect to the Transmission System (the "Application") which the Customer is proposing to build at Grangecastle Business Park Extension, Dublin 22 and which it is proposed will be known as Kishoge (the "Facility").

The Offer is issued by the Company to the Customer on the basis of the following application request received from the Customer:

- Connection demand facility to the Transmission System which is to be located at Grangecastle Business Park Extension, Dublin 22 and is to be known as Kishoge;
- A connection method consisting of a Loop-in of two underground circuits into an existing circuit; and
- •

The Offer consists of a Connection Agreement to be entered into by the Company and the Customer (the "Connection Agreement"). Furthermore, any defined terms used in the Offer, shall have the same meaning when used in this Offer as in the Connection Agreement and reference should be made to the Connection Agreement for the definition of such terms.



John O'Connor Dr Theresa Donaldson Mark Foley
Shane Brennan, Tom Coughlan, Lynne Crowther, Michael Hand, Elleen Maher, Llam O'Halloran, John Trethowan & Michael Behan

Registered Address: Di Grid Pic, The Ovol, 160 Shelbourne Road, Bellabridge, Dublio DO4 FW2B, Ireland • Company Registration No. 330522



- The Company has received the Connection Agreement signed by an authorised signatory of the Customer using Docusign;
- The Customer has signed the Interface Undertaking with the Transmission Asset Owner which is set out in Schedule 11 of the Connection Agreement;
- The Customer has signed the Interface Undertaking with the DSO which is set out in Schedule 13 of the Connection Agreement;

•			
	* 01		

Please note that the Customer is required to sign the execution page of the Connection Agreement. The Company requires that the signatory be an authorised signatory of the Customer. As evidence of the signatory's authority, the Company requires the Customer to provide the following:

- a certified copy of the current Articles of Association of the Customer's company demonstrating that the signatory has the necessary authority to enter into contracts for and on behalf of the Customer; [and]
- (ii) a certified copy of the relevant board minute or written resolution demonstrating that the signatory has the necessary authority to enter into the Connection Agreement for and on behalf of the Customer.

In some circumstances the document listed at (i) may in itself be sufficient to demonstrate the signatory's authority to the Company, but generally documents (i) and (ii) will be required. Please note that the signatory must execute the Connection Agreement in the presence of a witness who must also sign attesting the signatory's signature.

Should you have any queries in relation to this matter or if I can be of further assistance, please do not hesitate to contact me at ______ or by email at ______.

Yours Sincerely,

EirGrid plc.

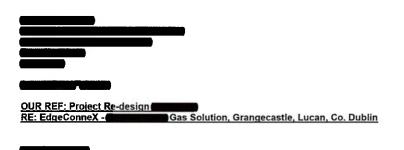
APPENDIX C - Gas Network Ireland's Connection Agreement letter

businesslink Bóthar Theampaill Mhaighréide Fionighlas Baile Átha Cliath 11, D11 Y895 Éire businesslink St. Margaret's Road Finglas Dublin 11, D11 Y895 Ireland



T +353 1850 411 511

gasnetworks.ie



Please find the following enclosed in our Quotation Pack

- Quotation Letter
- Contract
- Shipper Listing
- New Natural Gas Customers 'Important Terms'
- Switch and Save Today brochure
- A Drawing showing the Layout

Yours Sincerely,



Lionral Gáis Éireann cuideachta ghníomhaíochta ainmnithe, faoi theorainn scaireanna, atá corpraithe in Éirinn leis an uimhir chláraithe 555744 agus a tá hoifig chláraithe ag Bóthar na nOibreacha Gáis, Corcaigh, T12 RX96. Gas Networks Ireland a designated activity company, kmited by shares, incorporated in Ireland with registered number 555744 and having its registered office at Gasworks Road, Cork, T12 RX96.

Stiúrthóiri/ Directors: Mike Quinn (Charman), Brendan Marphy, Michael G. G'Su'llvan, Liam O. Sullivan, Denis O' Sullivan



Following your recent enquiry regarding the connection of natural gas to the above, Gas Networks Ireland can confirm that connection of the site to the natural gas network is possible.

In order to carry out a connection to the gas network we require the following:

- 2. The attached Agreement Form to be signed.
- Return of the signed Agreement Form and full payment must also be at least 6 weeks before work is required on site to guarantee crew availability
- Should you wish to pay for the project under the RCT rules you will need to supply us
 with a completed Deduction Authorisation Form as received by the revenue. These can
 be submitted to <u>accounts_receivable@ervia.ie</u>

This offer is based upon the standard terms and conditions in the attached Agreement Form, as well as those specific conditions outlined in this correspondence.



*Please note that once you have made payment electronically you will need to send notification to customerpayments@gasnetworks.ie referencing your project number.

Should you require any further information, please do not hesitate to contact me at mail at mail at the state of the state

Yours sincerely,

New Connections Sales Representative

Specific Project Details

Lavout

Please find enclosed the layout showing the route of our gas mains and the service connection that will supply the development with natural gas.

Gas Pressure

The operating pressure of the gas mains network on your development

Meter Position

As agreed onsite

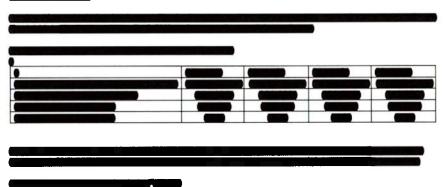
Site Name:

Gas Networks Ireland has your site name as EdgeConneX Grangecastle, Lucan, Co. Dublin. Gas Networks Ireland require your site name in order to progress meter fit appointments for your clients. If this information is to be amended, please contact me via e-mail at Hugh.Murphy@gasnetworks.ie

Connections Policy - Relevant guidelines

Gas Networks Ireland operates within the rules as determined by the Commission for Regulation of Utilities (CRU) and outlined in the Connections Policy. This policy specifies the manner in which all customers must contribute towards the cost of connection to the natural gas network. Construction is undertaken only on receipt of Agreements entered into with customers and prepayment of appropriate contributions.

Full Project Costs



Technical Support

As soon as you have appointed a Registered Gas Installer we recommend that a meeting be organised with our technical advisors to discuss any queries you may have in relation to your development. Please contact businesslink at **1850 411 511** who will organise an appointment for you.

With safety of each customer's Natural Gas connection being paramount, and in line with the Energy (Miscellaneous Previsions) Act 2006, it is important to note that The Register of Gas Installers Ireland (RGII) has been appointed by the Commission for Regulation of Utilities (CRU) as the Gas Safety Supervisory Body to regulate the activities of domestic natural gas installers with respect to safety.

Meter Installation

When your clients require meter installation and commencement of gas supply they must:

 Register as a customer of a participating licensed Natural Gas Supplier/Shipper of their choice.

Currently the suppliers serving the domestic market are available to view at www.energycustomers.ie or by calling the CRU at 1850 4000 800

- Ensure a Certificate of Conformance is attached to the meter box.The Gas Networks Ireland fitter can only proceed to complete the meter installation and turnon gas if Part 1 of this Certificate (Declarations of Conformity) containing the pipe-work test results is available in the meter box at the time of the meter fit appointment.
- Arrange for a meter fit appointment through their Natural Gas Supplier/Shipper. Their Natural Gas Supplier/Shipper will book the installation with Gas Networks Ireland who will dispatch a fitter to site for the installation on the agreed day / half-day

Terms and Conditions

- All excavations to be complete in advance of a Gas Networks Ireland contractor attending site.

3. The client provides sand surround and all other back-fill materials as appropriate.

- 4. Construction work is subject to obtaining all wayleaves /road opening licenses required from the relevant authorities. All applications for these licenses will be made upon receipt of contribution payment and signed Agreement Form; any delays in obtaining these will be communicated to you.
- 5.
- 6. The minimum clearance of our gas main from any building is:
 - a. Low pressure 1 meter and 300mm for any other utility below ground
 - Medium Pressure 5 metres and 300mm from any other utility below ground.
 No other utilities may be placed above or below the gas main.

Developments designed for medium pressure meters cannot be located:

- Within the building line or envelope of the building, as defined in IS 329:2000
- In covered alley ways
- · In any location under an occupied over-hanging area
- 7. Gas Networks Ireland must be informed of any changes to the agreed layout or increase/decrease in the number of connections prior to commencing our work on site. We will require a revised layout showing the changes. Any changes to the layout may result in a revised quotation being issued.
- If this service involves construction operations to which Relevant Contracts Tax (RCT) apply, VAT will not be included on the service. Instead the VAT should be accounted for by the Principal Contractor.

9.

11.

APPENDIX D- Letter from KPMG confirming they are contracted to aquire Corporate PPA's on behalf of Edgeconnex in Ireland



.

KPMG Corporate Finance Stokes Place St. Stephen's Green Dublin 2 D02 DE03 Telephone +353 1 410 1000 Fax +353 1 412 1122 Internet www.kpmg.ie

Private and confidential

Anand Ramesh EdgeConneX Global Procurement, LLC 2201 Cooperative Way Suit 400 Hendon VA, 20175

9 August 2023

Dear Anand,

RE: EdgeConneX Corporate PPA's in Ireland

I write to confirm the basis upon which KPMG Corporate Finance is engaged to act as advisor ("the Advisor") to EdgeConneX Global Procurement, LLC ("EdgeConneX", "ECX") to secure a Corporate Power Purchase Agreement (CPPA) for renewable electricity related to your data centre operations in Ireland.

We note that the CPPA will be engaged for the EdgeConneX data centre operations in Ireland which will be inclusive of the future data center referenced as EDCDUB06 and subject to Planning Permission under South Dublin County Council SD22A/0333.

The CPPA will be utilized to meet EdgeConneX stated corporate goals of 99% Renewable and Carbon Free Energy as detailed in the public EdgeConneX Sustainability Report.

I can confirm the EdgeConneX and KPMG current appointment has been signed August-2023 for these future works.

Russell Smyth

Partner, KPMG Ireland

hus Hang 4 Marie Aumstrong 4 Davina Barren 4 Claim Barry 4 James Binds 4 Alam Boyne 6 Brain Brenhari 4 Alam Brownel 4 Gavern Bryan ca Ceren 4 James Claegh 4 Not Classy 4 Not

KFMG, an Irish partnership and a member firm of the KFMG global organisation of independent member firms affected with KFMG international Limited, a private English company limited by guarantee

KPMG is aumorised by Chartered Accountants freland to carry on lovestment Business

APPENDIX E - Decision of South Dublin County Council

An Rannóg Talamhúsáide, Pleanála agus Iompair Land Use, Planning & Transportation Department Comparie Contas Atha Clath Thess South Dublin County Council

Telephone: 01 4149000

Fax: 01 4149104

Email: planningdept@sdublincoco.ie

Henry J Lyons Architects, Anth 51-54, Pearse Street Dublin 2

NOTIFICATION OF DECISION TO REFUSE PERMISSION PLANNING & DEVELOPMENT ACT 2000 (as amended) AND PLANNING REGULATIONS THEREUNDER

Decision Order No.	0845	Date of Decision	20-Jul-2023
Register Reference	SD22A/0333	Date	26-May-2023

Applicant:

Development:

EdgeConneX Ireland Limited

Construction of 2 adjoined single storey data centres with associated office and service areas with an overall gross floor area of 15, 274sq.m comprising of the construction of 2 adjoined single storey data centres with a gross floor area of 12, 859sq.m that will include a single storey goods receiving area / store and single storey office area (2, 415sq.m) with PV panels above, located to the east of the data centres as well as associated water tower, sprinkler tank, pump house and other services; The data centres will also include plant at roof level; with 24 standby diesel generators with associated flues (each 25m high) that will be located within a generator yard to the west of the data centres; New internal access road and security gates to serve the proposed development that will provide access to 36 new car parking spaces (including 4 electric and 2 disabled spaces) and sheltered bicycle parking to serve the new data centres; New attenuation ponds to the north of the proposed data centres; Green walls are proposed to the south and east that will enclose the water tower and pump house compound; The development will also include ancillary site works, connections to existing infrastructural services as well as fencing and signage; The development will include minor modifications to the permitted landscaping to the west of the site as granted under SDCC Planning Ref. SD19A/0042 / ABP Ref. PL06S.305948 and Ref. SD21A/0042; The site will remain enclosed by landscaping to all boundaries; The development will be accessed off the R120 via the permitted access granted under SDCC Planning Ref. SD19A/0042 / ABP Ref.

PL06S.305948 and SD21A/0042; An Environmental Impact Assessment Report (EIAR) has been submitted with this application.

Location:

Site within the townland of Ballymakaily, West of Newcastle Road (R120), Lucan, Co. Dublin

Time extension(s) up to and including:

Additional Information Requested/Received:

10-Oct-2022, 29-Mar-2023/26-May-2023,

Clarification of Additional Information Requested/Received:

10-Oct-2022, 29-Mar-2023/26-May-2023,

DECISION: Pursuant to the Planning and Development Act 2000 (as amended), dated as above a decision to **REFUSE PERMISSION** is hereby made for the said development for the reason(s) set out on the Schedule hereto.

REASON(S)

- 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.
- The proposed development does not comply with GI1 Objective 4, GI2 Objective 2. GI2
 Objective 4, NCBH11 Objective 3 and GI5 Objective 4 the South Dublin County Development
 Plan 2022-2028 in relation to the retention and protection of existing green infrastructure and
 provision of green infrastructure.

Please note that upon receipt of this document you are obliged to remove the planning site notice in compliance with Article 20 of the Planning and Development Regulations 2001 (as amended). Please note that any valid submissions or observations received in accordance with the provisions of the Planning and Development Regulations 2001 (as amended), have been considered in the determination of this application.

Register Reference:

SD22A/0333

Signed on behalf of the South Dublin County Council.

Yours faithfully,

F. Campbell

_21-Jul-2023

for Senior Planner

