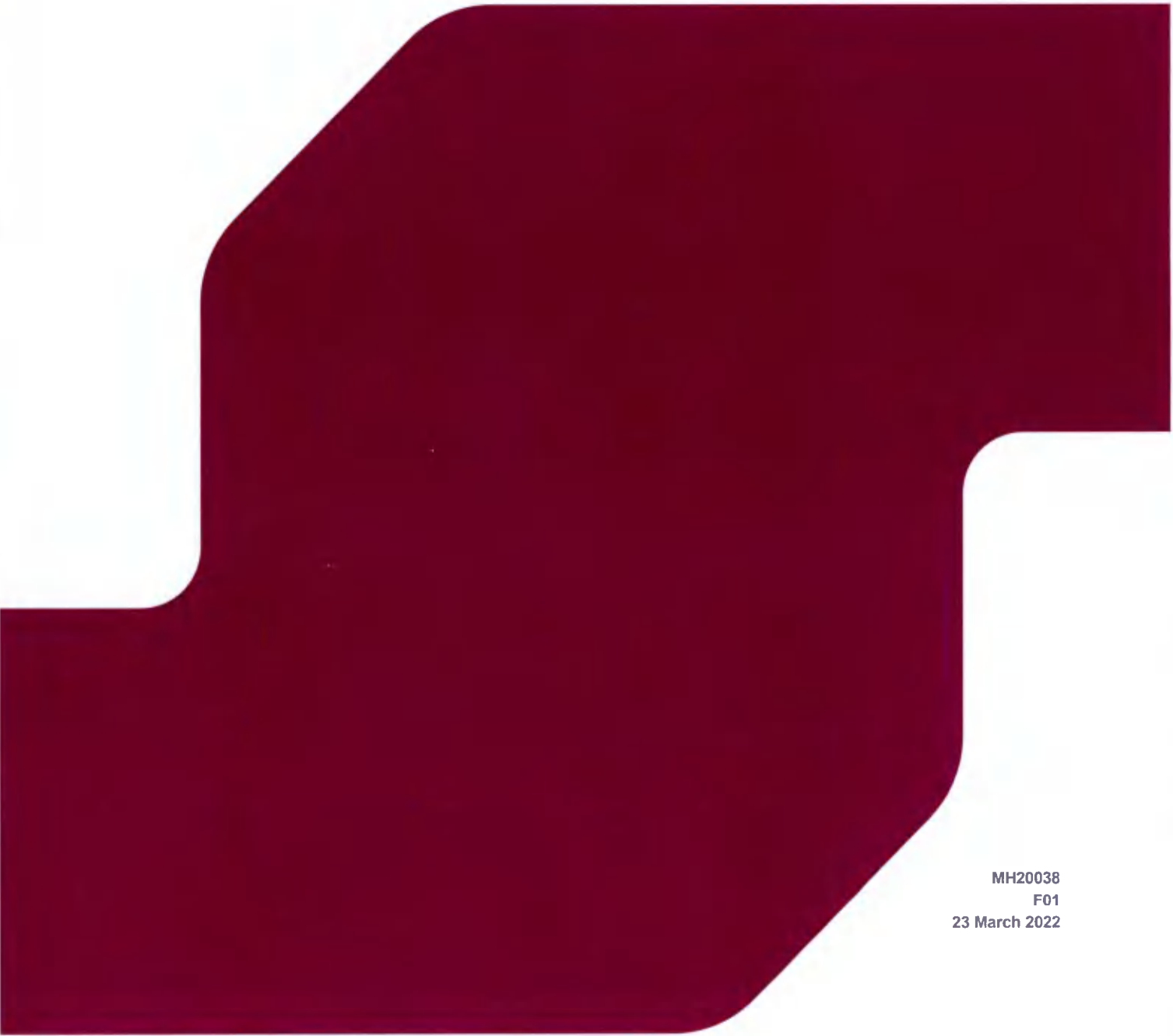


## **INXN DUB15/16**

Reg. Ref: SD21A/0217 – Further Information Response



MH20038  
F01  
23 March 2022

**Document status**

Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
F01	FI Response	HM	BC	VB	21.03.22

**Approval for issue**

VB

21 March 2022

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# 1 INTRODUCTION

RPS has been instructed by Digital Netherlands VII B.V. (Netherlands) to prepare this Further Information Response with respect to a planning application for a data centre development at Profile Park, Nangor Road, Clondalkin, Dublin 22 (Reg. Ref: SD21A/0217). If permitted, the development would result in, inter alia, Foreign Direct Investment (FDI) and new employment opportunities in the County.

The application site comprises a brownfield site located within an existing business park. Planning permission was granted previously for a development of the site which was partially constructed. This application seeks to develop the remainder of the site.

In summary, the application proposed two data centre buildings and associated works.

The application was submitted on 4 August 2021. The description of development is as follows:

*“10 year permission for the following development: Removal of an existing unused waste water treatment facility on site and the erection of two data centre buildings, gas powered energy generation compound, and all other associated ancillary buildings and works. The two data centre buildings, DUB 15 and DUB 16, will comprise a total floor area of c. 33,577m<sup>2</sup> over two storeys. The first 2 storey data centre building (DUB15), located to the south west of the site, will comprise 16,865m<sup>2</sup> data storage use, ancillary office use and associated electrical and mechanical plant rooms, loading bays, maintenance and storage space. A second 2 storey data centre building (DUB16), located to the south east of the site, will comprise 16,712m<sup>2</sup> data storage areas, ancillary office use and associated electrical and mechanical plant rooms, loading bays, maintenance and storage space. Both data centre buildings will reach a height of 20m. Emergency generators and associated emission flues and plant are proposed in compounds adjacent to each data centre building. Gas powered energy generation is proposed to the north east corner of the site to provide electricity for the proposed development. The application proposes to re-route and widen an existing watercourse constructed following an earlier planning permission. It is proposed to reroute this watercourse along the eastern and southern boundary of the site. Landscaping is proposed to the south of the site to screen the buildings. Fencing and security gates are proposed around the site. New access roads within the site are proposed along with 71 car parking spaces and 26 cycle spaces, bin stores, site lighting, and all associated works including underground foul and storm water drainage attenuation and utility cables and all other ancillary works. A Natura Impact Statement will be submitted to the planning authority with the application”.*

South Dublin County Council (SDCC) sought further information on 12 points by letter dated 29 September 2021. The deadline for responding to this further information request is 29 March 2022 (+ 9 days for Christmas). A request to extend this period was submitted on 21 March 2022. SDCC responded as follows:

*“Further to a request dated 21/03/22 regarding the above mentioned planning application, I wish to inform you that, by Order dated 22/03/22, the period for submitting a response to the request for Further Information has been extended up to and including 05/07/2022 in accordance with the provisions of Article 33 (3) of the Planning and Development Regulations, 2001 (as amended)”.*

RPS and members of the project team met with Planners from SDCC on 3 December 2021 to discuss our response to the FI Request. Further consultation with other stakeholders has also taken place.

## 2 SCHEDULE OF CHANGES

The following changes have been made to the proposals to address the Further Information Request:

- Energy generation has been removed from the site and the proposed substations have been reduced in size.
- Green walls have been introduced to the southern and western elevations to soften the visual impact of the proposed development.
- A green roof cassette system is proposed for the office roofs.
- The cladding has been changed to provide a staggered panel arrangement with two different colours to add visual interest. The proposed panels are Merlin Grey and Albatross.
- The building level for DUB16 (eastern) has been reduced to align with DUB15. This will reduce the quantity of fill required and avoids the need for retaining walls between DUB15 and DUB16.
- The watercourse profile has been revised and flood plains introduced to sections along the proposed watercourse re-routing, avoiding a heavier engineering solution in favour of a natural design solution and reducing the velocity of the stream.
- The previously proposed engineered attenuation tank for SUDs has been replaced with a natural SUDs system. An attenuation pond is proposed to the northeast of the site in place of the former energy centre. Swales are proposed around the perimeter of the road network surrounding the site.
- Landscaping plans have been updated to reflect improvements to the watercourse and drainage designs. Additional planting is proposed throughout the site. Landscaped mounding to the south of the site is proposed to form screening and reduce the volume of soil leaving site. Additional planting is now proposed along the western boundary.
- Significant work has been done to reduce noise generated on site. This includes the removal of the energy centre and associated noise sources. We have updated the noise model which now indicates that the required levels are met.
- The lighting design for the proposed development has been updated following the removal of the energy centre and the addition of the attenuation pond.
- The Air Quality and Emissions Report has been updated to reflect the changes to the scheme.
- An aviation impact assessment report is now included in planning documentation.
- A separate report is now included on the removal of the existing and redundant waste water treatment plant.
- The amount of cut and fill required to facilitate the development has been reassessed.
- The hydrant pump and two tanks have been moved out of the RU zoned land.
- Fencing moved in off the site boundary and off the RU zoned land. The fencing will now not cross the watercourse; this will have an ecological benefit.
- A pulling in lane for 16.5m truck inside the site entrance on the left.

Following the changes, reports and drawings have been updated to reflect the revised scheme.

### **3 DURATION**

The application is seeking an appropriate period of 10 years in which to construct the development. This duration is being sought for a number of reasons including the complex nature of the construction works that are involved.

The application comprises two large data halls. It is envisaged that it would be preferable to build these data halls in two phases. A 10 year permission would give more flexibility and allow the development of the site in an orderly fashion.

A 10-year permission ensures that the entire development as proposed is implemented as a single permission. There are no disbenefits to providing a 10 year permission.

## 4 FURTHER INFORMATION RESPONSE

### 4.1 Item 1: Energy

The Planning Authority considers that there is a need to balance the demand for development with climate action and resilience as well as the capability of the national grid to provide for such developments. The Planning Authority is seriously concerned with the current proposal to power the data centres with a gas generator due to the absence of capacity in the national grid. The applicant is advised that the Planning Authority has concerns in relation to the number and extent of large demand connections in this area and the demand for future grid reinforcements. It is noted that Action 20 of the Climate Action Plan, 2019 states "Implement energy actions under the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy to ensure that large demand connections are regionally balanced to minimise grid reinforcements". The absence of power supply via Eirgrid to commence operation and the apparent shortfall in power supply from the Gas Energy Centre appears to contribute to a future demand for grid reinforcements. In this context, the applicant is advised that the proposed development may be premature pending a stable connection to the national grid and the use of gas powered generators conflicts with the macro policies in the Development Plan around Energy and Climate Action. In light of this, the applicant is requested to address the following:

(a) The applicant is advised that the Planning Authority has significant concerns in relation to the justification and site suitability for a gas powered data centre proposal, in the context of national, regional and local policy on energy and climate resilience and adaptability. The applicant is requested to submit the following additional information in order for the Planning Authority to undertake a proper assessment of the proposed development:

(i) Justification for the form of energy production proposed in relation to climate change and renewable energy policy.

(ii) provide more detail regarding the alternative sources of power generating assessed as part of the alternatives.

(iii) consider whether it is possible to incorporate a significant portion of renewable energy generation for the development.

(iv) Information on whether the existing site is serviced in terms of gas utilities and if not, the proposals for undertaking the development required to facilitate servicing

(v) Information on proposals to connect the power plant and site to the national gas grid and the source of gas proposed.

(b) The applicant is requested to provide an assessment of the potential to serve the site with renewable energy. Where this is not possible, the applicant is requested to set out the following:

(i) The ability of the on-site gas generation to serve both DUB15 and DUB16

(ii) Proposal/timeframe for decommissioning on site generators

(iii) Proposed route/location of grid connection

(iv) Correspondence from the Commission for Regulation of Utilities/Eirgrid that connection is feasible and the timeline for the connection.

#### 4.1.1 Response

Mindful of the significant concern raised by the Local Authority with regard to the onsite gas energy generation, this aspect of the proposal has been removed. Energy for the proposals will be secured from the national grid.

The Applicant has engaged with EirGrid with regard to a connection and discussions are ongoing. EirGrid will not issue a formal offer for proposals until planning permission is granted. This position was discussed with the Planners at our meeting on 3<sup>rd</sup> December 2021 and was favourably received by the Council.

The EirGrid All Ireland Generation Capacity Statement 2021-2030 states: "EirGrid recognises the important role that data centres play in shaping Ireland's economy, and has committed to meeting the challenge of

maintaining Ireland’s high standards in security of supply while maximising the opportunities presented by these customers”.

In June 2019, the Irish Government published the Climate Action Plan 2019. This sets out 2030 targets for how, at high level, 70% renewable energy will be achieved. Measures being undertaken by the Government to do this include (as set out in the All Ireland Generation Capacity Statement 2021-2030 (EirGrid):

- “Delivering an early and complete phase-out of coal and peat fired electricity generation
  - Moneypoint closure by 2025
  - Reduced reliance on peat fired plants
    - Bord na Mona transition away from peat by 2028. Current planning permission for Edenderry ends in 2023, but an extension to planning is being pursued.
    - ESB Shannonbridge and Lanesborough are to close at the end of 2020.
- An increase of electricity from renewable sources to 70% via:
  - At least 3.5 GW of offshore renewable energy,
  - Up to 1.5 GW of grid-scale solar PV energy,
  - Up to 8.2 GW total of increased onshore wind capacity.
- Meeting 15% of electricity demand by renewable sources contracted under corporate PPAs.
- Enhanced interconnection is planned, including the Celtic Interconnector to France and the Greenlink Interconnector to the UK.
- Facilitation of small and micro-scale generation at a residential and community level to sell excess generation back to the grid.
- Smart meter installation for all homes by 2024.
- Revised market structures and grid connection processes to best facilitate the targets”.

Figure 19 of the All Ireland Generation Capacity Statement 2021-2030 (EirGrid) indicates how the grid will move towards more renewable energies over the next 10 years.

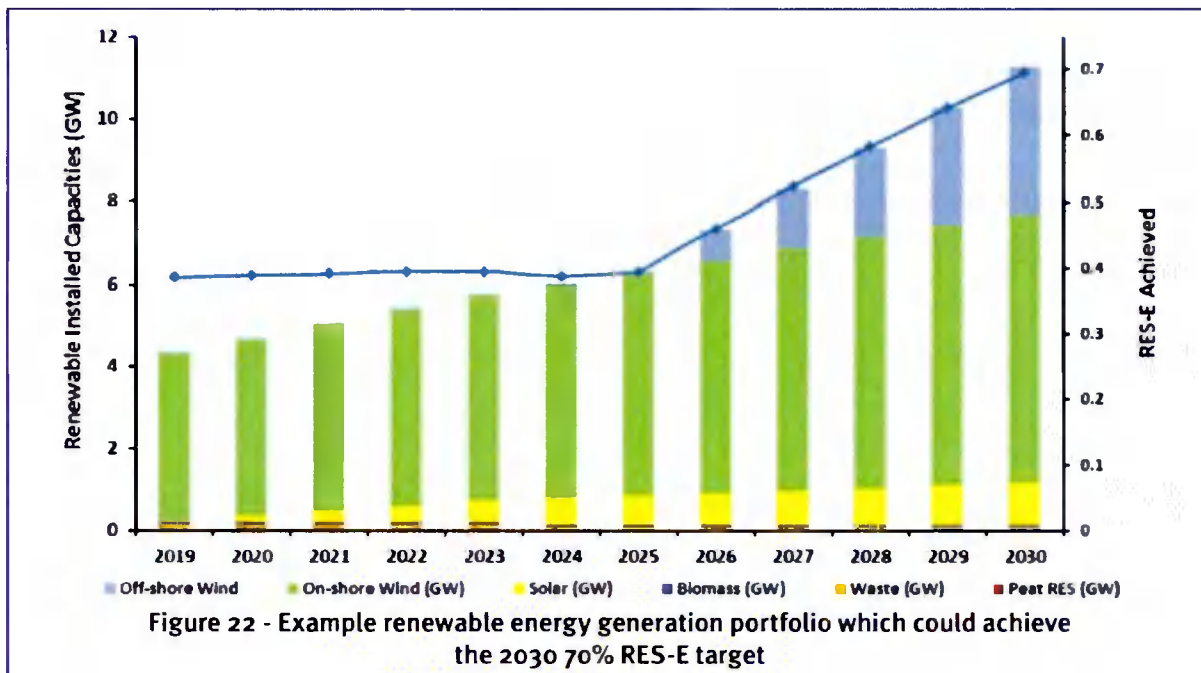


Figure 4-1: Future Grid Generation, Source: Figure 19 of the All Ireland Generation Capacity Statement 2021-2030, EirGrid



The National Planning Framework (NPF) sets a number of National Strategic Objectives (NSOs). NSO 5 is for a strong economy supported by enterprise, innovation and skills. In term of digital and data innovation it seeks the *“promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities”*. NSO 8 of the NPF seeks to transition to a climate-neutral and climate resilient society. At a regional level Chapter 7 of the Eastern and Midland Regional Assembly Regional Spatial and Economic Strategy (RSES) seeks to decarbonise the energy sector with a shift from its reliance on using fossil fuels and natural gas as its main energy source to a more diverse range of low and zero-carbon sources.

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

Action 20 of the Climate Action Plan, 2019 clearly states:

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

The Government Statement on The Role of Data Centres in Ireland's Enterprise Strategy notes:

*“Data centres directly contribute to job creation and they also generate significant added economic benefit by providing a range of services to other firms that undertake production, research and development, marketing, sales, service, and support activities in locations with no physical/geographic connection to the data centre”*.

The Strategy concludes:

*“Ireland continues to enhance the business environment to ensure its attractiveness as business needs evolve. The Government reaffirms support for the development of enabling technology and infrastructure to meet enterprise, economic and social policy goals.*

*We acknowledge the need for social acceptance of large data centre developments. The planning process provides the necessary framework for ensuring that all necessary standards are met and that comprehensive statutory and non-statutory consultation is built into the process.*

***The Government endorses, supports and promotes the appropriate and timely delivery of data centres across the regions. It reaffirms that it is Government policy and in the national interest, that these developments are delivered in the most efficient and timely way possible, based on the best available knowledge and informed engagement on their impacts.***

*The policy responses summarised above will help ensure that Ireland continues to achieve its national enterprise policy objectives, mindful of the strategic issues that come with developments in the area, while ensuring that our sustainability goals are also reached”*.

**[Our Emphasis]**

The South Dublin County Council Development Plan 2016-2022 (hereafter, the County Development Plan / CDP) considers Energy in Chapter 10. It states that *“South Dublin County should aspire to becoming as carbon neutral as possible and make every effort to increase energy efficiency and unlock renewable energy potential”*. Chapter 10 of the CDP is clear in its focus on moving away from carbon-based fossil fuels including gas and the use of alternative non-polluting, low carbon and renewable energy sources such as wind, solar, hydro, and geothermal.

As noted above, the onsite energy generation has been removed from the proposals. Instead, the proposed development will connect to the National Grid. Discussions are ongoing with EirGrid. EirGrid will not make a formal offer in advance of planning permission.

The energy secured from the grid will become more and more sustainable in line with the targets set out in the All-Ireland Generation Capacity Statement.

It is considered that the proposed data centre will be sustainably powered from the Grid and will accord with the Development Plan policies in this regard.

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RFI Point:

Our Response:

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<p>(a) The applicant is advised that the Planning Authority has significant concerns in relation to the justification and site suitability for a gas powered data centre proposal, in the context of national, regional and local policy on energy and climate resilience and adaptability. The applicant is requested to submit the following additional information in order for the Planning Authority to undertake a proper assessment of the proposed development:</p>	<p>Gas powered energy generation is no longer proposed as part of this application. The application will connect to the national grid.</p>
<p>(i) Justification for the form of energy production proposed in relation to climate change and renewable energy policy.</p>	<p>As set out above, energy from the national grid is generated increasingly from renewable sources. In years to come, the national grid will provide the most sustainable energy available.</p>
<p>(ii) provide more detail regarding the alternative sources of power generating assessed as part of the alternatives.</p>	<p>We have assessed the potential to generate electricity on site.</p> <p>Sustainability measures such as ground source heat pumps and waste heat recovery are included as part of the proposal.</p>
<p>(iii) consider whether it is possible to incorporate a significant portion of renewable energy generation for the development.</p>	<p>We have assessed the potential for renewables and in terms of wind and solar, neither are suitable for this site due to its location adjacent to the nearby airport.</p> <p>By connecting to the national grid, a large proportion of the energy used by the proposals will be renewable. This will increase as the energy on the grid becomes greener.</p>
<p>(iv) Information on whether the existing site is serviced in terms of gas utilities and if not, the proposals for undertaking the development required to facilitate servicing</p>	<p>Gas powered energy generation is no longer proposed.</p>
<p>(v) Information on proposals to connect the power plant and site to the national gas grid and the source of gas proposed.</p>	<p>Gas powered energy generation is no longer proposed.</p>
<p>(b) The applicant is requested to provide an assessment of the potential to serve the site with renewable energy. Where this is not possible, the applicant is requested to set out the following:</p>	<p>We have assessed the potential for renewables and in terms of wind and solar, neither are suitable for this site due to its location adjacent to the nearby airport.</p> <p>This was assessed in the Part L report prepared by ARUP and submitted with the application. It stated:</p> <p><i>“The following technologies were considered as part of the Part L compliance analysis:</i></p> <p><i>1. Variable Refrigerant Flow (VRF) heat pump technology to provide heating and cooling to the office space.</i></p>

	<p>2. Heat pump technology to provide domestic hot water to the office space.</p> <p>Photovoltaic (PV) panels were considered as part of the analysis. However, based on the close proximity of the site to Baldonnell Aerodrome and the large roof area (m<sup>2</sup>) required this option was discarded".</p>
<p>(i) The ability of the on-site gas generation to serve both DUB15 and DUB16</p>	<p>Gas powered energy generation is no longer proposed.</p>
<p>(ii) Proposal/timeframe for decommissioning on site generators</p>	<p>Gas powered energy generation is no longer proposed.</p>
<p>(iii) Proposed route/location of grid connection</p>	<p>The site is already connected to the national grid. The two existing data centres on site, DUB13 and DUB14 are connected from the grid. This route will also provide for DUB15 and DUB16.</p>
<p>(iv) Correspondence from the Commission for Regulation of Utilities/Eirgrid that connection is feasible and the timeline for the connection.</p>	<p>The Applicant has engaged with EirGrid with regard to a connection and discussions are ongoing. EirGrid will not issue a formal offer for proposals until planning permission is granted.</p>

## 4.2 Item 2: RU Zoned Land

A significant portion of the site (running along the southern boundary) is zoned 'RU' – 'To protect and improve rural amenity and to provide for the development of agriculture'. The applicant includes this rural zoned land within the parameters of the site, and it is proposed to provide a hydrant pump room and two tanks and landscaping on this section of the land alongside the re-diversion/re-alignment of the historic stream. The applicant, in essence, is proposing the use of the rural zoned lands to provide for supporting infrastructure and landscaping relief for the proposed development. The proposed size, bulk, scale and mass of the development and the land coverage the buildings, including those previously granted to the north of the site, will take up is significant and can be deemed to be an overdevelopment of the site. This issue was raised at Pre-Planning stage by the Planning Authority and the applicant was informed that this aspect was substandard. Any development proposed on lands zoned for Enterprise and Employment is required to comply with policies and objectives contained within the current County Development Plan. Chapters 7 and 8 require natural solutions and significant green infrastructure to form planning proposals on EE zoned land. In this regards any landscaping and works proposed on the RU zoned land should comply with the zoning objective to protect and improve rural amenity and to provide for the development of agriculture. It is not considered that the security fence, hydrant pump and two tanks and the realignment of the river support the zoning objective. Furthermore, if this landscaped area is to be accepted as part of the overall development lands it would only be considered over and above Green Infrastructure and natural solutions being provided within the EE zoned lands, which has not been proposed.

(a) The site is highly prominent, with significant blank facades. The buildings are significantly taller than the landscaping. The Planning Authority has significant concerns regarding the visual impact of the proposal, given its transitional location adjacent to rural zoning, designated open space, Protected Structures and a recorded monument. The applicant is, therefore, requested to consider how the visual impact could be reduced, in terms of both the design of the buildings, reduction in footprint of the buildings and also the provision of significantly additional green infrastructure and landscaping. The Planning Authority requires as a minimum that all southern elevations of the structures shall be provided with green walls.

(b) The Planning Authority has concerns over the mass and bulk of the main building and the level of development overall on the site. The Planning Authority is of the opinion that the proposal represents an overdevelopment of the site and the applicant is therefore requested to submit revised proposals to significantly reduce development across the entire site and substantially reduce the footprint of the structures. The rural zoned lands should not be included in calculations for green infrastructure and landscaping on the site.

(c) The applicant is requested to:

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

(ii) Provide details of any retaining structures.

(iii) The applicant is requested to locate security fencing within the site. Security fencing should not be located on site boundaries or in RU zoned lands.

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

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

(e) *Photomontages - the applicant is requested to provide additional/new photomontages based on design changes sought on the foot of this additional information request:*

- (i) *From Grange Castle Golf Club/R136 to the east and from Nangor Road, to the north.*
- (ii) *Viewing the site from the east in its context with the Protected Structure and recorded monument.*
- (iii) *Viewing the site from the west in its context with the Protected Structure and recorded monument.*

## 4.2.1 Response

The south of the site is zoned RU. The objective of this zoning is *"To protect and improve rural amenity and provide for the development of agriculture"*. The Further Information Request states: *"The applicant includes this rural zoned land within the parameters of the site, and it is proposed to provide a hydrant pump room and two tanks and landscaping on this section of the land alongside the re-diversion/re-alignment of the historic stream"*.

With regard to overdevelopment, the scheme has been amended to remove the gas powered energy generation to the north of the site. Significant greening and planting has also been included, including green walls, to ensure that the proposed development fits within the site.

The proposed amendments to the stream are to the betterment of the stream from an ecological and hydrological point of view.

The removal of the gas powered generation has provided more space on the EE zoned land for additional planting and ecological improvements. The revised scheme shows significant additional green infrastructure on the EE zoned land. The remaining planting on the RU zoned land complements this.

The planting and works to the watercourse on the RU zoned land will be natural in appearance. The rural zoned lands are situated outside of the proposed security fence. Landscape proposals here include additional hedgerow and native woodland planting, bee friendly native wildflower, riparian strip and marginal planting. Hard landscape interventions are kept to a minimum, a low impact compact gravel path and timber benches provide access and increase usable amenity space. The proposals will protect and improve rural amenity as they will be rural in nature. They will also provide for the development of agriculture by providing a natural buffer between the EE zoned land and the agricultural land to the south.

All built development including the security fence, hydrant pump and two tanks have been removed from the RU zoned land. The existing watercourse is in an unnatural state and the works proposed to it within the RU zoned land are for the ecological benefit of the watercourse.

### 4.2.1.1 Item A

The proposals have been assessed and measures have been introduced to reduce the visual impact of the southern façade cognisant of the heritage assets to the south and the traditional nature of the site.

The Data Hall facades have been modified from the previous blank single colour panel system which gave the appearance of a large single bulky mass. The design to the Data Hall portions of the facades have been revised, and a panel system has been introduced with alternating vertical cladding panels of varying widths and contrasting colours. This aids in the reduction of the overall visual massing of the building. Breaks up the previous blank façade, reduces the visual impact of bulk and massing of the buildings. The colour palette proposed is a variation between light and dark greys (see below).

The walls around the perimeter of the generator yards have remained as per the original planning submission and are clad with merlin grey composite panels. These walls will only be visible from within the site as the proposed planting and ground levels of the southern boundary will fully screen the generator yard walls.

Green walls have been introduced to both the southern facades of DUB 15 and DUB16 and the eastern façade of DUB16.

Soil from on site had been redistributed to landscape mounding and berms which will minimise the visual impact of the development and screen building facades.



Figure 4-2: Indicative Facade Samples

#### 4.2.1.2 Item B

The design of the main buildings has been altered to reduce the mass and bulk appearance. The on-site generation compound and associated welfare buildings have been removed from the development reducing the extents of proposed footprint of the structures across the site and increasing the amount of landscaping possible. Landscaping and green infrastructure has been increased across the site and an attenuation pond has been introduced with landscaping around its perimeter.

Green space on EE zoned land has increased from 22.2% in the original submission to 28.6% in the current submission<sup>1</sup>.

#### 4.2.1.3 Item C(i)

Section 2.3.6 of the CDP states:

*“The design and siting of new residential development should respond appropriately to the natural topography of its site and improve upon and enhance natural characteristics. This should be based on a thorough site analysis and context review”.*

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<sup>1</sup> Page 5 of Masterplan Update, B+R

*"To minimise ecological and visual impacts, residential development on sites with a steep or varying topography should utilise the natural slope of the landscape and avoid intrusive engineering features".*

Housing (H) Policy 16 Steep or Varying Topography Sites states:

*"It is the policy of the Council to ensure that development on lands with a steep and/or varying topography is designed and sited to minimise impacts on the natural slope of the site".*

This section quotes the following two policies:

*"H16 Objective 1: To ensure that all developments including buildings, streets and spaces are designed and arranged to respond to and complement the site's natural contours and natural drainage features in accordance with the recommendations of the Urban Design Manual – A Best Practice Guide (2009)".*

*"H16 Objective 2: To avoid the use of intrusive engineered solutions, such as cut and filled platforms, embankments or retaining walls on sites with steep or varying topography".*

It is noted that the proposal is not for residential development. However, the proposals do work with the natural topography of the site as much as possible. It is in the Applicant's interest to have a little cut and fill as possible. Therefore, efforts have been made to ensure this is limited.

The landscape topography follows natural high and low lands of the site and soil on site is redistributed in landscape mounding and berms used to minimise the visual impact of the development.

#### **4.2.1.4 Item C(ii)**

All retaining wall details have been provided, comprising Gabion Basket retaining wall shown on drawing IE-DUBZZ-STE1-EO-ARP-DR-C-0122 and Willow Spilling retaining wall shown on drawing IE-DUBZZ-STE1-EO-ARP-DR-C-0137.

#### **4.2.1.5 Item C(iii)**

The proposed fence has been moved to within the EE zoned land as required.

#### **4.2.1.6 Item D(i)**

As set out above, we have introduced significant proposals to soften the southern facades of both data centre buildings to mitigate the impacts of the proposed development on the protected structures and recorded monument to the south. This includes a reduction in the built form on site and the introduction of mitigation measures to the southern facades including green walls and additional planting.

Significant woodland and native hedgerow planting are also proposed for the southern site boundary as shown in the Landscape Masterplan.

Please refer to:

- Architectural Visualisation - Visual Impact Assessment, Digital Dimensions
- IE-DUBZZ-ZZZZ-ZZ-RKD-DR-A-04005 Contiguous Elevations - Proposed
- IE-DUBZZ-ZZZZ-ZZ-RKD-DR-A-04006 Contiguous Elevations - Proposed
- IE-DUB15-DTZZ-ZZ-RKD-DR-A-04011 DUB15 Proposed Building Elevations 1 of 2
- IE-DUB15-DTZZ-ZZ-RKD-DR-A-04012 DUB15 Proposed Building Elevations 2 of 2
- IE-DUB16-DTZZ-ZZ-RKD-DR-A-04051 DUB16 Proposed Building Elevations 1 of 2
- IE-DUB16-DTZZ-ZZ-RKD-DR-A-04052 DUB16 Proposed Building Elevations 2 of 2

#### 4.2.1.7 Item E

The existing verified views have been updated to reflect the design changes to the buildings, together with additional views requested, however, access was not granted by the golf club to provide a view from this location.

We have also included 2 additional contiguous elevations along the boundary line to aid in giving a realistic view of the buildings at the site boundaries from the southern and eastern boundary line and how they sit within the landscape and are lower than the surrounding ground levels and the screening that is provided by the existing and proposed surrounding trees and hedgerows.

Please refer to:

- Architectural Visualisation - Visual Impact Assessment, Digital Dimensions
- IE-DUBZZ-ZZZZ-ZZ-RKD-DR-A-04005 Contiguous Elevations – Proposed
- IE-DUBZZ-ZZZZ-ZZ-RKD-DR-A-04006 Contiguous Elevations - Proposed



### 4.3 Item 3: Stream

The Planning Authority has serious concerns regarding the realignment of an historic stream to the south of the site and further interventions to the portion of stream previously realigned. The methods used in the previously aligned stream design are no longer acceptable and runs contrary to current County Development Plan policy. Heavy engineering solutions are not favourably considered. In this regards the applicant is requested to reconsider this proposal to realign the stream and to consider the reduction in structures on the site, otherwise the following is required:

(a) The significant Hydraulic-Section of the proposed realigned stream as notated on submitted drawings, appears to denote water moving in a confined space under pressure. This needs to be clarified and redesigned. The Planning Authority requires more natural design solutions to slow the movement of water through the site and general area. These should be investigated. Additional information and details on this hydraulic section are required including method of construction and materials to be used. For example, engineered beds (as well as man-made and materials on the stream bed) will not be acceptable. The applicant should note that a 'drainage channel' design will not be acceptable.

(b) The applicant is requested to submit a revised drawing in plan and cross section of the stream to include details of the ecological enhancement value of the stream above its existing condition. The hydromorphology of the stream diversion should be varied to create ecological diversity and enhanced amenity, water quality improvement and attenuation. A landscaped area with SuDS features should be provided as part of a treatment train that provides multifunctional benefit.

(c) The applicant is requested to clarify that the 10m riparian strip does not include any built development and is taken from the top of the bank. The applicant is also requested to provide further details of the watercourse as existing and as proposed, providing an overlay and indicating culverts to be removed etc.

(d) Gabions, concrete beds/supporting walls and other heavy engineering solutions should be avoided in all revised proposals.

(e) Significant reduction in soil sealing and hard surfacing across the entire site should be achieved within the revised design.

(f) The impact on the widening of the watercourse to the north of the site should be submitted in a revised ecological report, which should clearly demonstrate significant mitigation measures to achieve ecological maturity within a short time.

(g) Details of swales should be submitted.

(h) Consent letters for works on lands for realignment of streams to be submitted, where land is outside the ownership of the applicant.

#### 4.3.1 Response

Our approach to the stream has been reassessed and we provide an updated Flood Risk Assessment to addresses the concerns set out above.

RFI Point:	Our Response:
<p>The Planning Authority has serious concerns regarding the realignment of an historic stream to the south of the site and further interventions to the portion of stream previously realigned. The methods used in the previously aligned stream design are no longer acceptable and runs contrary to current County Development Plan policy. Heavy engineering solutions are not favourably considered. In this regards the applicant is requested to reconsider this proposal to realign the stream and to consider the reduction in structures on the site, otherwise the following is required:</p>	<p>We have updated the flood risk assessment report to include the changes as requested, see below:</p>
<p>(a) The significant Hydraulic-Section of the proposed realigned stream as notated on submitted drawings,</p>	<p>The realigned watercourse has no culverted sections. The revised proposal is for the stream to meander</p>

appears to denote water moving in a confined space under pressure. This needs to be clarified and redesigned. The Planning Authority requires more natural design solutions to slow the movement of water through the site and general area. These should be investigated. Additional information and details on this hydraulic section are required including method of construction and materials to be used. For example, engineered beds (as well as man-made and materials on the stream bed) will not be acceptable. The applicant should note that a 'drainage channel' design will not be acceptable.

along and includes adjacent floodplains with the bankfull discharge. Bankfull discharge is the flow that fills the channel up to the top of banks prior to flooding.

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

Along the Southern, upstream section, floodplains are provided on both left and right banks. The main channel (bankfull discharge) meanders from the left to the right bank.

On the middle section downstream, a flood plan is provided on the left bank, until the stream joins the existing stream.

To provide erosion protection at the bends, a geotextile membrane is proposed. Instead of the gabions to provide root protection, a willow spiling like the below is proposed:



In the Northern, downstream section, the bed width will be increased to 3m. Bank protection with riprap or willow planting will be provided here also.

Revised routing drawings and cross-sections along the entire length, are shown on the revised master-planning drawings.

Additional ecological enhancement measures include:

- Establishing a 10m riparian zone to provide buffer between the watercourse and the new buildings,
- Fencing to prevent from grazing animals,
- Bank stabilization of high gradient reaches with planting of native trees such as willow,
- Tree root zone protection using willow spiling as opposed to gabions,

*(b) The applicant is requested to submit a revised drawing in plan and cross section of the stream to include details of the ecological enhancement value of the stream above its existing condition. The hydromorphology of the stream diversion should be varied to create ecological diversity and enhanced amenity, water quality improvement and attenuation. A landscaped area with SuDS features should be provided as part of a treatment train that provides multifunctional benefit.*

	<ul style="list-style-type: none"> <li>Grass berms, wild flowers and grasses will be planted along the stream as shown on the landscape architects sections.</li> </ul>
<p>(c) The applicant is requested to clarify that the 10m riparian strip does not include any built development and is taken from the top of the bank. The applicant is also requested to provide further details of the watercourse as existing and as proposed, providing an overlay and indicating culverts to be removed etc.</p>	<p>We confirm that the 10m riparian buffer zone does not include any built development.</p> <p>The accompanying drawings outline the proposed and existing watercourse.</p> <p>Note that there are no culverts on the proposed watercourse.</p>
<p>(d) Gabions, concrete beds/supporting walls and other heavy engineering solutions should be avoided in all revised proposals.</p>	<p>None of these heavy engineering solutions are included in the revised design.</p>
<p>(e) Significant reduction in soil sealing and hard surfacing across the entire site should be achieved within the revised design.</p>	<p>Included now.</p>
<p>(f) The impact on the widening of the watercourse to the north of the site should be submitted in a revised ecological report, which should clearly demonstrate significant mitigation measures to achieve ecological maturity within a short time.</p>	<p>A revised ecological report is submitted.</p>
<p>(g) Details of swales should be submitted.</p>	<p>Details of significant areas of swales around the site are included in the ARUP drawings and reports.</p>
<p>(h) Consent letters for works on lands for realignment of streams to be submitted, where land is outside the ownership of the applicant.</p>	<p>All lands to which the application relates is in the ownership of Moffash Ltd. and SDCC. Letters of consent from both were included with the application.</p>

## 4.4 Item 4: Cut and Fill

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

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

(ii) Provide details of any retaining structures.

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

### 4.4.1 Response

The Further Information Request raises concerns regarding the extent of proposed cut and fill.

Section 2.3.6 of the CDP states:

*"The design and siting of new residential development should respond appropriately to the natural topography of its site and improve upon and enhance natural characteristics. This should be based on a thorough site analysis and context review".*

*"To minimise ecological and visual impacts, residential development on sites with a steep or varying topography should utilise the natural slope of the landscape and avoid intrusive engineering features".*

Housing (H) Policy 16 Steep or Varying Topography Sites states:

*"It is the policy of the Council to ensure that development on lands with a steep and/or varying topography is designed and sited to minimise impacts on the natural slope of the site".*

This section quotes the following two policies:

*"H16 Objective 1: To ensure that all developments including buildings, streets and spaces are designed and arranged to respond to and complement the site's natural contours and natural drainage features in accordance with the recommendations of the Urban Design Manual – A Best Practice Guide (2009)".*

*"H16 Objective 2: To avoid the use of intrusive engineered solutions, such as cut and filled platforms, embankments or retaining walls on sites with steep or varying topography".*

We have assessed the potential cut and fill levels and associated volumes in terms of the expected underlying ground conditions along with proposed finished site and floor levels derived from multi-disciplinary decision making (e.g. the determination of the appropriate levels for the various buildings etc in terms of tying in with the existing infrastructure on and adjacent to the site including the existing Data Centres on site: DUB13/14 while with meeting the required drainage and utility requirements across the site and being cognisant of the surrounding topography). The cut and fill requirements have been minimised insofar as it possible along with determining locations for and the potential for reuse of material encountered across the site.

The revised cut and fill layout and cross sections are shown on drawings:

- IE-DUBZZ-ZZZZ-ZZ-ARP-DR-C-11001 P02 Proposed Earthworks Cut Plan
- IE-DUBZZ-ZZZZ-ZZ-ARP-DR-C-11002 P02 Potential Additional Excavation of Made Ground
- IE-DUBZZ-ZZZZ-ZZ-ARP-DR-C-11003 P02 Site Sections - Plan
- IE-DUBZZ-ZZZZ-ZZ-ARP-DR-C-11004 P02 Site Sections

With the drop in floor level of DUB16 and the inclusion of the pond, the cut volumes are greater than the original application but fill volumes have decreased. The changed volumes are as follows:

Cut / Excavation	Previous Masterplan (m3) 27.07.2021	Current Masterplan (m3) 03.02.2022	Difference (m3)	Comment
Made Ground	47500	47500	0	
Above Formation Level	29300	36350	7050	
Below Formation Level	18200	11150	-7050	
Overburden & Rock	36100	51100	15000	
<b>Total Cut / Excavation (m3)</b>	<b>83600</b>	<b>98600</b>	<b>15000</b>	Increase in overall volumes excavated.

Fill	Previous Masterplan (m3) 27.07.2021	Current Masterplan (m3) 03.02.2022	Difference (m3)	Comment
Replace Made Ground	18200	11150	-7050	
Roads & Services	21700	19000	-2700	
Building	25200	25600	400	
General	2600	3100	500	
<b>Total Fill (m3)</b>	<b>67700</b>	<b>58850</b>	<b>-8850</b>	Decrease in overall Fill volumes

**Figure 3: Cut and Fill Volumes**

In Landscape terms, obtrusive engineering features have been removed as shown in the ARUP submission.

Landscape topography has been designed with soil cut fill quantities to reduce soil disposed off site.

Mounding follows natural highs and lows of the site, while berms function to increase screening of proposed buildings. Landscape levels have been included on plans and cross sections updated to reflect proposed and existing levels on site.

- IEDUBZZ-STE1-E0-MAL-LA-L-91001 Rev A Landscape Masterplan
- IEDUBZZ-STE1-E0-MAL-SE-L-91020 Rev A Landscape Sections

## 4.5 Item 5: Office Space

*In order for the Planning Authority to assess the principle of the proposal, the applicant is requested to set out the level of office provision in sq.m and ensure that it is in compliance with County Development Policy and zoning objective. The applicant is also requested to clarify the proposed use for the office space.*

### 4.5.1 Response

The application site is predominantly zoned EE. The objective of this zoning is *“To provide for enterprise and employment related uses”*.

Offices between 100 sqm and 1,000 sqm are open for consideration. Offices over 1,000 sqm are open for consideration in accordance with Chapter 4 Economic Development and Tourism, policies for offices over 1,000 sqm.

Policy 4.2.0 notes the objective to strengthen existing employment centres and to strengthen the integration between employment, housing, transportation with a view to promoting compact urban areas and reducing car dependency.

Objective ET1 Objective 6 is as follows:

*“To direct people intensive enterprise and employment uses such as major office developments (>1,000sq.m gross floor area) into lands zoned Town Centre and Regeneration Zones in Tallaght, lands zoned Town Centre in Clondalkin and also to lands zoned District Centre and Enterprise and Employment, and Regeneration Zones subject to their location within 400 metres of a high capacity public transport node (Luas/Rail), quality bus service and/or within 800 metres walking distance of a Train or Luas station, the latter requiring demonstration of required walking distance or provision of a permeability project, in accordance with the Permeability Best Practice Guide (2013), to achieve same”.*

The application proposes a data centre use with ancillary office space. The office space proposed is to serve the data centres and is not stand alone office in any sense. It is also noted that all staff on site will be required to be there. The application does not propose office space that is not directly related to the data centre use.

As shown in **Figure 4-4**, the following office space is proposed:

- DUB15: Ground Floor 98m<sup>2</sup>
- DUB15: First Floor 205m<sup>2</sup> and 409m<sup>2</sup>
- **DUB15: Total 712m<sup>2</sup>**
- DUB16: Ground Floor 77m<sup>2</sup>
- DUB16: First Floor 207m<sup>2</sup> and 406m<sup>2</sup>
- **DUB16: Total 690m<sup>2</sup>**

As noted above, the proposed offices are ancillary to the overall use of the site as a data centre. Notwithstanding this, the office space proposed in each building is below 1,000 sqm and accords with the zoning objective.



Figure 4-4: Office Space

## 4.6 Item 6: SUDS

*The Planning Authority has serious concerns regarding the minimal natural solutions, SUDS and Green Infrastructure proposed and incorporated within the proposed development.*

*(a) The proposed attenuation on site (as outlined in red) includes:*

*DUB 14 – reinstated reinforced concrete attenuation tank*

*DUB 15*

*(i) Reinforced concrete tank No. 1 (586.1 cubic metres)*

*(ii) Reinforced concrete tank No. 2 (640.2 cubic metres)*

*DUB 16 Reinforced concrete tank (856.75 cubic metres)*

*Energy Centre reinforced concrete attenuation tank (396.3 cubic metres)*

*Each of these tanks are contrary to County Development policy and objectives. This is significant and unacceptable, especially when considering potential flooding to the north of the site and downstream. The applicant is requested to revise the proposals to incorporate natural solutions, to substantially increase SUDS and Green Infrastructure throughout the site and provide attenuation above ground in accordance with policy. Please note that above ground SuDS (Sustainable Drainage Systems) such as green area detention areas, or other such SuDS are required at this location and the applicant is requested to submit information of areas m2 and runoff coefficients in table format for each attenuation area.*

*(b) The applicant is requested to submit a report showing surface water attenuation calculations for the proposed new development. If the development will share an existing attenuation system then this should also show the surface water attenuation calculations for the existing and proposed development. The calculations shall include, SAAR value, Qbar, Soil factor, areas of buildings, roads, pathways permeable paving and green areas in m2 and their respective run off coefficients. Include the area of site in Hectares.*

*(c) The applicant is requested to submit a revised surface water drawing showing location of hydro-brakes and discharge rates of same. Include the surface water layout and attenuation systems.*

*(d) The applicant is requested to provide revised a surface water drawing and report and is requested to contact water services to discuss same.*

*(e) The applicant is requested to show further proposed SuDS features (to include details of same) for the development such as green roofs, living walls, further natural swales, channel rills, integrated tree pits, bioretention, above ground attenuation, detention basins, reed bed/wetland etc. and other such SuDS and show what attenuation capacity is provided by such SuDS. The SuDS features should be integrated into the landscape proposal and details provided on how they work.*

### 4.6.1 Response

As part of our Further Information response, a revised Surface Water Drainage Report has been prepared by ARUP. It, along with the associated drawings, addresses this RFI point in full. The table below identifies how each point is addressed:

RFI Point:	Our Response:
<p><i>The Planning Authority has serious concerns regarding the minimal natural solutions, SUDS and Green Infrastructure proposed and incorporated within the proposed development.</i></p>	<p>The proposed site layout has been revised in order to sufficiently accommodate natural drainage features, SuDS and Green Infrastructure. Among the proposed SuDS features incorporated into the revised surface water strategy are green roofs, roadside swales, permeable paving, proprietary surface water treatment system, full retention petrol interceptors, bypass petrol interceptor and attenuation pond. The Surface Water Drainage Report has been produced, detailing the new surface water strategy for the proposed development. Please refer to same for additional information.</p>



RFI Point:	Our Response:
	<p>As result of the site layout update, the following drawings have been revised/produced and issued to support the RFI responses:</p> <ul style="list-style-type: none"> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0101</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0102</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0103</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0104</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0105</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0106</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0107</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0108</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0109</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0110</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0111</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0116</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0123</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0124</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0134</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0135</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0136</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0137</li> </ul>
<p><i>(a) The proposed attenuation on site (as outlined in red) includes:</i></p> <p><i>DUB 14 – reinstated reinforced concrete attenuation tank</i></p> <p><i>DUB 15</i></p> <p><i>(i) Reinforced concrete tank No. 1 (586.1 cubic metres)</i></p> <p><i>(ii) Reinforced concrete tank No. 2 (640.2 cubic metres)</i></p> <p><i>DUB 16 Reinforced concrete tank (856.75 cubic metres)</i></p> <p><i>Energy Centre reinforced concrete attenuation tank (396.3 cubic metres)</i></p>	<p>All previously proposed attenuation tanks are no longer part of the proposed surface water attenuation strategy for the site. All the surface water run-off from the proposed development and buildings shall drain by gravity via the swales and pipes network towards the attenuation pond to the northeast of the site, comprised of Hydrobrake flow restricting device limiting the discharge to greenfield run-off rate. The attenuation pond is designed to store a volume with equivalent storage for a 1 in 100-year storm event plus 20% allowance for climate change, totalling 2,498.0 cubic metres of storage provided by the pond. Please refer to Surface Water Drainage Report for additional information regarding the overall strategy and updated drawings listed below:</p> <ul style="list-style-type: none"> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0104</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0105</li> </ul>

RFI Point:	Our Response:
<p><i>Each of these tanks are contrary to County Development policy and objectives. This is significant and unacceptable, especially when considering potential flooding to the north of the site and downstream. The applicant is requested to revise the proposals to incorporate natural solutions, to substantially increase SUDS and Green Infrastructure throughout the site and provide attenuation above ground in accordance with policy. Please note that above ground SuDS (Sustainable Drainage Systems) such as green area detention areas, or other such SuDS are required at this location and the applicant is requested to submit information of areas m2 and runoff coefficients in table format for each attenuation area.</i></p>	<p>As mentioned above, all previously proposed attenuation tanks are no longer part of the proposed surface water attenuation strategy for the site. All attenuation for the surface water run-off from the proposed development is being catered by the new above ground attenuation facility (pond). The surface water swales and pipes network will also support in attenuating run-off for the most critical storms up to and including the 1 in 100-year plus 20% climate change. Also, the new site layout including the removal of the previously proposed energy centre, substantially increased the site capacity in incorporate SuDS features, with the new layout comprising the following: green roofs, roadside swales, permeable paving, proprietary surface water treatment system, full retention petrol interceptors, bypass petrol interceptor and attenuation pond. Please refer to Surface Water Drainage Report for additional information regarding the overall strategy and updated drawings listed below:</p> <ul style="list-style-type: none"> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0101</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0104</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0105</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0116</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0137</li> </ul> <p>The Attenuation Pond Catchment Area Summary is included in page 3 of Surface Water Drainage Report and in drawing C-0105, which comprises graphic and table representation of catchment areas break-up.</p>
<p><i>(b) The applicant is requested to submit a report showing surface water attenuation calculations for the proposed new development. If the development will share an existing attenuation system then this should also show the surface water attenuation calculations for the existing and proposed development. The calculations shall include, SAAR value, Qbar, Soil factor, areas of buildings, roads, pathways permeable paving and green areas in m2 and their respective run off coefficients. Include the area of site in Hectares.</i></p>	<p>The Surface Water Attenuation Report has been produced and shows SAAR value, Qbar, Soil factor, areas of buildings, roads, pathways, permeable paving and green areas in square metres (sqm) and their respective run off coefficients. The overall surface water catchment area for the proposed development in hectares is 4.053ha. Refer to Appendix B for Storm Water Attenuation Calculation.</p> <p>The attenuation system for the site is stand alone and not shared.</p>
<p><i>(c) The applicant is requested to submit a revised surface water drawing showing location of hydrobrakes and discharge rates of same. Include the surface water layout and attenuation systems.</i></p>	<p>Revised surface water drawings showing the location of hydrobrakes and discharge rates are included. Refer to drawings listed below:</p> <ul style="list-style-type: none"> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0104</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0105</li> </ul> <p>The surface water layout and attenuation system are shown on drawings listed below:</p>

RFI Point:	Our Response:
	<ul style="list-style-type: none"> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0104</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0105</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0106</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0107</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0108</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0109</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0116</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0134</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0135</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0136</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0137</li> </ul>
<p><i>(d) The applicant is requested to provide revised a surface water drawing and report and is requested to contact water services to discuss same.</i></p>	<p>The Surface Water Attenuation Report has been produced and revised surface water drawings are listed below:</p> <ul style="list-style-type: none"> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0104</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0105</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0106</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0107</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0108</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0109</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0116</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0134</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0135</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0136</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0137</li> </ul> <p>We have contacted water services to discuss our approach.</p>
<p><i>(e) The applicant is requested to show further proposed SuDS features (to include details of same) for the development such as green roofs, living walls, further natural swales, channel rills, integrated tree pits, bioretention, above ground attenuation, detention basins, reed bed/wetland etc. and other such SuDS and show what attenuation capacity is provided by such SuDS. The SuDS features should be integrated into the landscape proposal and details provided on how they work.</i></p>	<p>As noted above, green roofs, green walls, natural swales, attenuation pond and other SuDS measures have been incorporated into the design. The landscaping proposals have been amended to integrate the SuDS measures into the proposals.</p>

It is considered that this item is addressed in full, and the measures proposed are as requested by the Council.

## 4.7 Item 7: Surface Water Attenuation

The applicant is requested to:

(a) submit a report showing surface water attenuation calculations for the proposed new development. If the development will share an existing attenuation system then this should also show the surface water attenuation calculations for the existing and proposed development. The calculations shall include, SAAR value, Qbar, Soil factor, areas of buildings, roads, pathways permeable paving and green areas in m2 and their respective run off coefficients. Include the area of site in Hectares.

(b) submit a revised surface water drawing showing location of hydro-brakes and discharge rates of same. Include the surface water layout and attenuation systems. Note concrete tanks are not generally acceptable and an arched type attenuation system shall be used. Consideration shall be given to above ground SuDS (Sustainable Drainage Systems) such as green area detention areas, or other such SuDS. The applicant is requested to submit information of areas m2 and runoff coefficients in table format for each attenuation area.

(c) provide revised a surface water drawing and report and is requested to contact water services to discuss same.

### 4.7.1 Response

Item 7 requests the same information as requested in Item 6b, c and d.

RFI Point.	Our Response:
<p>The applicant is requested to</p> <p>(a) submit a report showing surface water attenuation calculations for the proposed new development. If the development will share an existing attenuation system then this should also show the surface water attenuation calculations for the existing and proposed development. The calculations shall include, SAAR value, Qbar, Soil factor, areas of buildings, roads, pathways permeable paving and green areas in m2 and their respective run off coefficients. Include the area of site in Hectares.</p>	<p>The Surface Water Attenuation Report has been produced and shows SAAR value, Qbar, Soil factor, areas of buildings, roads, pathways, permeable paving and green areas in sqm and their respective run off coefficients. The overall surface water catchment area for the proposed development in hectares is 4.053ha. Refer to Appendix B for Storm Water Attenuation Calculation.</p> <p>The attenuation system for the site is stand alone and not shared.</p>
<p>(b) submit a revised surface water drawing showing location of hydro-brakes and discharge rates of same. Include the surface water layout and attenuation systems. Note concrete tanks are not generally acceptable and an arched type attenuation system shall be used. Consideration shall be given to above ground SuDS (Sustainable Drainage Systems) such as green area detention areas, or other such SuDS. The applicant is requested to submit information of areas m2 and runoff coefficients in table format for each attenuation area.</p>	<p>Revised surface water drawings showing the location of hydrobrakes and discharge rates are included. Refer to drawings listed below:</p> <ul style="list-style-type: none"> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0104</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0105</li> </ul> <p>The surface water layout and attenuation system are shown on drawings listed below:</p> <ul style="list-style-type: none"> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0104</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0105</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0106</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0107</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0108</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0109</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0116</li> <li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0135</li> </ul>

RFI Point:	Our Response:
<i>(c) provide revised a surface water drawing and report and is requested to contact water services to discuss same.</i>	<ul style="list-style-type: none"><li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0136</li><li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0137</li></ul> <p>The Surface Water Attenuation Report has been produced and revised surface water drawings are listed below:</p> <ul style="list-style-type: none"><li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0104</li><li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0105</li><li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0106</li><li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0107</li><li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0108</li><li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0109</li><li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0116</li><li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0135</li><li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0136</li><li>• IE-DUBZZ-STE1-EO-ARP-DR-C-0137</li></ul> <p>We have contacted water services to discuss our approach.</p>

For the reasons set out in the above table, it is considered that this item is addressed in full, and the measures proposed are as requested by the Council.

## 4.8 Item 8: Tree Survey and Landscaping

The applicant is requested to:

(a) extend the tree survey, arboricultural assessment and tree protection plan to incorporate all of the area within the redline boundary and immediately adjacent and to include hedgerows as well as trees. The location of tree protection fencing should be shown on the plans. A tree and hedgerow bond will be required.

(b) revise the landscape proposals to include:

(i) existing hedgerows, particularly along the eastern boundary with the golf course/Kilcarbery development. It is impossible to assess the impact of the proposed stream diversion on these trees and hedgerows. The stream diversion appears to be dug within the root protection zone of trees and hedgerows. We require an arborist method statement and an arborist to be appointed to oversee these works.

(ii) proposed swales on the landscape plan, sections and details. These are mentioned in the Engineering Report but not included in the landscape proposals. All proposed SuDS features to be included in the landscape proposals.

(iii) boundary screening: berms along the southern boundary to be shown on the landscape plans and sections. (Although the landscape design report mentioned berms, these are not shown in the landscape plans and cross sections). Mixed native hedgerow planting to be shown along the western boundary.

(iv) varied hydromorphology of the rerouted stream to create ecological diversity and amenity. Section 5.3 of the Ecological Impact Assessment sets out ecological enhancement measures to include 'a stepped bank and occasional boulders in the stream' to 'allow for varied flow and subsequently create a variety of habitats'. This should be reflected in the landscape plan and detailed landscape proposals.

### 4.8.1 Response

RFI Point:	Our Response:
<p>The applicant is requested to:</p> <p>(a) extend the tree survey, arboricultural assessment and tree protection plan to incorporate all of the area within the redline boundary and immediately adjacent and to include hedgerows as well as trees. The location of tree protection fencing should be shown on the plans. A tree and hedgerow bond will be required.</p>	<p>Tree and hedgerow survey incorporates the area within the redline boundary and the hedgerow outside off, directly adjacent to the southern redline boundary.</p>
<p>(b) revise the landscape proposals to include: (i) existing hedgerows, particularly along the eastern boundary with the golf course/Kilcarbery development. It is impossible to assess the impact of the proposed stream diversion on these trees and hedgerows. The stream diversion appears to be dug within the root protection zone of trees and hedgerows. We require an arborist method statement and an arborist to be appointed to oversee these works</p>	<p>Landscape masterplan now shows trees and hedgerows to be retained from arboricultural survey overlaid.</p> <p>The trees or hedgerows are not within the site boundary. The stream diversion infringes less than 20% on the trees RPA, all trees on this boundary are Ash and experiencing varying levels of Ash dieback.</p> <p>Significant woodland and hedgerow planting are proposed on-site, increasing tree cover and mitigating the risk of tree canopy loss due to the failing Ash trees.</p> <p>There is now protective fencing shown on the arboricultural impact plan along the entire line of hedgerow. The Arborists report has been updated to include tree protection fencing detail and method statement.</p>

RFI Point:	Our Response:
<p><i>(ii) proposed swales on the landscape plan, sections and details. These are mentioned in the Engineering Report but not included in the landscape proposals. All proposed SuDS features to be included in the landscape proposals</i></p>	<p>Please refer to landscape drawings submitted.</p>
<p><i>(iii) boundary screening: berms along the southern boundary to be shown on the landscape plans and sections. (Although the landscape design report mentioned berms, these are not shown in the landscape plans and cross sections). Mixed native hedgerow planting to be shown along the western boundary.</i></p>	<p>Plans and sections have been updated to show location of berms.</p> <p>Native hedgerow planting is included along the north, east, west and southern boundary.</p>
<p><i>(iv) varied hydromorphology of the rerouted stream to create ecological diversity and amenity. Section 5.3 of the Ecological Impact Assessment sets out ecological enhancement measures to include 'a stepped bank and occasional boulders in the stream' to 'allow for varied flow and subsequently create a variety of habitats'. This should be reflected in the landscape plan and detailed landscape proposals.</i></p>	<p>This is all now included on the landscape plans and details.</p>

For the reasons set out in the above table, it is considered that this point is fully addressed.

## 4.9 Item 9: Acoustics

*(a) Table 14 of the acoustic report predicts the cumulative noise level at 'NSR 1' will be 43dB. Whilst the report refers to this change in noise level as a 3dB increase, this is not a true representation of the increase to the existing environment, as highlighted below: Existing background noise level (LA90) at NSR1 = 34dB Night time (Table 9) Predicted cumulative noise level at NSR 1 = 43dB (Table 14) An increase of 9dB for the night time period equates to a doubling of noise and therefore is likely to impact on the residential receiver. This impact may be particularly noticeable during the night-time period when people are sleeping. This increase must be mitigated against in order to prevent potential noise complaints arising in the future. It should be noted that whilst the acoustic report advises that it will comply with the 'identified' criteria, it is the role of the Environmental Health Department to assess the potential impact of a development on the existing environment. The proposed application highlights a potential for noise to impact on a residential receiver. The noise levels predict a moderate change in the noise level at the nearest receiver during the night-time period.*

*(i) The applicant is requested to assess and re-evaluate all noise emitting equipment proposed on site in this application.*

*(ii) The applicant is requested to undertake necessary modifications to the proposed structures and operations on site in order to reduce the predicted noise levels at the nearby receivers to an acceptable level during both day and night time. The development must not give rise to noise levels that exceed the background level for evening and night time periods.*

*(a) The applicant is requested to demonstrate the development can meet the standards set out by South Dublin County Council as noted below: Noise due to the normal operation of the proposed development, expressed as Laeq over 15 minutes at the façade of a noise sensitive location, shall not exceed the daytime background level by more than 10 dB(A) and shall not exceed the background level for evening and night time. Clearly audible and impulsive tones at noise sensitive locations during evening and night shall be avoided irrespective of the noise level.*

*(b) Table 16 of the report indicates a significant impact is predicted to occur at NSR 1 during emergency testing however the report does not specify how frequent this scenario is likely to occur and its duration.*

*(i) The applicant is requested to clearly specify this in an amended report. If these events are likely to occur multiple times over the course of a month, mitigation measures are required to be put in place to reduce the noise emissions to a more appropriate level.*

*(ii) The amended acoustic report should include the exact times for which noise monitoring was undertaken during both daytime and night time.*

### 4.9.1 Response

The noise report for the Proposed Development has been updated following a redesign of the masterplan, omitting the energy centre and adding the storm water attenuation pond. The changes to the report include:

- Removing the gas powered energy centre and associated noise sources.
- Updating noise modelling for the Proposed Development following updated building height levels and updated mechanical plant noise outputs.
- Updating baseline noise levels in line with a proposed power plant that has submitted a planning application and will affect nearby noise sensitive receptors.
- Updating noise limits for the Proposed Development based on advice from the SDCC EHO.
- Updating cumulative noise analysis following advice from the SDCC EHO.



In response to the specific points raised above:

RFI Point	Our Response:
<p>(a) Table 14 of the acoustic report predicts the cumulative noise level at 'NSR 1' will be 43dB. Whilst the report refers to this change in noise level as a 3dB increase, this is not a true representation of the increase to the existing environment, as highlighted below: Existing background noise level (LA90) at NSR1 = 34dB Night time (Table 9) Predicted cumulative noise level at NSR 1 = 43dB (Table 14) An increase of 9dB for the night time period equates to a doubling of noise and therefore is likely to impact on the residential receiver. This impact may be particularly noticeable during the night-time period when people are sleeping. This increase must be mitigated against in order to prevent potential noise complaints arising in the future. It should be noted that whilst the acoustic report advises that it will comply with the 'identified' criteria, it is the role of the Environmental Health Department to assess the potential impact of a development on the existing environment. The proposed application highlights a potential for noise to impact on a residential receiver. The noise levels predict a moderate change in the noise level at the nearest receiver during the night-time period.</p>	<p>The Noise Impact Assessment has been revised omitting the gas generation plant and increasing the acoustic treatment of air handling and condenser cooling plant on the roof.</p> <p>The predicted noise level, (i.e. LA90) from the proposed development at the nearest sensitive receptor is now 34dB, exactly the same as the measured background noise levels at night time.</p> <p>No increase in background noise levels is expected arising from this development.</p>
<p>(i) The applicant is requested to assess and re-evaluate all noise emitting equipment proposed on site in this application.</p>	<p>This has been carried out and significant efforts have been undertaken to reduce the levels of noise generated by the proposed development.</p>
<p>(ii) The applicant is requested to undertake necessary modifications to the proposed structures and operations on site in order to reduce the predicted noise levels at the nearby receivers to an acceptable level during both day and night time. The development must not give rise to noise levels that exceed the background level for evening and night time periods.</p>	<p>Significant efforts have been made to reduce the noise generated by the proposals. In the face of very low background noise levels the design team have successfully reduced noise to a level below background levels.</p>
<p>(a) The applicant is requested to demonstrate the development can meet the standards set out by South Dublin County Council as noted below: Noise due to the normal operation of the proposed development, expressed as Laeq over 15 minutes at the façade of a noise sensitive location, shall not exceed the daytime background level by more than 10 dB(A) and shall not exceed the background level for evening and night time. Clearly audible and impulsive tones at noise sensitive locations during evening and night shall be avoided irrespective of the noise level.</p>	<p>As noted above and below, this threshold has been achieved.</p>
<p>(b) Table 16 of the report indicates a significant impact is predicted to occur at NSR 1 during emergency testing however the report does not specify how frequent this scenario is likely to occur and its duration.</p>	<p>Noise levels and wording of emergency scenario updated in Noise Impact Assessment. It is noted that the emergency scenario only occurs when there is a power cut and this is not expected to happen more than once every few years at most.</p>

RFI Point:	Our Response:
<i>(i) The applicant is requested to clearly specify this in an amended report. If these events are likely to occur multiple times over the course of a month, mitigation measures are required to be put in place to reduce the noise emissions to a more appropriate level.</i>	An amended Noise Impact Assessment is submitted as part of the Further Information Response.
<i>(ii) The amended acoustic report should include the exact times for which noise monitoring was undertaken during both daytime and night time.</i>	This information is included in the revised Noise Impact Assessment.

## **4.10 Item 10: Impact on Casement Aerodrome**

*Due to the proximity to Casement Aerodrome, Military Air Traffic Services requests an Aviation Impact Assessment on all potential emissions. The assessment should cover the possible effects of exhaust plumes or any other associated impact on flight operations at Casement Aerodrome.*

### **4.10.1 Response**

Firstly, the Air Quality and Climate Impact Assessment Report has been updated by ARUP to reflect the changes to the scheme – notably the removal of on site gas generation for the development. The gas generators were the primary source of emissions from the original proposal. The remaining emissions are from the standby diesel generators.

ARUP then carried out additional modelling and calculations to assess the impact of the remaining emissions on flight operations at Casement Aerodrome. The results are included in the Aviation Assessment Report submitted as part of this pack of Further Information. The report concludes that the levels of exhaust heat and oxygen exhaust contents are essentially indistinguishable from ambient conditions and are not expected to have an impact on flight operations.

## **4.11 Item 11: IW Feasibility Letter and Sewage Plant Decommissioning**

The applicant is requested to submit:

- (a) a confirmation of feasibility letter from Irish Water of proposed development (for both water and foul).
- (b) a report to show how existing sewage treatment plant on site will be dealt with or decommissioned.

### **4.11.1 Response**

The Irish Water Connection Letter (dated 7 October 2021) is enclosed as part of this Further Information Response (**Appendix A**).

We enclose Removal of Derelict Wastewater Treatment Plant, prepared by ARUP. This report demonstrates how the site will be dealt with. Further details are provided in response to Item 12 below.

## 4.12 Item 12: Wastewater Treatment Disposal

The Planning Authority notes the proposal to remove the existing wastewater treatment from the site. The Planning Authority requests additional information on the works that this will entail and how the materials will be disposed of.

### 4.12.1 Response

A report entitled Removal of Derelict Wastewater Treatment Plant has been prepared by ARUP. This report demonstrates how the existing wastewater treatment plant will be removed.

The Report provides background information on the existing derelict wastewater treatment plant (WwTP), a summary of the environmental and site investigations undertaken, ARUP's analysis of the data and the proposed removal of the wastewater treatment plant.

Historic mapping and aerial photographs indicate that the WwTP was constructed sometime between 1913 and the 1930s, likely at the same time as the nearby Casement Aerodrome was developed. The site appears disused by 1995 but has remained in place since. The WwTP covers an area of approximately 75m x 40m and is surrounded by mesh fencing. It contains overgrown vegetation/shrubs, two partially buried disused circular open-top sedimentation tanks both approximately 13m in diameter, a buried aeration tank approximately 12m x 4m, a buried clear water tank approximately 7m x 3m and a stone hut approximately 2.5m x 4.5m in area. The sedimentation tanks were constructed of brick, with two metal agitators still in place. The sedimentation tanks have been infilled with clinker. It is presumed that the sedimentation tanks were connected through an underground system of pipelines from the aeration tank. For a proper operation, each of the sedimentation tanks had a discharge pipeline from one side of the tank to the clear water tank and one sludge pipeline from the centre of the sedimentation tank to a different facility on site (possible a platform).

The site is surrounded by chain link fencing and concrete posts. Enabling works across the proposed development will include for removal of the WwTP and excavation of the associated buried structures and foundations. The area comprising of the sewage treatment works will be excavated to an average depth of approximately 2m BGL. These soils will be replaced with suitable engineering fill to the proposed earthworks formation level to allow for the construction of the Dub16 building, the proposed new water course at this location and associated site security fencing.

Ground investigation and laboratory testing in and around the WwTP site show that the soils there are described as Made Ground which will require disposal to licenced landfills. The excavation will be monitored for any evidence of further contamination and validation sampling and testing will be carried out. All demolished and removed material from the structures present on site will be delivered for reuse and recycling where feasible and where such facilities exist.

Where material is reused, it will be undertaken in accordance with Article 27 of the European Union (Waste Directive) Regulations, 2011 to 2020. Where possible natural soils will be retained on site for reuse and the excavation will be backfilled to the required levels with suitable materials, leaving the site in a suitable environmental condition for the proposed development.

## 5 CONCLUSION

RPS is instructed by Digital Netherlands VII B.V. (Netherlands) to prepare this Further Information Response with respect to a planning application for a data centre development at Profile Park, Nangor Road, Clondalkin, Dublin 22 (Reg. Ref: SD21A/0217).

The design team has put significant work into amending the scheme to address the Further Information Request. A list of the main changes is submitted at Section 2 of this Report.

The revised proposals were discussed with SDCC at a pre-application meeting on 3 December 2021 and the changes were positively received.

Our response to each of the 16 Further Information Points is included in this Report and the accompanying drawings and reports. It is considered that each point is satisfactorily addressed.

The proposed development for two data centre buildings remains consistent with the policies of the NPF, RSES and the current County Development Plan. The Government's continued support of data centres is welcomed and we ask that the Council are mindful of the role they play in creating employment and attracting investment to Ireland. The Government Statement on The Role of Data Centres in Ireland's Enterprise Strategy (2018) concludes:

*"Ireland continues to enhance the business environment to ensure its attractiveness as business needs evolve. The Government reaffirms support for the development of enabling technology and infrastructure to meet enterprise, economic and social policy goals.*

*We acknowledge the need for social acceptance of large data centre developments. The planning process provides the necessary framework for ensuring that all necessary standards are met and that comprehensive statutory and non-statutory consultation is built into the process.*

*The Government endorses, supports and promotes the appropriate and timely delivery of data centres across the regions. It reaffirms that it is Government policy and in the national interest, that these developments are delivered in the most efficient and timely way possible, based on the best available knowledge and informed engagement on their impacts.*

*The policy responses summarised above will help ensure that Ireland continues to achieve its national enterprise policy objectives, mindful of the strategic issues that come with developments in the area, while ensuring that our sustainability goals are also reached".*

Our improved IT infrastructure has assisted recently in facilitating home working and home schooling over the past two years. Such infrastructure shapes our lives immeasurably each day and are vital to our way of life.

The concerns relating to energy use is noted. The Council's concerns regarding on-site energy generation proposed in the original scheme has been considered and this element has been removed from the proposed development. On site renewables are proposed but the main source of energy will be from the national grid. Energy on the national grid is becoming more and more sustainable through the development of more renewable technology in Ireland. This source of energy is on target to become the most sustainable source of energy by the end of the decade.

It is considered that the proposed development accords with current national, regional, and local policies. Notably, it can help deliver:

- The objectives of the Government Statement on The Role of Data Centres in Ireland's Enterprise Strategy as set out above.
- National Strategic Outcome 6 of the NPF which relates to the creation of "A Strong Economy Supported Economy, Enterprise, Innovation and Skills". This strategic outcome is underpinned by a range of objectives including: "Promotion of Ireland as a sustainable destination for ICT infrastructures such as data centres and economic activities".
- National Strategic Outcome 5 which states: "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 facilities. 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 objective of EMRA RSES Regional Policy Objective 8.25 which states that Local Authorities shall, inter alia: *"Support the national objective to promote Ireland as a sustainable international destination for ICT infrastructures such as data storage facilities and associated economic activities at appropriate locations"*.
- SDCC CDP Policy ET3 Objective 2 which is: *"To prioritise high tech manufacturing, research and development and associated uses in the established Business and Technology Cluster to the west of the County (Grange Castle and Citywest areas) to maximise the value of higher order infrastructure and services that are required to support large scale strategic investment"*.
- The objectives of other SDCC CDP Policies including Section 4.2.0 Strategic Policy for Employment, Economic and Tourism (ET) Policy 1 Overarching, Economic and Tourism (ET) Policy 3 Overarching, ET3 Objective 5, ET3 Objective 6, and ET3 Objective 7.
- The land use zoning objectives as set out in the SDCC CDP.
- Objective 2 of the SDCC Corporate Plan 2020 / 2024 which is to: *"support and increase foreign direct and local investment in the county"*.
- The key themes of the South Dublin Digital Strategy 2020-2023, notably, digital skills, digital economy, digital services and digital infrastructure.

It is respectfully requested that planning permission is granted for this sustainable FDI development.

## Appendix A Irish Water Connection Letter



Arup / Cid dos Santos Junior

50 Ringsend Road  
Dublin 4  
D04T6X0

Uisce Éireann  
Bosca OP 448  
Oifig Sheachadta na  
Cathrach Theas  
Cathair Chorcaí

7 October 2021

Irish Water  
PO Box 448,  
South City  
Delivery Office  
Cork City

**Re: CDS21004551 pre-connection enquiry - Subject to contract | Contract denied**

[www.water.ie](http://www.water.ie)

**Connection for Business Connection of 6 units at Profile Business Park, Grangecastle, Dublin**

Dear Sir/Madam,

Irish Water has reviewed your pre-connection enquiry in relation to a Water & Wastewater connection at Profile Business Park, Grangecastle, Dublin (the **Premises**). Based upon the details you have provided with your pre-connection enquiry and on our desk top analysis of the capacity currently available in the Irish Water network(s) as assessed by Irish Water, we wish to advise you that your proposed connection to the Irish Water network(s) can be facilitated at this moment in time.

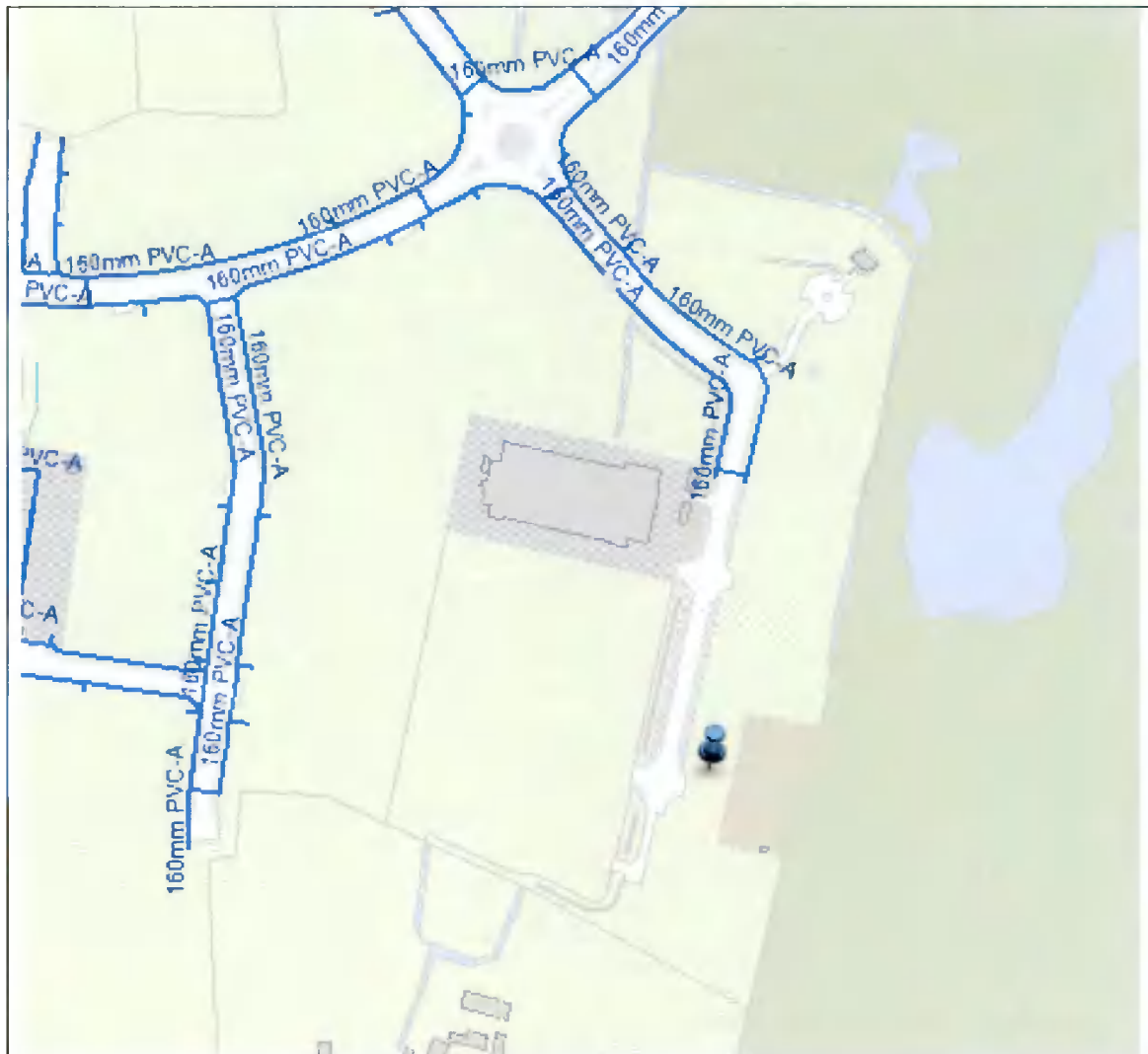
SERVICE	<b>OUTCOME OF PRE-CONNECTION ENQUIRY</b> <b><u>THIS IS NOT A CONNECTION OFFER. YOU MUST APPLY FOR A CONNECTION(S) TO THE IRISH WATER NETWORK(S) IF YOU WISH TO PROCEED.</u></b>
Water Connection	Feasible without infrastructure upgrade by Irish Water
Wastewater Connection	Feasible without infrastructure upgrade by Irish Water
<b>SITE SPECIFIC COMMENTS</b>	
Water Connection	<p>The connection should be from the existing 160mm uPVC main via 150mm ID connection pipe with a bulk meter installed on the line.</p> <p>On-site water storage will be required, for the average day peak week demand rate of the commercial section, for 24-hour period with 12- hour re-fill time.</p> <p>An additional storage for the Data Centre is required.</p>
Wastewater Connection	<p>The proposed wastewater connection for this development connects to the Irish Water network via private infrastructure. Please be advised that at connection application stage you have to provide written confirmation from the owner of the infrastructure that you have received legal permission to connect to and that the infrastructure has capacity to cater for the additional load from the Development.</p> <p>A new connection to the existing network is feasible without Irish Water network upgrade on the condition that the existing (privately owned) Grange</p>

Castle Pumping Station does not increase maximum output flow rate of Phase 2 PS set up (55l/s).

However, should your Development trigger the Phase 3 Pumping Station set up (270 l/s), it will be necessary to carry out further detailed study and investigations to confirm the available capacity and to determine the full extent of any upgrades which may be required to be completed to Irish Water Infrastructure, prior to agreeing to the proposed connection.

The design and construction of the Water & Wastewater pipes and related infrastructure to be installed in this development shall comply with the Irish Water Connections and Developer Services Standard Details and Codes of Practice that are available on the Irish Water website. Irish Water reserves the right to supplement these requirements with Codes of Practice and these will be issued with the connection agreement.

The map included below outlines the current Irish Water infrastructure adjacent to your site:



Reproduced from the Ordnance Survey of Ireland by Permission of the Government. License No. 3-3-34

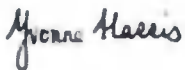
Whilst every care has been taken in its compilation Irish Water gives this information as to the position of its underground network as a general guide only on the strict understanding that it is based on the best available information provided by each Local Authority in Ireland to Irish Water. Irish Water can assume no responsibility for and give no guarantees, undertakings or warranties concerning the accuracy, completeness or up to date nature of the information provided and does not accept any liability whatsoever arising from any errors or omissions. This information should not be relied upon in the event of excavations or any other works being carried out in the vicinity of the Irish Water underground network. The onus is on the parties carrying out excavations or any other works to ensure the exact location of the Irish Water underground network is identified prior to excavations or any other works being carried out. Service connection pipes are not generally shown but their presence should be anticipated.

**General Notes:**

- 1) The initial assessment referred to above is carried out taking into account water demand and wastewater discharge volumes and infrastructure details on the date of the assessment. **The availability of capacity may change at any date after this assessment.**
- 2) This feedback does not constitute a contract in whole or in part to provide a connection to any Irish Water infrastructure. All feasibility assessments are subject to the constraints of the Irish Water Capital Investment Plan.
- 3) The feedback provided is subject to a Connection Agreement/contract being signed at a later date.
- 4) A Connection Agreement will be required to commencing the connection works associated with the enquiry this can be applied for at <https://www.water.ie/connections/get-connected/>
- 5) A Connection Agreement cannot be issued until all statutory approvals are successfully in place.
- 6) Irish Water Connection Policy/ Charges can be found at <https://www.water.ie/connections/information/connection-charges/>
- 7) Please note the Confirmation of Feasibility does not extend to your fire flow requirements.
- 8) Irish Water is not responsible for the management or disposal of storm water or ground waters. You are advised to contact the relevant Local Authority to discuss the management or disposal of proposed storm water or ground water discharges
- 9) To access Irish Water Maps email [datarequests@water.ie](mailto:datarequests@water.ie)
- 10) All works to the Irish Water infrastructure, including works in the Public Space, shall have to be carried out by Irish Water.

If you have any further questions, please contact Marina Byrne from the design team via email [mzbyrne@water.ie](mailto:mzbyrne@water.ie) For further information, visit [www.water.ie/connections](http://www.water.ie/connections).

Yours sincerely,



**Yvonne Harris**

**Head of Customer Operations**

