An Rannóg Talamhúsáide, Pleanála agus Iompair Land Use, Planning & Transportation Department

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PLANNING & DEVELOPMENT ACT, 2000 (as amended) AND PLANNING REGULATIONS THEREUNDER

Decision Order Number: 1294	Date of Decision: 28-Sep-2021
Register Reference: SD21A/0217	Registration Date: 04-Aug-2021

Applicant: Digital Netherlands VIII B. V.

Development: 10 year permission for development consisting of removal of an existing unused

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

Natura Impact Statement will be submitted to the planning authority with the

application.

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

Application Type: Permission

Dear Sir /Madam,

With reference to your planning application, received on 04-Aug-2021 in connection with the above, I wish to inform you that before the application can be considered under Section 33 of the Planning & Development Act 2000, six copies of the following ADDITIONAL INFORMATION must be submitted.

1. 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.
- 2. A significant portion of the site (running along the southern boundary) is zoned 'RU' 'To protect and improve rural amenity and to provide for the development of agriculture'. The applicant includes this rural zoned land within the parameters of the site, and it is proposed to provide a hydrant pump room and two tanks and landscaping on this section of the land alongside the re-diversion/realignment 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.
- 3. The Planning Authority has serious concerns regarding the realignment of an historic stream to the south of the site and further interventions to the portion of stream previously realigned. The methods used in the previously aligned stream design are no longer acceptable and runs contrary to current County Development Plan policy. Heavy engineering solutions are not favourably considered. In this regards the applicant is requested to reconsider this proposal to realign the stream and to consider the reduction in structures on the site, otherwise the following is required:
 - (a) The significant Hydraulic-Section of the proposed realigned stream as notated on submitted drawings, appears to denote water moving in a confined space under pressure. This needs to be clarified and redesigned. The Planning Authority requires more natural design solutions to slow the movement of water through the site and general area. These should be investigated. Additional information and details on this hydraulic section are required including method of construction and materials to be used. For example, engineered beds (as well as man-made and materials on the stream bed) will not be acceptable. The applicant should note that a 'drainage channel' design will not be

acceptable.

- (b) The applicant is requested to submit a revised drawing in plan and cross section of the stream to include details of the ecological enhancement value of the stream above its existing condition. The hydromorphology of the stream diversion should be varied to create ecological diversity and enhanced amenity, water quality improvement and attenuation. A landscaped area with SuDS features should be provided as part of a treatment train that provides multifunctional benefit.
- (c) The applicant is requested to clarify that the 10m riparian strip does not include any built development and is taken from the top of the bank. The applicant is also requested to provide further details of the watercourse as existing and as proposed, providing an overlay and indicating culverts to be removed etc.
- (d) Gabions, concrete beds/supporting walls and other heavy engineering solutions should be avoided in all revised proposals.
- (e) Significant reduction in soil sealing and hard surfacing across the entire site should be achieved within the revised design.
- (f) The impact on the widening of the watercourse to the north of the site should be submitted in a revised ecological report, which should clearly demonstrate significant mitigation measures to achieve ecological maturity within a short time.
- (g) Details of swales should be submitted.
- (h) Consent letters for works on lands for realignment of streams to be submitted, where land is outside the ownership of the applicant.
- 4. (a) It is noted from the engineering plans that a retaining wall is proposed to the west of the site. It is noted that details of cut and fill have been provided on drawings IE-DUBZZ-ZZZZ-ZZ-ARP-DR-C-1100(1, 2,3, 4) The Planning Authority has concerns regarding the design of the proposed development and the extent of the proposed cut-and-fill. The applicant is requested to provide additional information as follows:
 - (i) Demonstrate how the siting and location of the proposed development responds appropriately to the natural topography of the site and to the historic fabric in the immediate vicinity of the site (Protected Structures and recorded monuments) and would improve upon and enhance natural characteristics. This should be based on a thorough site analysis and context review. The applicant is advised that in order to minimise ecological and visual impacts, development on sites with a steep or varying topography should utilise the natural slope of the landscape and avoid intrusive engineering features as per Section 2.3.6 of the 2016 2022 Development Plan.
 - (ii) Provide details of any retaining structures.
 - (b) In addition to the above the Planning Authority recognises the varying contours of the site and adjoining lands. These do not appear to have been considered and/or incorporated within the overall design. This is not acceptable. Cross sections (Sheet No. IEDUBZZ-STE1-E0-MAL-SE-L-91020) showing the landscaped area on the Rural zoned lands to the south do not appear to be accurate as they do not reflect the existing contours at this location as labelled on drawings submitted with this application. Furthermore, it appears that the realigned watercourse will be cut through a substantial levels to ensure that the water runs downhills, this will result in substantial trenches being constructed requiring heavy engineered supports, which are not conducive to achieving ecological rich conduits. This is contrary to policy and objectives in Chapters 7 and 8 of the County Development Plan. The applicant is requested to address these issues.

- 5. In order for the Planning Authority to assess the principle of the proposal, the applicant is requested to set out the level of office provision in sq.m and ensure that it is in compliance with County Development Policy and zoning objective. The applicant is also requested to clarify the proposed use for the office space.
- 6. The Planning Authority has serious concerns regarding the minimal natural solutions, SUDS and Green Infrastructure proposed and incorporated within the proposed development.
 - (a) The proposed attenuation on site (as outlined in red) includes:

DUB 14 – reinstated reinforced concrete attenuation tank

DUB 15

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

DUB 16 Reinforced concrete tank (856.75 cubic metres)

Energy Centre reinforced concrete attenuation tank (396.3 cubic metres)

Each of these tanks are contrary to County Development policy and objectives. This is significant and unacceptable, especially when considering potential flooding to the north of the site and downstream. The applicant is requested to revise the proposals to incorporate natural solutions, to substantially increase SUDS and Green Infrastructure throughout the site and provide attenuation above ground in accordance with policy. Please note that above ground SuDS (Sustainable Drainage Systems) such as green area detention areas, or other such SuDS are required at this location and the applicant is 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 hydrobrakes and discharge rates of same. Include the surface water layout and attenuation systems.
- (d) The applicant is requested to provide revised a surface water drawing and report and is requested to contact water services to discuss same.
- (e) The applicant is requested to show further proposed SuDS features (to include details of same) for the development such as green roofs, living walls, further natural swales, channel rills, integrated tree pits, bioretention, above ground attenuation, detention basins, reed bed/wetland etc. and other such SuDS and show what attenuation capacity is provided by such SuDS. The SuDS features should be integrated into the landscape proposal and details provided on how they work.
- 7. The applicant is requested to:
 - (a) submit a report showing surface water attenuation calculations for the proposed new development. If the development will share an existing attenuation system then this should also show the surface water attenuation calculations for the existing and proposed development. The calculations shall include, SAAR value, Qbar, Soil factor, areas of buildings, roads, pathways permeable paving and green areas in m2 and their respective run off coefficients. Include the area of site in Hectares.

 (b) submit a revised surface water drawing showing location of hydro-brakes and discharge rates of

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

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

8. The applicant is requested to:

- (a) extend the tree survey, arboricultural assessment and tree protection plan to incorporate all of the area within the redline boundary and immediately adjacent and to include hedgerows as well as trees. The location of tree protection fencing should be shown on the plans. A tree and hedgerow bond will be required.
- (b) revise the landscape proposals to include:
- (i) existing hedgerows, particularly along the eastern boundary with the golf course/Kilcarbery development. It is impossible to assess the impact of the proposed stream diversion on these trees and hedgerows. The stream diversion appears to be dug within the root protection zone of trees and hedgerows. We require an arborist method statement and an arborist to be appointed to oversee these works.
- (ii) proposed swales on the landscape plan, sections and details. These are mentioned in the Engineering Report but not included in the landscape proposals. All proposed SuDS features to be included in the landscape proposals.
- (iii) boundary screening: berms along the southern boundary to be shown on the landscape plans and sections. (Although the landscape design report mentioned berms, these are not shown in the landscape plans and cross sections). Mixed native hedgerow planting to be shown along the western boundary.
- (iv) varied hydromorphology of the rerouted stream to create ecological diversity and amenity. Section 5.3 of the Ecological Impact Assessment sets out ecological enhancement measures to include 'a stepped bank and occasional boulders in the stream' to 'allow for varied flow and subsequently create a variety of habitats'. This should be reflected in the landscape plan and detailed landscape proposals.
- 9. (a) Table 14 of the acoustic report predicts the cumulative noise level at 'NSR 1' will be 43dB. Whilst the report refers to this change in noise level as a 3dB increase, this is not a true representation of the increase to the existing environment, as highlighted below:
 Existing background noise level (LA90) at NSR1 = 34dB Night time (Table 9) Predicted cumulative noise level at NSR 1 = 43dB (Table 14) An increase of 9dB for the night time period equates to a doubling of noise and therefore is likely to impact on the residential receiver. This impact may be particularly noticeable during the night-time period when people are sleeping. This increase must be mitigated against in order to prevent potential noise complaints arising in the future.
 It should be noted that whilst the acoustic report advises that it will comply with the 'identified' criteria, it is the role of the Environmental Health Department to assess the potential impact of a development on the existing environment. The proposed application highlights a potential for noise to impact on a residential receiver. The noise levels predict a moderate change in the noise level at the nearest receiver during the night-time period.

- (i) The applicant is requested to assess and re-evaluate all noise emitting equipment proposed on site in this application.
- (ii) The applicant is requested to undertake necessary modifications to the proposed structures and operations on site in order to reduce the predicted noise levels at the nearby receivers to an acceptable level during both day and night time.

The development must not give rise to noise levels that exceed the background level for evening and night time periods.

(a) The applicant is requested to demonstrate the development can meet the standards set out by South Dublin County Council as noted below:

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

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

NOTE: The applicant should note that any submission made in repsonse to the above will be examined and MAY be deemed to be SIGNIFICANT ADDITIONAL INFORMATION by the Planning Authority. In this event the applicant(s) will be subsequently notified and requested to publish a notice in an approved newspaper and erect or fix a site notice on the land or structure to which the further information relates and to submit copies of the both the newspaper and site notices to the Planning Authority in accordance with Article 35 (1) (a) and (b) of the Planning and Development Regulations 2001 (as amended).

Note: The applicant must submit the Further Information within **6 months** of the **date of decision**. If the information is not received within this period the planning authority shall declare the application to be withdrawn.

<u>Please ensure that your reply to this Request for Additional Information is accompanied by a covering letter marked "ADDITIONAL INFORMATION" and that the Planning Register Reference Number given above is quoted on the covering letter.</u>

Signed on behalf of South Dublin County Council

Register Reference: SD21A/0217

Yours faithfully,

Date: 29-Sep-2021

for Senior Planner