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

Telephone: 01 4149000 Fax: 01 4149104 Email: planning.dept@sdublincoco.ie

Anthony Marston, Marston Planning Consultancy 23, Grange Park Foxrock Dublin 18 D18 T3Y4

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

| Decision Order Number: 1390 | Date of Decision: 26-Oct-2021 |
|--------------------------------|---------------------------------------|
| Register Reference: SD21A/0241 | Registration Date: 31-Aug-2021 |

Applicant: Vantage Data Centers Dub 11 Ltd.

Development:

Demolition of the abandoned single storey dwelling and associated outbuilding (206sqm); construction of 2 two storey data centers with plant at roof level of each facility and associated ancillary development which will have a gross floor area of 40,589sq.m consisting of 1 two storey data center (Building 11) which will be located to the south of the site and will have a gross floor area of 24,667sq.m. including 22 emergency generators located at ground floor level within a compound to the western side of the data center with associated flues that will be 22.3m in height; 1 two storey data center (Building 12) which will be located to the north of the site, and to the immediate north of Building 11 and will have a gross floor area of 12,915sq.m including 11 emergency generators located at ground floor level within a compound to the western side of the data center with associated flues that will be 22.3m in height; each of the two data centers will include data storage rooms, associated electrical and mechanical plant rooms, loading bays, maintenance and storage spaces, office administration areas, and plant including PV panels at roof level as well as a separate house generator for each facility which will provide emergency power to the admin and ancillary spaces; each generator will include a diesel tank and there will be a refuelling area to serve the proposed emergency generators; the overall height of each data center apart from the flues and plant at roof level is c. 14.23m above the finished floor level; the overall height of each data center apart from the flues and plant at roof level is c. 14.23m above the finished floor level; single storey step-up substation (38sq.m) as well as 2 single storey switch substations (121sq.m); AGI Gas Regulator compound that include 3 single storey buildings

(134sq.m); construction of a gas powered generation plant in the form of a 13m high single storey building with a gross floor area of 2,714sq.m that will contain 10 gas generators with associated flues that will be 25m in height, and grouped in pairs and threes; the Gas Plant will be located to the west of Building 11; ancillary site development works, that will include reorientation of the Baldonnel Stream, biodiversity management initiatives, attenuation ponds and the installation and connection to the underground foul and storm water drainage network, and installation of utility ducts and cables, that will include the drilling and laying of ducts and cables under the internal road network within Profile Park; other ancillary site development works will include hard and soft landscaping, lighting, fencing, signage, services road, entrance gates, sprinkler tanks and pump room; a temporary gas powered generation plant within a fenced yard containing 21 generator units in containers, each with associated flues (each 25m high), 12 transformers and 10 containers of controls to be located to the west of, and associated with the first phase of Building 11, and will be required for a period of up to 2 years if connection to the national grid is delayed; this temporary plant will not be built if the connection to the national grid is in place prior to the operation of Building 11 at this site that includes an abandoned single storey residential property on the New Nangor Road (R134), Dublin 22; and on land within the townlands of Ballybane and Kilbride within Profile Park, Clondalkin, Dublin 22 on an overall site of 8.7 hectares.

Location: In the townlands of Ballybane & Kilbride within Profile Park, Clondalkin,

Dublin 22

Application Type: Permission

Dear Sir /Madam.

With reference to your planning application, received on 31-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 temporary and permanent power plants 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 (both permanent and temporary) 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. Details of consultation with Gas Networks Ireland should also be set out.
- (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 DUB11.1, DUB11.2 and DUB12
- (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, as well as details of any consultation undertaken with these bodies
- (c) The applicant is also requested to provide details of the following:
- (i) Information on whether the existing site is serviced in terms of utilities and if not the proposals for undertaking the development required to facilitate servicing.
- (ii) Details of the connection to the surrounding area and national gas grid
- (iii) Clear proposals for decommissioning of any temporary plant
- (iv) Details of the energy which each phase will be supplied from.
- 2. A primary element of the proposed development, which it is stated to be required to accommodate the full extent of the data centre structures on site, is the realignment of the existing Baldonnel Stream, which currently travels northwards along the eastern boundary before meandering westwards close to the northern boundary. The stream is an established feature, with existing trees and vegetation along its banks, particularly along the eastern boundary. It is noted that under Reg. Ref. SD20A/0124, that it was proposed to realign the stream and that under an AI request the applicant was required to redesign a development more suitable for the site where the alignment of the stream was retained; this was successfully achieved and the development for warehousing was subsequently granted with the stream intact.
 - (A) In light of this, the applicant is requested to reconsider the proposed development on the site, as follows:
 - (i) constructing all required structures on the site in a more southerly/south-westerly direction, by

relying more on the internal road network within Profile Park (Falcon Avenue). The planting scheme and landscaped area proposed at the southern end of the site could be relocated at the northern end alongside the existing stream. The applicant is requested to submit a revised layout plan indicating this.

(ii) If (i) cannot be achieved, the applicant should consider the omission of one of the datacentre structures.

The applicant should note that the proposal to realign the stream to accommodate the datacentre development may be considered to be an overdevelopment of the site and would not be looked upon favourably by the Planning Authority.

- (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 a 10m riparian strip (measured from the top of each of the banks) has been provided and does not include any built development and is taken from the top of the bank.
- (D) If the Applicant, after considering Item A above, still considers proposing the realignment of the the watercourse, the applicant is requested to provide:
- (i) further details of the watercourse as existing and as proposed, providing an overlay and indicating culverts to be removed etc. Gabions, concrete beds/supporting walls and other heavy engineering solutions should be avoided in all revised proposals.
- (ii) details that the proposal complies with the requirements of Inland Fisheries
- (iii) details confirming a Section 50 licence can be obtained from OPW.
- (E) Significant reduction in soil sealing and hard surfacing across the entire site should be achieved within the revised design.
- 3. (a) The proposed size, bulk, scale and mass of the development and the land coverage the buildings are significant and may be deemed to be an overdevelopment of the site. 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. It is apparent that there is a significant level of hardstanding across the site and 'greener' solutions may be more appropriate in some instances. The applicant is requested to reconsider the overall layout.
 - (b) The Planning Authority notes from a site inspection that the site is set below the existing internal road network and this change in levels is not apparent in the section that was submitted. It is also noted there will be cut and fill on this site and the applicant has provided a plan indicating how the levels will change across the site. In addition to this information, the planning authority require existing and proposed cross sections. It is apparent that there are retaining structures proposed and details of these should be provided on plans and sections provided.
 - (b) The site is highly prominent, with significant blank facades.
 - (i) The data centre buildings are significantly taller than the landscaping. The Planning Authority has significant concerns regarding the visual impact of this element of the proposal, given the prominence of the data centres along New Nangor Road and also within Profile Park, on Falcon Avenue. 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 applicant is also requested to consider:

- Reorientating buildings to increase the visual prominence of active facades;
- Redesigning buildings to reduce the monolithic appearance from New Nangor Road and Falcon Avenue;
- Provision of further green walls.
- (ii) The permanent power plant would be over 118m long and would have a significant presence on the western boundary of the site. It is noted that the western elevation is blank and monotonous, with flues. Whilst significantly shorter than the west elevation, the south elevation also appears blank. The Planning Authority request that the applicant consider adding detail to these elevations, to reduce the monolithic appearance.
- (iii) There are concerns regarding the design of the temporary power plant. It is noted that the proposal would be temporary, however, there are still concerns regarding the presence of significant blank facades. The floorplans provided indicate a single access gate to the north and south and it is noted that these details are not reflected on the elevations. The Planning Authority request that the applicant consider adding detail to these elevations, to reduce the monolithic appearance.
- (c) The applicant is requested to provide:
- (i) further details on the southern elevation of building 11. Details of temporary and final elevations should be provided, as it is proposed to construct this building under a number of phases.
- (ii) further details on the northern elevation for the permanent power plant. Details of temporary and final elevations should be provided, as it is proposed to construct this building under a number of phases.
- (d) The applicant is requested to provide full details of all flues, in terms of location, scale and proposed materials. Details should be clearly set out in plans and elevations. Any temporary flues and the timeframe for removal should also be highlighted. It is noted that no roof plan has been provided for the temporary power plant.
- (e) It is noted that there are a number of inconsistencies between the description of development and the submitted plans and elevations:
- (i) The permanent power plant, according to submitted plans provides the following: Height Ridge 11.55m and eaves 9.5m, chiller deck at 12.5m. It is noted that the description of development sets out that this building is 13m high.
- (ii) The temporary power plant, according to the submitted plans, provides the following: Flue height 14.4m. It is noted that the description of development sets out that the flue are 25m high.
- (f) The diesel-powered electrical generators located to the immediate west are housed on site in a screened equipment yard located adjacent to the building and separated by an internal road. The applicant states the usage is only to supply power in the event of a utility outage. The Planning authority would request further details and cross-sectional views on the stated 'buried fuel tanks shall only be used where sub-base tanks are prohibited.
- (g) there are a number of inconsistencies within the photomontages. The applicant is requested to provide the following:
- Location of view 1
- Proposed views for view 4 and 8
- Details of locations for 7a and 7b

It is noted that the proposed development would take place in a number of phases. The applicant is requested to provide photomontages which reflect the different phases. These should include any

interim landscaping. It is noted that earlier phases may be in place for a number of years prior to the construction of later phases. All boundary treatment and landscaping should be included in the photomontages.

- 4. (1) It is apparent that there are a number of phases to the development. The Planning Authority request that a single phasing plan is provided, indicating all buildings and that these buildings are clearly labelled. A corresponding schedule should be provided stating which plans should be referred to for each building. A schedule providing details of ancillary uses in each of the data centres should also be provided, setting out the total sq.m for each ancillary use.
 - (2) The Planning Authority notes that a temporary power plant is proposed to be constructed in Phase 1A, alongside Building 11.1. It is then proposed to demolish this temporary plant. The southern portion of the permanent power plant would be constructed in Phase 1B. Phase 2A would involve the construction of Building 11.2. The final phase would involve construction of Building 12 and the northern portion of the permanent power plant. Notwithstanding the timeframes that have been submitted by the applicant to date, the Planning Authority requires a clear, full and unequivocal proposal, with timeframes, for assessment as part of this proposal. The applicant is requested to clearly state what development is sought and within what timeframe.
- 5. (a) Tree and Hedgerows Protection

The applicant is requested to submit a Tree Protection Plan and Arboricultural Method Statement, all in accordance with, BS 5837: 2012 Trees in relation to design, demolition and construction — recommendations. The method statement shall include no dig or other solutions to retain the existing trees within hedge number 5 along the western boundary.

(b) Landscape Proposals

The applicant is requested to:

- (i) clarify the discrepancy between trees to be retained as shown on the Landscape Masterplan versus those shown on the Tree Removal and Retention Plan.
- (ii) provide a method statement to include no dig or other solutions to retain the existing trees within hedge number 5 along the western boundary.
- (iii) Provide details of invasive species within native hedgerows referred to in page 1 of the landscape report and proposed necessary measures to remove/manage them.
- (iv) Explain how the landscaped areas that are fenced off can be accessed by machinery for maintenance?
- (v) Investigate opportunities to increase natural SuDs on the site.
- (vi) Show how the design of the attenuation basin maximizes amenity and biodiversity.
- (vii) All SuDS proposals to be shown on the landscape proposals with detail on how they work.
- (c) Sustainable Drainage Proposals

At present, the proposal is contrary to Policy G5 -Sustainable Urban Drainage Systems and Objective G5 1 and G5 2 in the County Development Plan. The applicant is requested to provide:

- (i) Further natural above ground SUDS features, be incorporated into the proposed drainage system. The SUDS should be an integrated multi-disciplinary approach which locally addresses water quality, water quantity, and provides for amenity and biodiversity enhancement which meets the objectives of South Dublin County Council Development Plan 2016-2022. The use of underground tanks should be avoided.
- (ii) A revised design and layout of the proposed development that proposes a comprehensive SuDS strategy that fully delivers a 'treatment train' maximizing the use of natural SuDS. The proposals shall

incorporate as appropriate:

- (i) green roofs, grass areas, SuDs tree pits in the car park/adjacent to hardstanding, channel rills, swales, rain gardens and other such SuDS and show what attenuation capacity is provided by such SuDS.
- (ii) Maximise the amenity and biodiversity of the attenuation basin to provide a more natural habitat feature in the landscape.
- 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 includes underground attenuation. These are contrary to County Development policy and objectives. This is significant and unacceptable, especially when considering potential flooding. 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. If SuDS atteutation is insufficient, then additional attenuation shall be provided by an arched type attenuation system. The applicant is requested to submit a report and drawing to show what capacity in m3 revised attenuation provided.
 - (b) It is unclear how much surface water attenuation is provided because a drawing submitted DUB11.1-DR-UG-G128-V1-WS3-PIN shows Attenuation Pond 1 with a capacity of 1,368m3 but report submitted shows capacity of pond is 2,100 m3 in attenuation pond. Depending on what attenuation is provide the surface water attenuation is undersized by 57% for a 1 in 30 year storm event and undersized by 86% for a 1 in 100 year storm event.

The applicant is requested to submit site specific rainfall data from Met Eireann.

The applicant is requested to submit a report and drawing showing increased surface water attenuation by 57% for 1 in 30 year and increase by 86% for a 1 in 30 year as required above. Prior to submission of report, the applicant is requested to contact water services to discuss revised surface water attenuation calculations.

- (c) The applicant is requested to clarify in a report and drawing what the expected depth of water in diverted stream will be at location North West of site at shallowest point of stream, if it is still proposed to divert the stream. Prior to submission of revised report and drawing of diverted stream, the applicant shall contact water
- services to discuss a revised stone design and width.
- 7. The applicant is requested to engage with the Property Management Branch of the Department of Defence in terms of the construction and operation phases of development, to assess any potential impact on flight procedures and communication, navigation and surveillance equipment present at Casement Aerodrome, a letter of consent shall be obtained from the Department of Defence.
- 8. 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 pre-connection enquiry to Irish Water for the proposed development (for both water and foul).

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.

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.

Signed on behalf of South Dublin County Council

Register Reference: SD21A/0241

Date: 27-Oct-2021

Yours faithfully,

for Senior Planner