

# Water Services Planning Report

**Register Reference No.:** *SD21A/0042*

**Development:**

Construction of two single storey data centres with associated office and service areas; and three gas powered generation plant buildings with an overall gross floor area of 24,624sq.m that will comprise of the following: Demolition of abandoned single storey dwelling, remaining agricultural shed and derelict former farm building; Construction of 2 single storey data centres (12,797sq.m), both with associated plant at roof level, with 24 standby diesel generators with associated flues (each 25m high) that will be attached to a single storey goods receiving area/store and a single storey office area (2,404sq.m) located to the west of the data centres as well as associated water tower and sprinkler tank and other services; Amendments to the internal access road and omission of access to loading bay permitted under SDCC planning Ref.

SD19A/0042/ABP Ref. PL06S.305948 that include the relocation of permitted, and new, internal security gates; and new internal access roads to serve the proposed development that will provide access to 39 new car parking spaces (including 4 electric and 2 disabled spaces) and sheltered bicycle parking to serve the new data centres; The development will also include the phased development of 3 two storey gas powered generation plants (9,286sq.m) within three individual buildings and ancillary development to provide power to facilitate the development of the overall site to be located within the south-west part of the overall site. Gas plant 1 (3,045sq.m) will contain 20 generator units (18+2) with associated flues (each 25m high) will facilitate, once operational the decommissioning of the temporary Gas Powered Generation Plant within its open compound as granted under SDCC Planning Ref.

SD19A/0042/ABP Ref. PL06S.305948. Gas plant 2 (3,045sq.m) will contain 20 generator units (18+2) with associated flues (each 25m high). and, Gas plant 3 (3,196sq.m) will contain 21 generator units (19+2) with associated flues (each 25m high). These plants will be built to provide power to each data centre, if and, when required. The gas plants will be required as back up power generation once the permitted power connection via the permitted substation is achieved; New attenuation pond to the north of the site; Green walls are proposed on the southern elevation of each power plant, as well as to the northern elevation of the generator compound of the data centres, and enclosing the water tower/pump room compound, and a new hedgerow is proposed linking east and west of the site; Proposed

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above ground gas installation compound to contain single storey kiosk (93sq.m) and boiler room (44sq.m). The development will also include ancillary site works, connections to existing infrastructural services as well as fencing and signage. The development will include minor modifications to the permitted landscaping to the west of the site as granted under SDCC planning Ref. SD19A/0042/ABP Ref. PL06S.305948. The site will remain enclosed by landscaping to all boundaries. The development will be accessed off the R120 via the permitted access granted under SDCC planning Ref. SD19A/0042/ABP Ref. PL06S.305948. An EPA-Industrial Emissions (IE) licence will be applied for to facilitate the operation of the gas powered generation plant. An Environment Impact Assessment Report (EIAR) has been submitted with this application. All on a site of 22.1hectares.

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

Application Type: Permissision

**Report Date:** 29<sup>th</sup> March 2021

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## **Surface Water Report:**

## **Further Information Required:**

- 1.1 There is no drawing submitted which shows the proposed surface water drainage layout for the proposed data hall area to the west/north west of the site. The applicant is required to submit a drawing showing existing and proposed surface water drainage layouts for the proposed data hall area of the site. The drawing shall include the location of all Aj's, manholes, pipe size, material type and direction of flow.
- 1.2 The applicant is required to submit a drawing showing cross section views of the proposed attenuation pond. The drawing must show the water level in the attenuation pond for flood events in relation to proposed finished floor levels. There should be a minimum freeboard of 500mm between attenuation pond water level and proposed finished floor levels of buildings on site.
- 1.3 Submitted drawing number PIN-05-ZZ-DR-C-0202 specifies a maximum discharge rate of 24L/S and 9.6L/S from proposed attenuation pond. The applicant is required to clarify on a drawing what the proposed maximum surface water discharge rate from the site is.
- 1.4 The applicant shall include further SuDS (Sustainable urban Drainage Systems) features for the proposed development such as but not limited to the following to convey, treat and attenuate water aswell as providing bio diversity and amenity value:

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- Swales
- Filter Drains
- Further Permeable/ Porous paved areas
- Tree pits
- Rain Gardens
- Rainwater Harvesting for use within data halls where possible.

The applicant shall clarify what attenuation volumes can be provided in all proposed SuDS features and shall provide cross sectional details of all SuDS features.

## **Note to Planner:**

Casement Aerodrome is located in close proximity to the site to the south. The applicant must consult with the Irish Aviation Authority in relation to the proposed attenuation pond to ensure that the proposed pond will not have any adverse impacts on Casement Aerodromes flight operations regarding bird attraction and/or other issues. This should be carried out irrespective of whether the pond is designed to hold attenuated water on a permanent or occasional basis.

- The Developer shall ensure that there is complete separation of the foul and surface water drainage for the proposed development.
  - All works for this development shall comply with the requirements of the Greater Dublin Regional Code of Practice for Drainage Works.
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## **Flood Risk Report:**

## **Further Information Required**

**2.1** There potentially is a series of drainage ditches / watercourses traversing the site. The applicant is required to submit a drawing showing all existing watercourses/drainage ditches which traverse the site and which run around the perimeter of the site. The applicant shall clarify what these drainage systems currently serve ,what condition they are in and how they will be modified as part of this development.

## **Water Report:**

**Referred to IW**

## **Foul Drainage Report:**

**Referred to IW**

Signed:	_____	Date:	_____
	Ronan Toft AE		
Endorsed:	_____	Date:	_____
	Brian Harkin SEE		