Water Services Planning Report

Register Reference No.: SD21A/0241 AI

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,

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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

Report Date: 20th April 2022

Surface Water Report:

No Objection Subject To:

1.1 It is unclear how much surface water attenuation is required on site because there is no individual Catchment area shown for each attenuation pond. Prior to commencement of development submit a revised drawing showing what each catchment area is draining to each attenuation pond. Show the size in m² of each surface type in each separate catchment area.

- 1.2 Prior to commencement of development submit a revised drawing showing additional SuDS such as swales, filter drains, tree pits. Examine how concrete paving on footpaths can be replaced with permeable paving. Examine how pipes and oil interceptors can be replaced by SuDS features.
 Prior to submission of revised drawing and report contact water services to discuss revised surface water drawing and attenuation calculations.
- 1.3 Prior to commencement of development 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. Prior to submission of revised report and drawing of diverted stream contact water services prior to submission of drawing and report to discuss a revised stone design and width of stream north west of site.
- **1.4** Any revised stream route shall comply with requirements of Inland Fisheries.
- **1.5** Prior to commencement of development obtain a Section 50 from OPW of proposed rerouted stream

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Flood Risk

No Objection

- **2.1** All floor levels shall be a minimum of 500mm above the highest know flood level for the site
- The Developer shall ensure that there is complete separation of the foul and surface water drainage for the proposed development.
- All new precast surface water manholes shall have a minimum thickness surround of 150mm Concrete Class B.
- All works for this development shall comply with the requirements of the Greater Dublin Regional Code of Practice for Drainage Works.

Water Report: Foul Drainage Report:			Referred to IW Referred to IW	
				Signed:
Endorsed:	Brian Harkin SEE.	Date:		