

Water Services Planning Report

Register Reference No.: SD21A/0167 AI

Development: Construction of a gas fired power plant with an electrical output of up to 125MW with associated balance of plant, equipment and buildings including; an Engine Hall building with a height of 18.9m, comprising 6 gas engines and ancillary infrastructure; an Electrical Annex Building with a height of 18.7m; a Workshop building with a height of 5.1m; a Tank Farm building with a height of 5.68m; a Security hut with a height of 3.27m; an Exhaust Stack with a height of 31.8m; a Gas AGI including a kiosk with height of 3.3m; Radiator Coolers with a height of 8.46m; 2 electrical transformers with a height of 4.98m; Tanks including 2 x Diesel Oil Storage Tanks (volume of 2500m³ combined); SCR Urea Tank (26m³); Lube Oil Storage Tank (26m³); Lube Oil Maintenance Tank (26m³); Pilot Oil Tank (26m³); Fire Water Storage Tank (1000m³); Effluent Collecting Tank (26m³); Underground Surface Water Attenuation Tank (490m³); 2 new access onto the existing private road network with Profile Park; 12 parking spaces, footpaths, landscaping; fencing and all other associated site development plant and equipment and other works including surface water and foul wastewater drainage.

Location: Profile Park, Baldonnel, Dublin 22

Report Date : 1st April 2022

Surface Water Report: Clarification of Further Information Required:

- 1.1** The applicant's use of 1000mm for SAAR (Standard Average Annual Rainfall) value is too high. A SAAR value of 780mm shall be used in greenfield run off rate calculations which results in a maximum discharge rate from the suite of 3.8L/S. The applicant is required to submit a revised surface water drainage layout drawing and report with revised calculations showing revised attenuation calculations based on a maximum greenfield discharge rate from the site of 3.8L/S.
 - 1.2** The applicant shall include green roofs on the site where feasible to reduce the amount of hardstanding area. Green roofs may be included on industrial buildings and/or ancillary buildings such as security huts, office admin buildings etc. The applicant shall submit a revised surface water drainage layout drawing showing the maximisation of green roofs across the site and include a section detail of the proposed green roof system.
 - 1.3** All fuel storage proposals on site shall comply with the Greater Dublin Regional Code of Practice for Drainage Works Section 17. All process water and any effluent from the development shall not discharge to the surface water drainage network.
 - 1.4** All proposed car parking areas shall be constructed using a porous material such as grasscrete, permeable paving, porous asphalt etc.
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Flood Risk Report: Clarification of Further Information Required:

2.1 The applicant is required to provide a report showing hydraulic model results for flood areas post development works. The report shall demonstrate the operation of the proposed flood compensation area for the 1 in 1000 year plus climate change scenario. The report shall take in consideration residual risks associated with the proposed flood mitigation measures on site.

2.2 It is unclear how surface water run off will discharge from the proposed flood compensation area to the Baldonnell stream. The applicant is required to submit a longitudinal section view drawing of the proposed flood compensation area which demonstrates how surface water will enter and exit the basin. The drawing shall include details of levels along the basin and at the discharge point of the stream to demonstrate this.

- 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.
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Water Report:

Referred to IW

Foul Drainage Report:

Referred to IW

Signed: _____
Ronan Toft AE

Date: _____

Endorsed: _____
Brian Harkin SEE

Date: _____