MOTT MACDONALD

Huntstown Temporary Emergency Power Plant

Screening for Appropriate Assessment

September 2022

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1 Introduction

1.1 Background

Huntstown Power Company Limited propose to develop a 50MW temporary emergency power generation facility on a c. 4.2ha site within the existing Huntstown Power Station, in the townlands of Huntstown and Johnstown, Finglas, Dublin 11.

The site of the proposed temporary emergency power generating plant is an area on the eastern side of the existing power station site that is currently used as a container storage and car parking area.

The proposed development aims to temporarily reinforce the transmission network and facilitate the provision of temporary emergency power generation support infrastructure and capacity. It is a critical temporary emergency power generation and transmission asset, required as a direct response to addressing and mitigating national risk to power disruption, supply and demand. It forms part of a programme of actions being progressed by the Commission for Regulation of Utilities (CRU), together with the energy industry and other stakeholders to provide additional stability and resilience to the Irish energy industry in response to the national security of energy supply emergency.

EirGrid is responsible, under Regulation 28(3) and 28(4) of the European Communities (Internal Market in Electricity) Regulations 2005 (S.I. No. 60 of 2005) (the “2005 Regulations”), to report on the monitoring of security of supply matters and identify where it is of the view that security of supply is threatened or is likely to be threatened.

In accordance with their statutory obligations, EirGrid has thus advised the Commission for the Regulation of Utilities (the “CRU”), of security of supply concerns and identified a number of recommendations as measures necessary to cover peak demand and to deal with shortfalls. In determining the proposed recommendations, EirGrid considered the adequacy of generation capacity, the availability of the transmission network and whether there is sufficient ancillary or system services to meet demand for electricity. On that basis, the CRU published a programme of actions to address security of supply matters in Information Paper CRU 21/115.2.

Furthermore, on 7 June 2022, the CRU, with the consent of the Minister for the Environment, Climate and Communications (the “Minister”), directed EirGrid under Regulation 28(10) of the 2005 Regulations, in its capacity as the Transmission System Operator (“TSO”), to seek to procure, using the most expeditious means available, approximately 450MW of additional generation capacity from the winter of 2023-24 up to the winter of 2025-26, for the purposes of the provision of system services in response to the national security of energy supply emergency.

It is expected that the temporary emergency generation will be called upon to generate when the system is in Alert or an Emergency state as defined in the Grid Code (https://www.eirgridgroup.com/site-files/library/EirGrid/GridCodeVersion9.pdf)

The temporary emergency generation facility will include thirty-eight 1.43MWe nominal capacity gas generator sets (Janbacher J420 units) to provide a nominal electrical output of 50MW (electrical output).

The emergency generating plant will be installed for up to five years from summer 2023, to late 2027.

This screening assessment investigates, in view of best scientific knowledge, whether the proposed development at the Huntstown Power Station, individually or in combination with other plans and projects, would be likely to have a significant effect on European sites in view of their site conservation objectives. This report considers the likelihood of significant effects on European sites from the construction and operation of the plant. The decommissioning of the proposed development is also considered as the life span of the project is envisaged to be no more than 5 years.

Further details regarding the project are provided in Section 3.

1.2 Requirement for Appropriate Assessment

Article 6 of the Habitats Directive (92/43/EEC) requires that where a plan or project is likely to have a significant effect on a European site, while not directly connected with or necessary to the nature conservation management of the site, it will be subject to 'Appropriate Assessment' to identify any implications for the European site in view of the site's Conservation Objectives. Specifically, Article 6(3) of the Habitats Directive states:

"*Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public*".

Section 177U of the Planning Acts transposes Article 6 of the Habitats Directive into Irish law. It requires that before consent for a project is given, a screening for Appropriate Assessment of a project must be carried out to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that project, individually or in combination with other plans or projects is likely to have a significant effect on the European site.

The Project is not associated with the 'management' of a European Site having regard to Article 6 of the Habitats Directive. Therefore, the Project is not directly connected with or necessary to the management of any European Site and must undergo screening for Appropriate Assessment under Section 177U of the Planning Acts.

This report has been prepared by Mott MacDonald on behalf of Huntstown Power Company Limited to inform the screening determination required under Section 177U of the Planning Acts.

This report has been prepared in accordance with the following European Commission Guidance:

- EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC Commission Notice C (2018) 7621.
- EC (2021) Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC[1].
- DEHLG (2009) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities (Revised 2010).
- Office of the Planning Regulator (March 2021). Appropriate Assessment Screening for Development Management. OPR Practice Note PN01.

[1] https://ec.europa.eu/environment/nature/natura2000/management/pdf/methodological-guidance_2021-10/EN.pdf

- Updated Commission guidance document on the strict protection of species of Community interest under the Habitats Directive (October 2021)[2].

This report has similarly been prepared with regard to relevant rulings by the Court of Justice of the European Union (CJEU) and the Irish Courts.

[2] https://ec.europa.eu/environment/nature/conservation/species/ guidance/index_en.htm

2 Methodology

2.1 Desktop Assessment

A comprehensive desk study has been carried out in order to obtain information relevant to the completion of this report. This desk study, completed in both February and July 2022, relied on the following sources of information:

- Conservation Status Assessment Reports (CSARs), Backing Documents and Maps prepared in accordance with Article 17 of the Habitats Directive;
- Site Synopsis and Conservation Objective Reports available from NPWS;
- Published and unpublished NPWS reports on protected habitats and species including Irish Wildlife Manual reports, Species Action Plans, and Conservation Management Plans; and
- Existing relevant mapping and databases e.g. waterbody status, species and habitat distribution etc. (sourced from the Environmental Protection Agency - http://gis.epa.ie/, the National Biodiversity Data Centre - http://maps.biodiversityireland.ie and the National Parks and Wildlife Services - http://www.npws.ie/mapsanddata/, and the Forestry Service (Department of Agriculture, Food and the Marine).

A complete list of all publications consulted in the completion of this report is presented in Section 6: References.

2.2 Site Visit

A site visit was conducted on 21st January, and the 16th of March 2022 by MM Ecologists to inform potential for the site to be used by mobile Qualifying Interests/ Special Conservation Interest (birds) associated with European sites including birds and mammals.

The area was also searched for evidence of invasive plant species listed in Part 1 and non-native animal species listed in Part 2 of the Third Schedule of S.I No. 477 of 2011, European Communities (Birds and Natural Habitats) Regulations 2011.

The presence of drains was noted in order to identify pathways for surface water pollutants to connect into the wider environment.

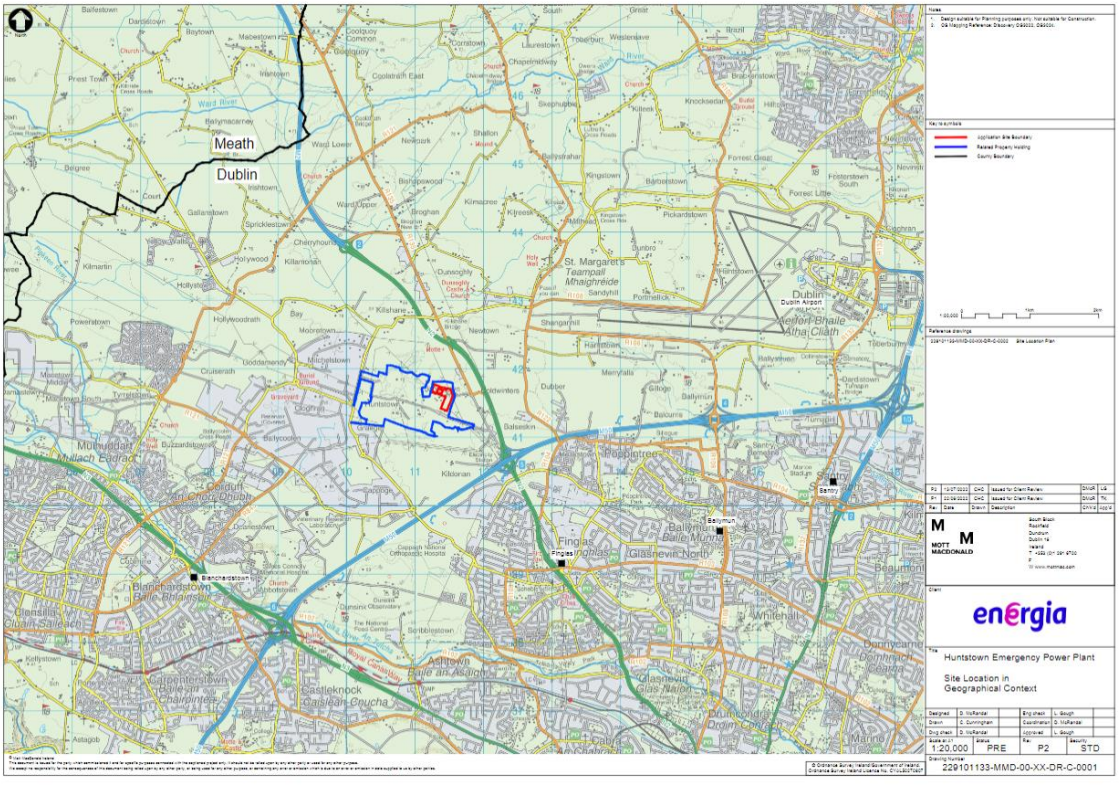
3 Project Description

3.1 Overview of Proposed Development and Local Site Characteristics

Huntstown Power Company Limited propose to develop a temporary emergency power generation facility on a c. 4.2ha site within the existing Huntstown Power Station, in the townlands of Huntstown and Johnstown, Finglas, Dublin 11. The proposed site location is shown in Figure 3.1.

The surrounding area is generally and chiefly characterised by industrial and commercial uses, including heavy industry (power generation and transmission), commercial warehousing (including a Home and Garden Centre) and logistics, quarrying, agricultural and limited residential uses. The proposed development is located within the existing Huntstown Power Station complex which has been operational since circa 2000. This land use is well-established and continues to be deemed appropriate for classes of development such as the proposed development by Fingal County Council through its “Heavy Industry” land use zoning (Fingal Development Plan 2017-2023, as varied).

Figure 3.1: Location of Proposed Development



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3.2 Description of the Development

The proposed temporary emergency power generation development consists of the following principal elements:

- 38No transportable, pre-assembled containerised Janbacher J420 1.43MWe generator units. Each generator unit is typically housed in 2No stacked ISO shipping containers and in this case a top attenuation unit is added, with each generator set comprising/ incorporating the following:
- an engine container (approx. 6.05m L x 2.4m W x 2.6m H);
- an engine cooling module container (approx. 6.05m L x 2.4m W x 2.6m H), stacked on top of each engine container;
- an attenuation unit with an exhaust silencer (approx. 6.05m L x 2.4m W x 2.6m H) that sits on top of the cooling module container; and
- one exhaust gas flue exit point with a diameter of approx. 0.4m (at approx. 8m height after the attenuator unit).
- 2No to 4No exhaust flues each approx. 0.4m in diameter will be extended and grouped/bundled together and supported by a total of 12No 25m (above ground level) high chimney structures.
- A 1250kVA mobile diesel generator for limited occasional black-starting the temporary emergency generation plant (approx. 6.05m L x 2.4m W x 2.6m H).
- 10No 6.3MVA Transformers, (each approx. 6.05m L x 2.4m W x 2.6m H).
- A ZS1 Switchgear (approx. 6.05m L x 2.4m W x 2.6m H).
- A 70MVA Transformer 11/110kV (approx. 7.3m L x 3.1m W x 3.9m H).
- A 110kV Air-Insulated Switchgear (AIS) System (approx. 31.6m L x 6.6m W x 7m H).
- 2No Series Reactors (each approx. 6.5m L x 5m W x 5.6m H).
- A Neutral Earthing Transformer (approx. 2.3m L x 1.9m W x 2m H).
- High Pressure Gas Pressure Reduction Station (approx. 10m L x 6m W x 2.5m H).
- 10No Medium Pressure Gas Trains (each approx. 4m L x 1m W x 1.4m H).
- New High Pressure Gas Lines (28 and 42 barg) to the existing Huntstown Power Station Gas Networks Ireland (GNI) site, extension to the existing AGI boiler house (approx.4.0m L x 3.8m W x 3.5m H), and an increase in the capacity of the existing 28 barg gas supply system.
- Above-ground pipe and cable-bridge(s) between the gas pressure reduction stations and the generator units and 110kV transformer.
- 20ft Control room container to house the Supervisory Control and Data Acquisition (SCADA) panel.
- Control containers for the Air-Insulated Switchgear equipment.
- Acoustic wall (approx. 102m L x 0.4m W x 7m H) to the immediate north and east of the 38No proposed generator units and 5m containers wall on part of the eastern side (approx. 55m L x 2.4m W x 5.2m H).
- 2.6m high chainmail security fencing topped with barbed wire around the perimeter of the site.
- 2No new lightning masts, approx.16m H.
- Replacement/ relocated tarmacadam laydown area for existing displaced equipment and car/ vehicle parking and replacement storage buildings/ offices/ workshops.
- New staff welfare facilities comprising a kitchen/diner container, a toilet block container and an offices container (each approx. 6.05m L x 2.4m W x 2.6m H).

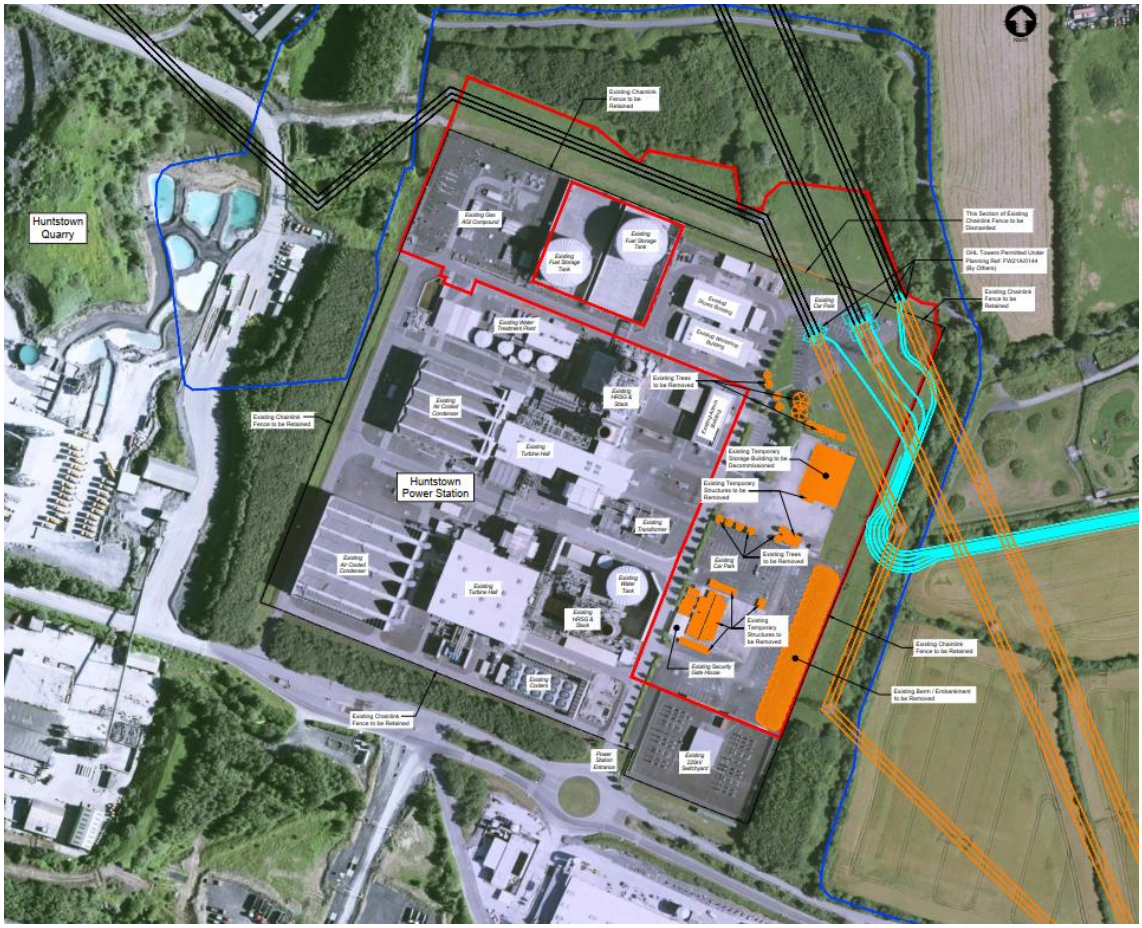
- New foul drainage.
- Extension to existing site stormwater drainage, including attenuation and hydrocarbon interceptor serving the proposed hardstanding areas.
- 3No workshop/stock containers (each approx. 6.05m L x 2.4m W x 2.6m H).
- Bunded chemical and oil storage areas.
- Lighting to facilitate the proposed development.
- Demolition of existing stores building (approx.34m L x 23m W x 8.0m H).
- New permanent stores building (29.5m L x 21.5m W x 10.3m H).
- Site development works and landscaping.

Standard measures/ controls are outlined below in relation to key plant processes and operational procedures. None of the measures outlined are required to avoid or reduce harmful effects on European sites.

The majority of the proposed development site is already levelled and compacted. As illustrated in Figure 3.2 (below and refer to Drawing No. 229101133-MMD-00-XX-DR-C-0010 provided in Appendix B), the majority of the development footprint pertaining to the proposed temporary emergency power generation plant, is located on areas of existing hard surface. This existing surface is currently used for storage, set-down and car parking, and has been in situ since around the same time as the commissioning of the existing power plant (since the year 2000), in excess of 20 years.

An adjacent grassed area with some hedgerow to the east and north will be developed as an area of hardstanding as a replacement parking, storage and laydown area. The proposed temporary emergency generation disapplication boundary extends to the west to include a small extension to an existing boiler house within the Gas Networks Ireland (GNI) Above Ground Installation (AGI) compound.

Figure 3.2: Proposed Site Extent (Red Line Boundary) and Structures/Plant identified for Removal



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The generator units (38 No.) are containerised and will be delivered to site predominately already pre-assembled. On arrival to site, they will be placed in position on plastic feet on the ground. Where the load bearing capacity of the ground is insufficient, the engines will be rested on sleepers in order to spread the load, and no excavation work is anticipated. Staff welfare facilities and the control room will be housed within 20ft containers to be placed on existing hardstanding.

The magnitude of earthworks required for the development proposed is relatively small, as foundations required are limited to those identified in Section 3.9.3 (Civil Works). It is anticipated that foundations will be raft type ground bearing foundations and will be constructed above the water table.

The generators will operate on gas only using the existing gas connection supplied to Huntstown Power Station by Gas Networks Ireland. A single gas pressure reduction station containing two gas pressure reduction modules is included in the proposals.

Power generated by the temporary emergency generating facility will be exported to the national grid via an underground cable connection to the existing Finglas 220kV substation (consented under Planning reference: FW21A/0144), located c.800m to the south-east of the site.

Due to the requirement for the proposed temporary emergency power generation development to be delivered expediently to secure emergency generation and due to its impermanence, the

design has been developed to ensure that it can be constructed and commissioned speedily. The proposed design is also cognisant of the requirements during its operation, as it will be required to operate under the conditions of an Industrial Emissions Licence (Huntstown Power Station operates under Industrial Emission (IE) Licence Number P0483-04 and P0777-02 regulated by the Environmental Protection Agency (EPA)) and the applicable emission limit values.

The design has therefore ensured that the construction methods are as non-intrusive as possible. The proposed development has utilised existing hardstanding – as outlined earlier; the majority of the site is existing levelled and compacted ground which would require limited interventions to ready the site for construction, as a result ground works will be minimal. Excavations for foundations are limited to the generator exhaust stacks (total of 12No.), 110kV transformer and associated blast walls, AIS substation equipment, reactor, replacement storage shed, lightning masts, acoustic wall and fencing. Where existing structures are present, these will be demolished/ dismantled (please refer to Section 3.9.2 and Drawing No. 229101133-MMD-00-XX-DR-C-0010 (provided in Appendix B) for more details on structures to be dismantled/ demolished), prior to the commencement of construction.

The proposed design has included an attenuation unit and an exhaust silencer on each generator set. Noise attenuation barriers will be provided along the northern and eastern boundaries of the site to ensure no exceedances at closest residential receptors of daytime and night-time noise limits for Industrial Emissions Licenced sites as prescribed in the EPA, Guidance Note for Noise, (2016) (NG4)[3].

Additionally, the proposed development will tie into the existing potable and stormwater networks within Huntstown Power Station site. The storm drainage strategy for the proposed development site is to provide on-site attenuation for a minimum 1 in 30 storm event. It is proposed to collect runoff from hardstanding via a series of new filter drains to be provided around the extents of the proposed site. The proposed filter drains will convey flows to the existing outfall on the northwest boundary of the site. Before discharging, flows will be attenuated to 5.48l/s (refer to Drawing No. 229101133-MMD-00-XX-DR-D-0001, 229101133-MMD-00-XX-DR-D-0002 and 229101133-MMD-00-XX-DR-C-0010 provided in Appendix B). Attenuation will be provided via a new below ground geo-cellular tank (refer to Drawing No. 229101133-MMD-00-XX-DR-D-0011 provided in Appendix B).

Rainfall/ surface water runoff on the permeable gravel surfaces will percolate through the build-up. The formation below will be graded towards the new filter trenches. The non-permeable laydown areas will be drained via traditional gullies or channels which will discharge into the proposed filter drains.

The proposed development will collect discharges from the new welfare facilities within an existing septic tank to be emptied by a vacuum tanker.

There will be no process wastewaters generated by the proposal.

All chemicals and oils (lube oil) will be stored in suitably bunded areas.

Firefighting on site will predominately be carried out by manual fire suppression using the existing fire hydrant network, which will be extended. Foam hydrants and hose cabinets will be provided in accordance with the National Fire Protection Association Guidelines. In general, fire water discharges will be collected in the existing extended surface drainage system and will be discharged from the site after passing through the proposed drainage interceptor.

[3] EPA & OEE 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in relation to Scheduled Activities' (NG4), 2016

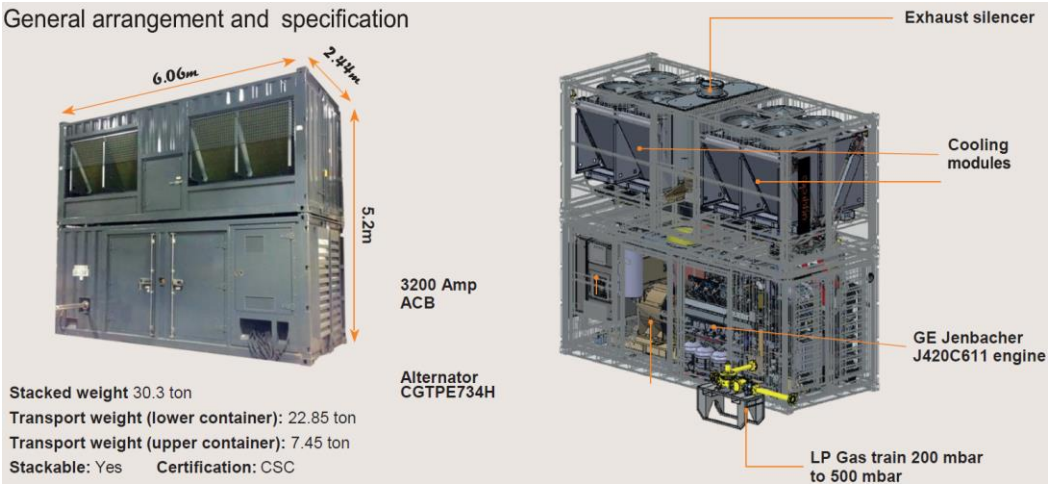
3.3 Key Plant Processes and Operating Procedures

3.3.1 Gas Generator Unit Technology

As indicated above, the Janbacher gas generators are housed in standard 20ft ISO shipping containers. Each generator is made up of two containers, one stacked on top of the other. The lower container houses the reciprocating gas engine + alternator, as well as a local control panel and Low Voltage circuit breaker for connection of out-going power cables. The upper container houses the radiators and cooling circuits, plus exhaust silencer. In this design a third attenuation unit is added which sits on top of the cooling module container.

An image of a typical Janbacher J420 generating unit is provided in Figure 3.3 below.

Figure 3.3: Janbacher J420 Generating Unit



Source: Aggreko

3.3.2 Control House Module

A twenty-foot container set up will be used as a control room for the temporary emergency generation power package, housing the Supervisory Control and Data Acquisition (SCADA) panel. The Emergency Shutdown and Intertripping panel will also be housed in the Control container. Within the 110kV AIS Switchyard separate control containers for the EHV equipment will contain the protection control and communication relays and panels associated with the 110kV equipment.

3.3.3 Above Ground Gas Installation

The Huntstown Power Station site is currently connected the natural gas network supplied to the site by Gas Networks Ireland (GNI).

The existing GNI above ground gas installation (AGI), located in the northwest of the site, will supply gas to the emergency generation units. Gas pipes from the AGI to the gas pressure reduction stations will run partly above ground and partly in underground gas pipes. After the gas pressure reduction station and up to the individual emergency generation units the gas piping will be run on above ground pipe works.

Initially gas will be provided to the temporary emergency generation plant by temporary AGI connections to the Huntstown Power Station internal gas network. As part of this emergency generation project, GNI will increase the capacity of the existing AGI and a single dedicated gas supply will be provided for the emergency generation plant. Once complete, the gas supply to

the emergency generation units will switch from the temporary AGI connections to this dedicated gas connection. The work required will include the construction of an extension to the existing Gas Networks Ireland (GNI) AGI boiler house utility infrastructure, as shown on the accompanying drawings.

The proposed development will not impact the operation of the two existing Combined Cycle Gas Turbine (CCGT) power stations at Huntstown.

3.3.4 Gas Reduction Station

Huntstown Power Station has an existing transmission gas connection supplied by GNI at 70barg. The gas supply to the site currently serves the gas requirements of the two CCGT power stations at the facility. The existing AGI configuration on site has two offtakes to the existing generators which each have a rated capacity output of 72,500 standard cubic metres per hour (scmh) (Huntstown 1) and 85,800 scmh (Huntstown 2).

The 28barg and 40barg supplies from the gas AGI will be piped to a pressure reduction and metering compound to reduce the gas pressure. A medium pressure pipe network feeds out to the generation area. Groups of four generators will then connect to the medium pressure network and the pressure reduced to the low pressure needed to supply the individual generators. A new single gas pressure reduction station containing two gas pressure reduction modules will be located at the northern end of the proposed temporary emergency generation site. The gas pressure reduction station will contain the equipment to reduce the incoming gas pressure down from High Pressure (42barg and 28barg) to Intermediate Pressure (4.5-5.5barg) for distribution around the temporary emergency generation plant area. The pressure reduction equipment contains control valves, gas filters, pressure regulators and a gas heating unit. Also included in the gas reduction packages are Remote Operating Valves (ROV) to shut-down the site gas supply in case of an emergency.

3.3.5 Electricity Transmission Connection

The thirty-eight Janbacher J420 units will be connected to a proposed 110kV Transformer which will export power to the national grid via the underground cable connection (consented under Planning reference: FW21A/0144) to the existing Finglas 220 kV Substation which is located approximately 800m southeast of the proposed development site.

The transformer will be of the oil-filled type, provided with safety blast walls and a foundation sump to prevent the escape of oil in case of a transformer leak.

The gas generators will connect to the consented underground cable connection by means of cabling running on above-ground cable racks. Where the cables cross circulation routes, steel plated ramps will be used for access over the top of the above-ground cable racks.

3.3.6 Replacement Laydown for Huntstown Power Station

A replacement laydown area for the existing Huntstown Power Station site will be provided to the north of the existing power station site. This area will be accessed from the existing northern boundary of the site, c.100m from the eastern boundary. The area to the north and east of the newly created access will have a tarmacadam finish and will be used as a laydown area for equipment and parts, with additional load-bearing requirements. The area to the west will have hardcore and chippings finish and will serve as both a parking area and a laydown area for smaller pieces of equipment. The site will have new perimeter chainmail fence (topped with barbed wire) and perimeter lighting.

3.3.7 Emissions Monitoring System

The exhaust gases from each gas generator will be discharged to atmosphere through a 25m high stack. There are 12 exhaust stacks proposed, as shown on Drawing No. 229101133-MMD-00-XX-DR-C-0025 (provided in Appendix B) with two, three of four generator sets connecting to a single 25m high exhaust stack. The stacks will incorporate emissions monitoring sampling points in accordance with EPA Guidance Note on Site Safety Requirements for Air Emissions Monitoring (AG1). Air emissions monitoring will be carried out in accordance with the reviewed IE Licence.

Periodical sampling of exhaust gases will be undertaken following commissioning at a frequency to be agreed with the EPA.

3.4 Water Demand

Water will be supplied to site via the existing Irish Water connections and there is sufficient existing water supply on site to meet the demand. Water will be used by the following consumers:

- Water for topping up of engine cooling systems.
- Potable water used for general purposes (drinking water, toilets etc.).
- The site is already served by the existing power station buried fire main and hydrant system. Some minor modifications to this system may be required to accommodate the new emergency generation units. Water storage for this system will continue to be provided from the existing power station firewater tank.

Foam hydrants and hose cabinets will be provided in accordance with the National Fire Protection Association Guidelines.

3.4.1 Wastewater Drainage

3.4.1.1 Surface Water Drainage

The proposed development will use and extend the existing site surface water drainage system – it will thus tie into the existing potable and stormwater networks within Huntstown Power Station site. The surface water drainage will be provided via two separate systems, one serving the southern part of the site and the other serving the northern part of the site.

The southern section of drainage will discharge to the existing drainage network which currently serves an existing building and carpark which are to be demolished/ relocated as part of the works. Rainfall/ runoff on the permeable gravel surfaces will percolate through the build-up. The formation below will be graded towards the filter trenches.

For the northern section of the site, the storm drainage strategy is to provide on-site attenuation for a minimum 1 in 30 storm event, the drainage strategy has been designed to ensure that no flooding of adjacent properties occurs as a result of a 1 in 100 storm event from the proposed development, based on CIRIA guidance.

It is proposed to collect runoff from hardstanding via a series of filter drains provided around the extents of the proposed site. The filter drains will convey flows to the existing outfall on the northwest boundary. Before discharging into the existing storm network, flows will be attenuated to 5.48l/s which is calculated as the greenfield runoff rate for the application boundary. Attenuation will be provided via a below ground geo-cellular tanks.

Rainfall/ runoff on the permeable gravel surfaces will percolate through the build-up. The formation below will be graded towards the filter trenches. The non-permeable laydown areas will be drained via traditional gullies or channels which will discharge into the filter drains.

Refer to drawings 229101133-MMD-00-XX-DR-D-0001 and 229101133-MMD-00-XX-DR-D-0002 provided in Appendix B for the proposed drainage layouts.

Water Quality

The CIRIA SuDS Manual states that the following interception storage measures for run off from rainfall events measuring <5m can be utilised by the proposed development:

- Filter Trenches,
- Porous / Granular open grading surface.

These measures ensure that the appropriate treatment of run-off in relation to the contamination risk for each surface type has been considered.

3.4.1.2 Foul Wastewater Drainage

A new foul drainage network comprising a limited extent of underground pipework, will be provided around the extents of the proposed new welfare facilities to allow for collection of all discharges from the welfare facilities (as illustrated in Drawing No.229101133-MMD-00-XX-DR-D-0002 provided in Appendix B). Foul wastewater will discharge to an existing septic tank within the Huntstown Power Plant complex which will be emptied, as is current procedure, by a licenced contractor to an approved licenced facility.

3.4.1.3 Process Wastewaters

There are no process wastewaters generated by the proposals.

3.5 Gas and Fire Safety Systems

3.5.1 Standards

Equipment inside the Generator Containers is designed in accordance with the safety requirements of the Institution of Gas Engineers & Managers (IGEM) Standard IGEM UP/3 “Gas-fuelled spark ignition and dual fuel engines”. The engine enclosure is classified as Hazardous Zone 2NE in accordance with European Standard EN 60079-10, with ventilation used to remove the hazardous atmospheres.

External gas pipework will be in accordance with the EU Pressure Equipment Directive and with European Standard EN 15001-1 “Gas installation pipework with an operating pressure greater than 0,5 bar for industrial installations and greater than 5 bar for industrial and non-industrial installations”. Gas pressure reduction stations shall comply with IGEM Standard TD/13 “Pressure regulating installations for natural gas, Liquefied Petroleum Gas (LPG) and LPG/air”.

3.5.2 Gas and Fire Safety Systems

3.5.2.1 Standards

Equipment inside the Generator Containers is designed in accordance with the safety requirements of the Institution of Gas Engineers & Managers (IGEM) Standard IGEM UP/3 “Gas-fuelled spark ignition and dual fuel engines”. The engine enclosure is classified as Hazardous Zone 2NE in accordance with European Standard EN 60079-10, with ventilation used to remove the hazardous atmospheres.

External gas pipework will be in accordance with the EU Pressure Equipment Directive and with European Standard EN 15001-1 “Gas installation pipework with an operating pressure greater than 0,5barg for industrial installations and greater than 5barg for industrial and non-industrial installations”. Gas pressure reduction stations shall comply with IGEM Standard TD/13 “Pressure regulating installations for natural gas, Liquefied Petroleum Gas (LPG) and LPG/air”.

3.5.2.2 Gas safety in engine containers

Risk analyses have shown that with a high rate of ventilation, an explosive atmosphere inside the engine containers is unlikely to occur during normal operation. Ventilation of the engine container to prevent a build-up of flammable gas, is therefore the primary gas safety control method.

Maintenance of a high rate of ventilation is essential, and interlocks are installed to check and monitor the air flow rates. The risk of gas leakage into the engine enclosure when the engine is shut down has been addressed by fitting an automatic gas shut off valve outside the enclosure. Any gas volume remaining in the enclosure supply piping will be very small and will be diluted safely by natural ventilation.

Duplicate gas detectors provide an alarm signal if the gas concentration reaches 20% of the lower explosive limit (LEL). If the concentration reaches 40% of the LEL, a signal is sent to two automatic shut-off valves at the gas inlet to the generator and the fuel supply is completely shut off.

In addition to this:

- The generator circuit breaker, which is located in a non-hazardous zone, opens if the gas pressure falls to 10% of its normal value
- The generator fail safe control system is activated
- The engine room air circulation fans keep running at maximum speed.
- Error messages “GAS PRE ALARM” and "GAS ALARM" appear on the main control system panel

Gas detection is not regarded as a substitute for good ventilation but is used for safety back up for the various risk scenarios.

3.5.2.3 Gas safety in external areas

Gas shut-off valves shall be provided at the gas connection points, and hazardous area identified.

Hazardous area calculations and layouts shall be used to ensure that electrical and sparking equipment are positioned out of the gas risk areas. These studies are site-specific and are completed in accordance with ISO standards.

Automatic emergency shut-down of the gas supply shall be provided by push button operation from the control room.

3.5.2.4 Fire safety

Fire hydrants shall be located around site in accordance with NFPA 1 and NFPA 24 to provide local fire-fighting capability to assets.

Firefighting on site will predominately be carried out by manual fire suppression using the existing fire hydrant network, extended as required. Foam hydrants and hose cabinets will be provided in accordance with the NFPA guidelines.

In general, fire water discharges will be collected in the surface drainage system and will be discharged from the site after passing through the drainage interceptors.

Portable fire extinguishers will be placed for use at the generator unit containers.

Smoke and heat detectors will be provided in each engine container, and if smoke or heat are detected the engine will be shut down and isolated.

In the event of fire being detected, an alarm announcement shall warn all operators to evacuate the site area.

Access and egress studies and drawings will be completed at design stage to ensure at least two points of egress are provided and that no confined spaces exist on site.

3.6 Chemical Storage

All chemicals and oils will be stored in suitably bunded areas. Table 3.1 provides quantities for each substance.

Table 3.1: Chemical Storage (Existing and Proposed)

Material/Substance	Nature	Amount Stored	Storage Location	Location of Use
Shell Rimula R4 X 15W-40	Generator Lube Oil	2-4 Nos	Lube Oil stored in drums and placed in 20-ft spare Containers	NGG 420 Genset
ZEREX™ Nitrite Free Extended Life 50-50 Antifreeze Coolant	Coolant	2-4 Nos	Stored in drums / IBC Tanks and placed in 20-ft spare Containers	NGG 420 Genset
SINOPEC Oil	Transformer Oil	28000kgs	Filled in Transformer Tank/ Spare not stored on site (order when needed)	70MVA Transformer
Shell Diesoline (B2)	Diesel	2-4 Nos	Stored in drums / IBC Tanks and placed in 20-ft spare Containers	Auxiliary Diesel Genset KTA50 G3+
Sealed Lead Acid Battery	Battery	10 Nos	Spare 20-ft Container	NGG 420 Genset / 6.3MVA Transformer
Si70 Silicon Coupling Block Spares Package	Sealant	7-10 kgs	Stored in workshop container (special vented cabinet)	General
Klüberquiet BQ 72-72	Grease	30 Nos (0.4kg)	Stored in workshop container (special vented cabinet)	General

3.7 Lighting

A new lighting arrangement will be provided to ensure a safe work environment for staff on site. This will consist of directional/ cowled LED flood lights where applicable and will replicate existing site security/ perimeter lighting.

3.8 Security

The Huntstown Power Station site is secured by high walls with security gates. Gates are remotely operated by security. Notices at the gates inform visitors to site on contact methods for security to gain access. The gates will operate in line with the current arrangements for the existing gates. During times of high traffic volumes to and from the site the gate will be manned. New chainmail perimeter fencing is proposed along the northern and eastern boundaries of the proposed development.

3.9 Construction Phase Programme and Activities

3.9.1 Construction Phase Description and Duration

Construction activities will gradually phase from pre-construction site preparation, enabling and demolition works to civil works which will include the construction of all equipment foundations

and drainage works, to the installation of the plant, connection to the gas and electricity infrastructure, followed by commissioning and testing of the proposed plant and equipment.

The construction phase of the project is expected to commence in Q3 2022 and can be broken into the following activities and durations (refer to Table 3.2), some activities will run in parallel to enable to completion of the project within 10 months.

Table 3.2: Construction Schedule

Phase	Timeline (estimated months)
Consent/Procurement/Enabling/ Dismantling/Demolition/ Decommissioning of existing services/Works	6 months
Civil Works	2 months
Plant Installation and Connection Works	3 months
Total Programme Duration	10 months

The total number of construction staff on-site will vary during the construction phase of the works but is expected to peak at approximately 35 persons.

Normal working hours for external site activities during the construction period are expected to be Monday to Friday 07:00 to 19:00 hours and 08.00 to 13.00 on Saturday. During certain stages of the construction phase, it is expected that some work will have to be carried out outside of normal working hours however this will be kept to a minimum. Works outside of the normal working hours will be arranged in advance by consultation with the local authority.

3.9.2 Enabling Works/Dismantling and Demolition Works

The pre-construction phase of development includes preparatory works and consultation with statutory bodies [Health and Safety Authority (HSA), EPA] as required. Following this process, site clearance activities will commence. Typical activities will include removal/relocating temporary structures (such as offices and portacabins), lighting and electrical panels, installation of welfare facilities, provision of new area for parking, demolition/dismantling of the existing storage building and temporary storage facilities and the grading of surfaces which will involve the removal of topsoil from the grassland area to the north of the existing power station site. This topsoil will be re-used on the site wherever possible.

Services to existing structures will be isolated and physically disconnected as required. Any remaining chemicals will be removed, and vessels will be decontaminated as required to reduce the residual risk to as low as reasonably practicable. Any hazardous materials will be identified and removed by specialist contactors in advance of site clearance and dismantling works.

There are a number of shipping containers which will be required to be removed in advance, in addition to a section of existing internal security fencing.

The existing temporary storage facility covers an area of approx. 780m^2 and is used to store plant and equipment for the operation of the power station. It will be required to be dismantled/demolished to facilitate the proposed development. The general methodology for removal of the storage facility will be by mechanical dismantling that will bring all structures and equipment to ground level/ grade in a progressive manner using a top-down approach - and the removal of foundations to a depth of approximately 300mm. All open spaces/ voids created as part of the removal process will be backfilled with suitable materials to the surrounding grade levels.

The majority of the proposed development site (as an existing brownfield ‘site’/ area of land) is already levelled and compacted. The area on the eastern side of the site situated in the earth berm will be levelled and compacted as required.

3.9.3 Civil Works

Where required, areas for the installation of new equipment will be levelled and new equipment foundations will be constructed. Where any works are required below ground, and there exists a conflict with rising substructures or existing foundations, the affected areas will be cleared as required. Existing below ground services (surface water drains) will be rerouted around areas where foundations are to be constructed. Existing below ground services in conflict with new foundations will be relocated as required. A description of the foundations required and an estimate of their approximate area and depth is provided in the Table 3.3 below:

Table 3.3: Foundations

Structure/Equipment	Approximate Area (m2)	Estimated depth below ground level (mm)
Generator Exhaust stacks (12 in no,)	20.25	1000
110 kV Transformer	28.0	600
110kV AIS Substation Equipment	1.0	1000
Series Reactor	45.6	450
Lightning Conductor masts (2 in no.)	2.25	1800
New palisade fencing foundations	0.36	1100
Blast walls adjacent to 110 kV transformer	26.52	2000
Acoustic Wall	21.0	1450
Replacement storage shed	45.0	750

It is anticipated that any other foundations will be raft type ground bearing foundations. Recent ground investigations note that the water table adjacent to the site is situated at approximately 4mbgl. The proposed works are anticipated to be limited to approximately 2.0mbgl.

Existing ground water monitoring/treatment wells that may be affected by the works will be identified and amendments to the monitoring well network will be agreed with the EPA prior to commencement of works. All currently decommissioned boreholes will be capped to prevent any ingress of surface water.

All waste arisings resulting from excavation works will be managed in accordance with the Waste Management Act, 1996 and associated regulations. Excavated material will be tested on site prior to disposal off site or reuse on site. Excavated material will be re-used on site where possible in accordance with the Construction Resource and Waste Management Plan (Appendix A to the CEMP). The CEMP will remain a ‘live’ document which will be reviewed regularly and revised as necessary to ensure that the measures implemented are effective. The CEMP is a standard construction procedure and is not mitigation required to avoid or reduce harmful effects on European sites

The Contractor will be responsible for the management of excavated material and the safe disposal of this material to a suitably licenced waste disposal facility where it cannot be reused as a by-product in accordance with the Article 27 notification procedure. In-situ concrete casting will be fully controlled to ensure that cement bound materials do not present any pollution risk.

In the area where the gas generating units are to be installed, the existing surface water network will need to be modified and rerouted. Surface water drains will also be re-routed and/or sealed in advance of any concrete being cast.

3.9.4 Environmental Clerk of Works

As is standard practice on any type of development, an Environmental Clerk of Works (EnCoW) will be employed by the Contractor on the proposed development. The EnCoW will have suitable environmental qualifications and the necessary experience and knowledge appropriate to the role. The EnCoW will be delegated sufficient powers under the construction contract to instruct the Contractor to stop works and to direct the carrying out of emergency mitigation / clean-up operations. The EnCoW will also manage consultation with key stakeholders as appropriate. The EnCoW will be responsible for carrying out regular monitoring of the Contractors CEMP and will report monitoring findings in writing to the HPCL on a regular basis (at least weekly, but immediately in the case of incidents or accidents. The EnCoW is not required for protection of European sites.

3.9.5 Plant Installation and Connection Works

The generator sets will be rested on plastic feet on the ground. Where the load bearing capacity of the ground is insufficient, the engines will be rested on sleepers in order to spread the load. No excavation work is anticipated.

Most of the new equipment will be skid mounted or containerised elements fabricated off site and delivered finished or for final assembly on site.

3.9.6 Construction Compounds / Laydown Areas

Given the modular nature of the development, no designated construction compound / laydown area is proposed.

Equipment will be delivered to site in a phased manner and located in its final position on arrival. Small items of plant and materials such as pipework, cables, tools and installation equipment will be stored in the proposed spares containers once delivered to site. The area to the north of north of the temporary storage facility and 110 kV AIS area labelled will be utilised (annotated as ‘surface finish -concrete’) will be used for construction parking/storage of plant if required.

3.10 Operational Phase

The temporary emergency generating plant must be capable of operating up to 1460 hours per annum (based on a daily average of 4 hours per pay) on natural gas only. The actual running profile will be determined by the TSO and it is expected the emergency generation will be called to generate when the system is in Alert or Emergency state (as defined in the Grid Code).

3.10.1 Operation and Maintenance

The operational phase will a maximum of five years from 2023 to 2027.

The operation of the plant will be an activity regulated by a revised Industrial Emissions Licence (P0483-04) and must therefore ensure that compliance with the licenced air, stormwater and noise emissions limit values when operational.

During the operational phase the generation plant will be operated by a site staff of up to 21No. personnel (within a 24-hour period) on a 3 x 8-hour shift basis.

Scheduled maintenance will be carried out by site personnel in compliance with the schedule provided by the plant manufacturer. A contract will be agreed with the engine OEM under which the warranty is maintained in conjunction with a comprehensive preventative maintenance program. For all major equipment such as Generators, HV & EHV Transformers, HV Switchgears, Reactors, 110kV Air Insulated Switchgear, Gas High Pressure Reduction Package, LP/MP Gas reduction trains etc is managed by a Maintenance Management System (MMS). It is a web-based tool produced by Aggreko to simplify asset maintenance scheduling

and ensure minimal asset downtime. Utilizing MMS ensures that asset reliability is maintained, and condition and equipment availability is maximised.

Apart from the digital MMS mentioned above, there are Service Tracker, Standard Work Instructions, Inspection Forms which will be followed during plant operations. Each Maintenance Schedule has an accompanying Maintenance Parts List detailing the Materials required to perform the task. List of critical spare parts will be stored at site to carry out repairs and maintenance as and when required.

Plant will be equipped with Certified Operators, Electrical / Mechanical Personnel, Qualified Technicians to perform unplanned and extraordinary maintenance, comprehensive inspection, repairs, and operation activities. Standard Site Operation Procedures and Operation & Maintenance (O&M) manuals will be followed throughout the Project Life Cycle.

Majority of the servicing and maintenance will be conducted on the generators by the on-site personnel with parts, material and equipment stored on-site. The below table shows the scheduled maintenance program for each Aggreko J420 generator according to the operating hours on the engine.

Table 3.4: J420 Generator Scheduled Maintenance Programme

Maintenance Type	Frequency (no. of operating hours)	Personnel Required	Location of Maintenance Activities
Oil drain	1,850	Mechanical Engineer/Technician	On-site
Engine induction air filter, NOx, Valve clearance, re-gap plugs, replace gas train filters	2,000	Mechanical Engineer/Technician	On-site
Grease alternator bearings	4,000	Electrical Engineer/Technician	On-site
Circuit breaker maintenance	5,000	Electrical Engineer/Technician	On-site
Turbo clean, Oil mist separator filter, Mechanical seal HT pump, Decoke head/piston change elasomers, clean mixture heat exchanger	10,000	Mechanical Engineer/Technician	On-site
Replace coolant, replace gaskets/seals/bearings on coolant pumps	16,000	Mechanical Engineer/Technician	On-site
Turbo overhaul using swing turbo	20,000	Mechanical Engineer/Technician	On-site
Engine overhaul & package maintenance	30,000	Mechanical / Electrical Engineers	On-site or off site at Aggreko Maintenance Facility

Two of the generators will be used as back-up generators in the event of any generator breakdown. These two generators will also be subject to scheduled maintenance on a rotational basis throughout the year. The maintenance schedule will ensure the high availability of the plant to meet the 95% operation availability.

3.11 Decommissioning Phase

Following the cessation of the emergency generation plant the generator units will be disconnected and removed from site. This equipment is likely to be shipped from Ireland, via Dublin Port for use at another location.

Remaining equipment such as, pipework and cabling, will be made safe and retained on site for potential future uses at Huntstown Power Station. Equipment will be stored under appropriate conditions and the site will be secured.

Waste materials generated during the decommissioning of the plant will be removed from site in accordance with the Waste Management Act, 1996 and associated regulations.

The activities associated with the decommissioning phase will be similar to those associated with the construction phase of the project.

3.12 Summary of Potential Impacts

Anticipated impacts associated with the Project are in relation to a location outside a European or any designated site and include the following:

- Direct impacts to habitats
- Disturbance effects due to construction machinery and increased human presence
- Surface water run-off
- Dust emissions associated with demolition
- Increases in noise emissions.

3.13 Baseline Environment

The description as follows is provided to consider ex situ or dynamic qualifying interest species or SCI birds which may use areas outside European sites. The habitat description is provided to determine if any habitats listed on Annex 1 of the Habitat Directive occur on the site.

The proposed development is located in an area primarily comprised of existing hardstanding surfaces. There are small areas of managed amenity grassland (GA2) and shrub and tree (Alder) planting.

Other habitats include an area of degraded dry calcareous and neutral grassland (GS1), located to the north of the existing hard standing. This area had been heavily grazed by horses and damaged by vehicular traffic. Species recorded included knapweed, sedges (*Carex spp.*), buttercups (*Ranunculus sp.*), silverweed (*Potentilla anserina*), dandelion and plantain (*Plantago lanceolata*).

Treelines (WL2) were noted outside the proposed works area. These are dominated by beech (*Fagus sylvatica*), alder (*Alnus glutinosa*), and ash (*Fraxinus excelsior*).

Hedgerows (WL1) were recorded surrounding immediately north of the proposed development. These were overgrown in places, grading into scrub (WS1). Species recorded included willow (*Salix spp.*), elder (*Sambucus nigra*), blackthorn (*Prunus spinosa*), and hawthorn (*Crataegus monogyna*).

A planted broadleaf woodland (WD1) was recorded surrounding the proposed development. This was dominated by ash and beech and will not be impacted by the development.

No habitat listed on Annex 1 of the Habitats Directive occurs on the site.

No evidence of drainage ditches was recorded during the site visit; however, an existing surface water collection system for the adjacent quarry was noted to the west.

No invasive species listed under the Third Schedule of the European Communities Regulations 2011 (S.I. 477 of 2011), as amended were recorded during site walkovers.

No evidence of any Qualifying Interest, or Special Conservation Interest species were recorded within or in proximity to the proposed development during site visits. No mobile Special Conservation (SCI) bird species were recorded, and the site is not likely to attract waterfowl or wader bird species and the location of the site is not located in a sensitive location for wintering birds (Biodiversity Ireland)[4]. The wider environs of the site are not identified as important for mobile wintering SCI species[5] of SPA's. Most areas are developed within 1km of the site and unsuitable.

Peregrine (listed Annex 1 Birds Directive) do breed in the adjacent quarry (c.a. 500m from site). There is no risk of impact to this locally breeding species.

3.13.1 Existing Drainage Infrastructure

The Annual Environmental Report for the emissions license (IEL Licence P0483-04) for Huntstown outlined the following in relation to the existing stormwater drainage system on the site:

- The storm water drains from the plant combine with the storm drains from P0483 facility prior to discharge. The discharge point is equipped with a 24hr flow proportional composite sampler. Grab samples are checked daily for pH, conductivity and ammonia. A daily visual check is also completed to assess colour and odour. In addition, there is an online TOC (total organic carbon) meter giving feedback to the central control room. Before final discharge the storm water flows through an oil interceptor and a penstock.
- The storm water from the site is discharged via the adjacent Roadstone Limited Quarry licensed discharge point to the Huntstown Stream which discharges to the Ballystrahan Stream a tributary of the Ward River.

3.14 Zone of Influence

Projects have the potential to impact on European sites beyond the footprint of the project itself. National Guidance[6, 7] states that screening for Appropriate Assessment should be carried out for any European Site within the likely 'Zone of Influence' of a plan or project. For projects, the guidance recommends that the Zone of Influence (ZoI) must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors, and the potential for in combination effects.

In order to establish the ZoI of the proposed development, nationally available data on protected habitats and species was mapped using Geographic Information System (GIS). The potential environmental effects of the proposed development are set out below.

[4] https://maps.biodiversityireland.ie/Map

[5] https://bwi.maps.arcgis.com/apps/View/index.html?appid=1043ba01fcb74c78bc75e306eda48d3a

[6] Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government, 2009

[7] Office of the Planning Regulator (March 2021). Appropriate Assessment Screening for Development Management. OPR Practice Note PN01

The ZoI for each is outlined below:

Direct Removal and Alteration of Existing Habitat During Construction Phase

The ZoI for direct impacts to existing habitat are assessed as the footprint of the site itself.

Increased Human Presence During Construction Phase

There is potential for disturbance to species associated with the physical presence of humans. The works area is within the existing Huntstown Power Plant site. This site is entirely screened by existing treelines, scrub, and buildings associated with the plant itself. As such, the ZoI for human disturbance is assessed as the footprint of the site itself.

Surface Water Run-Off During Construction Phase

There is potential for surface water emissions to be generated as part of the works. The closest surface water body to the Proposed Development is the River Ward located approximately 500m to the north. As outlined previously, the existing drainage system currently discharges into the River Ward.

The ZoI for the surface-water runoff is taken as catchment wide.

Dust Emissions During Construction Phase

The proposed construction works are likely to result in the temporary generation of dust. The Institute of Air Quality Management '*Guidance on the Assessment of the Impacts of Construction on Air Quality and the Determination of their Significance'* (2014) prescribes potential dust emission risk classes to ecological receptors.

The guidance specifies that the need for a detailed assessment arises "*where there is an 'ecological receptor' within 50m of the works, or within 50m of the route(s) used by construction vehicles on the public highway, up to 500m from the site entrance*" and that "*Where the need for a more detailed assessment is screened out, it can be concluded that the level of risk is "negligible", and any effects will not be significant*".

The ZoI is, therefore, taken as 50m from the works and 500m along existing roadways from the existing WTP site entrance.

Noise and Vibration Generated During Construction and Operational Phases

The proposed project will result in a temporary increase in noise due to machinery operation. Disturbance due to noise varies between species and is dependent on the volume and nature of the noise source.

Wetland birds have been documented to tolerate noise levels at or below 70dB(A) (Cutts and Burdon, 2009). The noise levels associated with the works as per the noise assessment (based on the worst-case construction activity noise) identifies that the noise levels fall below 70dB within 55m of the works. As such the ZoI for wintering bird species is taken as 55m. It is noted that an acoustic wall will form part of the proposed development which will negate localised noise during the operational phase. This acoustic wall is for local receptors and not mitigation for European sites hence avoiding any likely significant effect on European Sites. As outlined in Table 3.4 below the nearest European is at least 9.8km. As outlined in Section 3.13 no ex-situ qualifying interest or SCI occur in the area that are affected by noise from the or other impacts from the development.

The ZoI for otter (mobile QI) is taken as 150m from the proposed development (NRA 2006).

3.15 Source-Pathway-Receptor Assessment

Having regard to the ZoI as outlined above, the source-pathway-receptor connectivity between European Sites and the works area were investigated. This was carried out using GIS software,

and through examination of aerial photography to determine likely pathways of connection including ecological corridors and stepping stones.

Any European Sites identified within the potential zone of impact (see Section 3.14 above) of the proposed works were assessed to identify viable source-pathway-receptor connections to the proposed works. The source-pathway-receptor assessment is outlined below in Table 3.4. Those identified were then examined further to determine the potential for significant effects in Section 4.

The works location in relation to European Sites is presented in Figure 3.4.

Table 3.5: Source Pathway Receptor Assessment and Assessment of Potential for Significant Effects

Site Name and Code	Distance between the Proposed Development and European Sites (straight line) at Closest Point	Qualifying Interests / Special Conservation Interests (SCI) of the European Site (* denotes priority habitat)	Source-Pathway-Receptor Assessment
Special Area of Conservation (SAC)			
Malahide Estuary SAC [000205]	9.8km	● [1140] Tidal mudflats and sandflats ● [1310] Salicornia and other annuals colonising mud and sand ● [1330] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) ● [1410] Mediterranean salt meadows (*Juncetalia maritimi*) ● [2120] Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) ● [2130] Fixed coastal dunes with herbaceous vegetation (grey dunes)	The closest surface water body to the Proposed Development is the River Ward located approximately 500m to the north. The existing drainage system within Huntstown Power Station discharges into the River Ward. The River Ward ultimately discharges into the Malahide Estuary SAC. As the ZoI for surface water emissions is catchment wide **a possible source-pathway-receptor link is identified.** The Malahide Estuary SAC is not located within the ZoI of the Proposed Development. The project is not capable of giving rise to any impacts which are capable of affecting the Malahide Estuary SAC
North Dublin Bay SAC [000206]	11km	● [1140] Tidal mudflats and sandflats ● [1210] Annual vegetation of drift lines ● [1310] *Salicornia* mud ● [1330] Atlantic salt meadows ● [1410] Mediterranean salt meadows ● [2110] Embryonic shifting dunes ● [2120] Marram dunes (white dunes) ● [2130] Fixed dunes (grey dunes)* ● [2190] Humid dune slacks ● [1395] Petalwort (*Petalophyllum ralfsii*)	North Dublin Bay SAC is located 11km to the southeast of the Proposed Development. No hydrological connectivity is present via the River Santry which discharges into the North Dublin Bay SAC. A tenuous hydrological connectivity is present via the Ward River, through the coastal waters of Malahide Estuary and North Dublin Bay. However, given the nature of this link i.e. through coastal waters which would dissipate any surface waters considerably, this is not a viable source-pathway-receptor link.

Site Name and Code	Distance between the Proposed Development and European Sites (straight line) at Closest Point	Qualifying Interests / Special Conservation Interests (SCI) of the European Site (* denotes priority habitat)	Source-Pathway-Receptor Assessment
			The North Dublin Bay SAC is not located within the ZoI of any other impacts associated with the proposed development.
South Dublin Bay SAC [000210]	11.2km	● [1140] Tidal mudflats and sandflats ● [1210] Annual vegetation of drift lines ● [1310] *Salicornia* and other annuals colonising mud and sand ● [2110] Embryonic shifting dunes	South Dublin Bay SAC is located 11.2km to the southeast of the Proposed Development. No hydrological connectivity is present via the Brewery Stream, which discharges into the SAC boundary directly. A tenuous hydrological connectivity is present via the Ward River, through the coastal waters of Malahide Estuary and South Dublin Bay. However, given the nature of this link i.e. through coastal waters which would dissipate any surface waters considerably, this is not a viable source-pathway-receptor link. The South Dublin Bay SAC is not located within the ZoI of the Proposed Development. The project is not capable of giving rise to any impacts which are capable of affecting the South Dublin Bay SAC
Baldoyle Bay SAC [000199]	12km	● [1140] Tidal Mudflats and sandflats ● [1310] Salicornia and other annuals colonising mud and sand ● [1330] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) ● [1410] Mediterranean salt meadows (*Juncetalia maritimi*)	Baldoyle Bay SAC is located 12km to the east of the Proposed Development. No hydrological connectivity is present via the River Mayne, which discharges into the SAC boundary directly. A tenuous hydrological connectivity is present via the Ward River, through the coastal waters of Malahide Estuary and Baldoyle Bay itself. However, given the nature of this link i.e. through coastal waters which would dissipate any surface

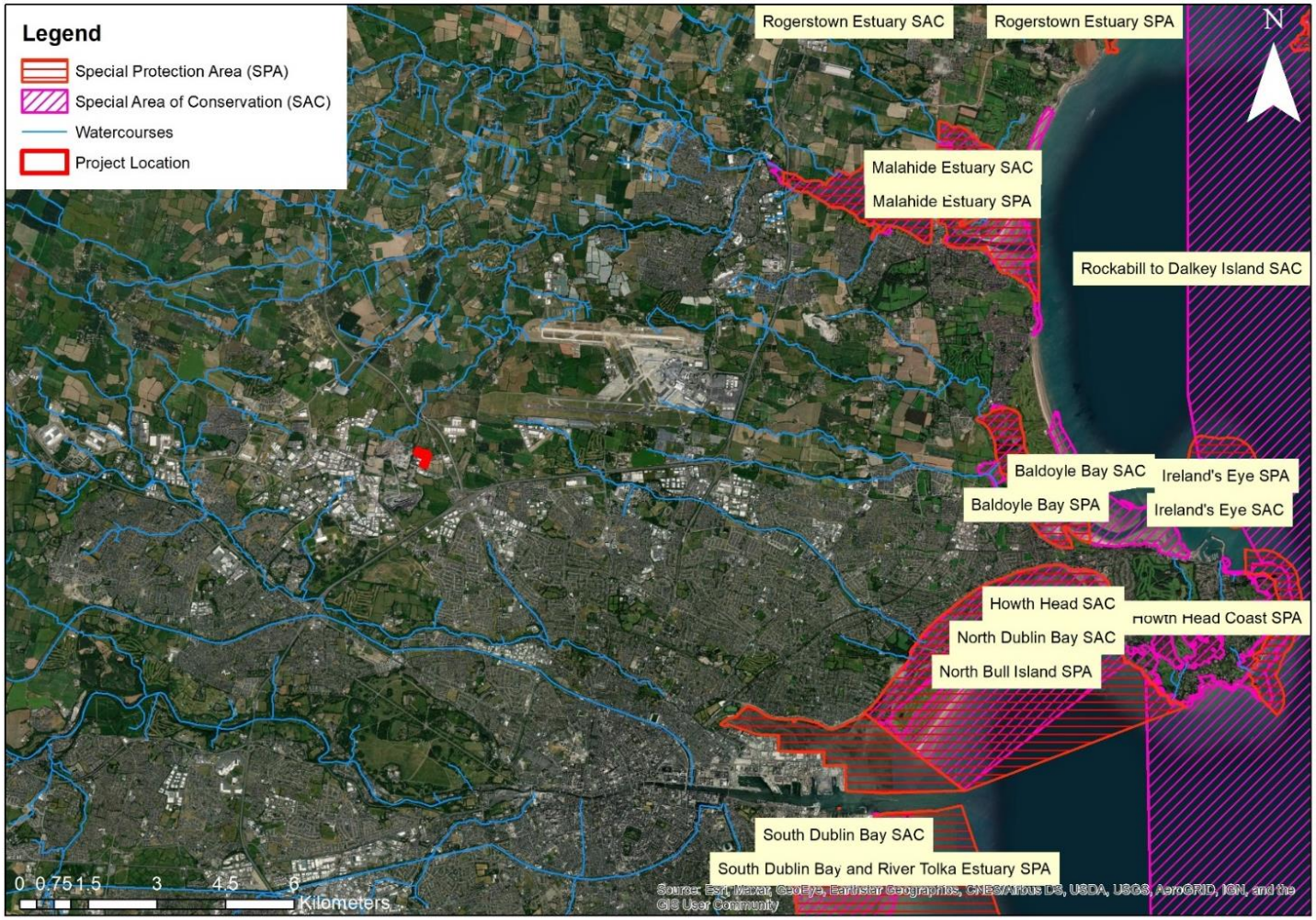
Site Name and Code	Distance between the Proposed Development and European Sites (straight line) at Closest Point	Qualifying Interests / Special Conservation Interests (SCI) of the European Site (* denotes priority habitat)	Source-Pathway-Receptor Assessment
			waters considerably, this is not a viable source-pathway-receptor link. Baldoyle Bay SAC is not located within the ZoI of the Proposed Development. The project is not capable of giving rise to any impacts which are capable of affecting the Baldoyle Bay SAC
Special Protection Areas (SPA)			
South Dublin Bay and River Tolka Estuary SPA [004024]	8.6km	● Light-bellied brent goose (*Branta bernicla hrota*) [A046] ● Oystercatcher (*Haematopus ostralegus*) [A130] ● Ringed plover (*Charadrius hiaticula*) [A137] ● Grey plover (*Pluvialis squatarola*) [A141] ● Knot (*Calidris canutus*) [A143] ● Sanderling (*Calidris alba*) [A144] ● Dunlin (*Calidris alpina*) [A149] ● Bar-tailed godwit (*Limosa lapponica*) [A157] ● Redshank (*Tringa totanus*) [A162] ● Black-headed gull (*Chroicocephalus ridibundus*) [A179] ● Roseate tern (*Sterna dougallii*) [A192] ● Common tern (*Sterna hirundo*) [A193] ● Arctic tern (*Sterna paradisaea*) [A194] ● Wetland and waterbirds [A999]	South Dublin Bay and Tolka Estuary SPA is located a significant distance from the proposed works area. There is no potential for direct impact to core supporting habitat for SCIs. Likewise, there is no potential for disturbance effects to core roosting or foraging habitat for any SCI species. There is potential for SCI species to occur outside of European site boundaries. No evidence of utilisation of the works area by SCI species was noted during the site walkover and no sites were noted in the area based on a desk study, also refer to Section 3.13 above regarding birds. A tenuous hydrological connectivity is present via the Ward River, through the coastal waters of Malahide Estuary and South Dublin Bay. However, given the nature of this link i.e. through coastal waters which would dissipate any surface waters considerably, this is not a viable source-pathway-receptor link. South Dublin Bay and River Tolka Estuary SPA is not located within the ZoI of the Proposed Development. The project is not

Site Name and Code	Distance between the Proposed Development and European Sites (straight line) at Closest Point	Qualifying Interests / Special Conservation Interests (SCI) of the European Site (* denotes priority habitat)	Source-Pathway-Receptor Assessment
			capable of giving rise to any impacts which are capable of affecting the SPA
Malahide Estuary SPA [004025]	9.8km	● Great crested grebe (*Podiceps cristatus*) [A005] ● Light-bellied brent goose (*Branta bernicla hrota*) [A046] ● Shelduck (*Tadorna tadorna*) [A048] ● Pintail (*Anas acuta*) [A054] ● Goldeneye (*Bucephala clangula*) [A067] ● Red-breasted merganser (*Mergus serrator*) [A069] ● Oystercatcher (*Haematopus ostralegus*) [A130] ● Golden plover (*Pluvialis apricaria*) [A140] ● Grey plover (*Pluvialis squatarola*) [A141] ● Knot (*Calidris canutus*) [A143] ● Dunlin (*Calidris alpina*) [A149] ● Black-tailed godwit (*Limosa limosa*) [A156] ● Bar-tailed godwit (*Limosa lapponica*) [A157] ● Redshank (*Tringa totanus*) [A162] ● Wetland and Waterbirds [A999]	Malahide Estuary SPA is located a significant distance from the proposed works area. There is no potential for direct impact to core supporting habitat for SCIs. Likewise, there is no potential for disturbance effects to core roosting or foraging habitat for any SCI species. There is potential for SCI species to occur outside of European site boundaries. No evidence of utilisation of the works area by SCI species was noted during the site walkover and no sites were noted in the area based on a desk study, also refer to Section 3.13 above regarding birds. The closest surface water body to the Proposed Development is the River Ward located approximately 500m to the north. The existing drainage system within Huntstown Power Station discharges into the River Ward. The River Ward ultimately discharges into the Malahide Estuary SPA. As the ZoI for surface water emissions is catchment wide a possible **source-pathway-receptor link is identified.**
North Bull Island SPA [004006]	11.3km	● Light-bellied Brent goose (*Branta bernicla hrota*) [A046] ● Shelduck (*Tadorna tadorna*) [A048] ● Teal (*Anas crecca*) [A052] ● Pintail (*Anas acuta*) [A054] ● Shoveler (*Anas clypeata*) [A056]	North Bull Island SPA is located a significant distance from the proposed works area. There is no potential for direct impact to core supporting habitat for SCIs. Likewise, there is no potential for disturbance effects to core roosting or foraging habitat for any SCI species.

Site Name and Code	Distance between the Proposed Development and European Sites (straight line) at Closest Point	Qualifying Interests / Special Conservation Interests (SCI) of the European Site (* denotes priority habitat)	Source-Pathway-Receptor Assessment
		• Oystercatcher (*Haematopus ostralegus*) [A130] • Golden plover (*Pluvialis apricaria*) [A140] • Grey plover (*Pluvialis squatarola*) [A141] • Knot (*Calidris canutus*) [A143] • Sanderling (*Calidris alba*) [A144] • Dunlin (*Calidris alpina*) [A149] • Black-tailed godwit (*Limosa limosa*) [A156] • Bar-tailed godwit (*Limosa lapponica*) [A157] • Curlew (*Numenius arquata*) [A160] • Redshank (*Tringa totanus*) [A162] • Turnstone (*Arenaria interpres*) [A169] • Black-headed gull (*Chroicocephalus ridibundus*) [A179] • Wetland and Waterbirds [A999]	There is potential for SCI species to occur outside of European site boundaries. No evidence of utilisation of the works area by SCI species was noted during the site walkover and no sites were noted in the area based on a desk study, also refer to Section 3.13 above regarding birds. A tenuous hydrological connectivity is present via the Ward River, through the coastal waters of Malahide Estuary and North Dublin Bay. However, given the nature of this link i.e., through coastal waters which would dissipate any surface waters considerably, this is not a viable source-pathway-receptor link. The North Bull Island SPA is not located within the ZoI of the Proposed Development. The project is not capable of giving rise to any impacts which are capable of affecting the SPA.
Baldoyle Bay SPA [004016]	12.1km	• Light-bellied brent goose (*Branta bernicla hrota*) [A046] • Shelduck (*Tadorna tadorna*) [A048] • Ringed plover (*Charadrius hiaticu*la) [A137] • Golden plover (*Pluvialis apricaria*) [A140] • Grey plover (*Pluvialis squatarola*) [A141] • Bar-tailed godwit (*Limosa lapponica*) [A157] • Wetland and waterbirds [A999]	Baldoyle Bay SPA is located a significant distance from the proposed works area. There is no potential for direct impact to core supporting habitat for SCIs. Likewise, there is no potential for disturbance effects to core roosting or foraging habitat for any SCI species. There is potential for SCI species to occur outside of European site boundaries. No evidence of utilisation of the works area by SCI species was noted during the site walkover and no sites were noted in the area based on a desk study, also refer to Section 3.13 above regarding birds.

Site Name and Code	Distance between the Proposed Development and European Sites (straight line) at Closest Point	Qualifying Interests / Special Conservation Interests (SCI) of the European Site (* denotes priority habitat)	Source-Pathway-Receptor Assessment
			No hydrological connectivity is present via the River Mayne, which discharges into the SPA boundary directly. A tenuous hydrological connectivity is present via the Ward River, through the coastal waters of Malahide Estuary and Baldoyle Bay itself. However, given the nature of this link i.e. through coastal waters which would dissipate any surface waters considerably, this is not a viable source-pathway-receptor link. Baldoyle Bay SPA is not located within the ZoI of the Proposed Development. The project is not capable of giving rise to any impacts which are capable of affecting the SPA

Figure 3.4: Site Location in Relation to European Sites



Source: Mott MacDonald (©Ordnance Survey Ireland/Government of Ireland. Ordnance Survey Ireland Licence No. CYAL50270907)

4 Potential for Impact to European Sites

Viable source pathway receptor links were identified for Malahide Estuary SAC (000205), and Malahide Estuary SPA (004025)

The potential for impact to these European Sites associated with the proposed works is discussed hereunder.

Size, Scale, Area, Land-Take

There will be no land take within or adjacent any European site boundaries. The proposed works locations and potential access routes to same are located outside of European sites.

There is no potential for effects due to the size, scale, area, or due to land take associated with the proposed works.

Physical Changes

The proposed development is located within the existing Huntstown Power Plant lands. Access to the works areas will be via the existing roadway. There will be disturbance to lands within the footprint of the works. There will be a requirement to excavate material (c.a. 5,000m^2 of topsoil) and remove buildings within the footprint of the works.

The proposed works are located entirely outside of any European sites. There will be no permanent physical changes within any European sites associated with the proposed works. There will be a requirement for additional hardstanding surface, within currently grassed areas on the northern end of the site. The grassland will be replaced with tarmacadam and hardcore chippings. This area will be cleared, levelled and re-surfaced. Habitats on the site are either existing made ground or grassland subject to a high degree of disturbance due to the existing infrastructure and industry associated with Huntstown and the surrounding environs. No evidence of utilisation of the works area by any SCI species was noted during the site walkover.

There will be no permanent physical changes associated with the proposed development on European sites. There is no potential for effects due to physical changes associated with the proposed works on European sites.

Resource Requirements

There are no resource requirements from European sites associated with the works. There is no potential for effects due to resource requirements associated with the works.

Transportation Requirements

Transportation to the works areas will be via the existing road network. The works will result in a temporary increase in local traffic volumes during the construction phase of the works.

There is no potential for effect on any European Sites due to transportation requirements associated with the works.

Emissions and Waste

Surface water emissions

There is limited potential for surface water run-off associated with site clearance, excavations, and stockpiled materials. Additional pollution control measures are outlined in Section 3.3 which form part of the proposed development to ensure local surface water to the development is protected from pollution and compliance with the existing EPA license (IEL Licence P0483-04).

Given that the site is EPA licenced, there is a pre-existing requirement to monitor surface water discharge from the entire site – which will include this discharge once the project is operational. The emission limit values under this licence will control surface water discharge as happened currently.

The existing and proposed upgrades to the drainage system will also allow for the settlement of cement fines and sediment in any discharge which may enter into the network due to surface water run-off during construction or operation. In the event that there is insufficient settlement to prevent the fines from entering into the Ward River, it is of note that the hydrological route to the European sites is significant in length (9.8km). The combination of surface-water inputs, and the coastal waters within Malahide Estuary will further attenuate any discharge such that there is no potential for impact to habitats within the European sites.

In addition, the habitats and species associated with these European Sites are coastal in nature. The input of sediment to these systems takes place as part of their natural processes. As such, there is no potential for significant effects to any European sites as there are no sensitive species or habitats associated that may be impacted by the works.

There is, therefore, no potential for significant effects on any European Sites caused by surface water emissions associated with the proposed development including the construction. operation and decommissioning phases.

Noise and Vibration

The proposed development will generate noise in the local vicinity during the phase. Malahide Estuary SAC has no noise sensitive QIs associated with it.

As previously noted, there is potential for SCI species to occur outside of the European Site boundary. Noise has the potential to cause disturbance to special conservation interest (SCI) species, should the species be present in sufficient proximity to the works and should the noise and vibration generated be of sufficient scale and/or duration to cause disturbance to such species.

The works have the potential to cause a short-term localised increase in noise levels at the works area. Wetland birds have been documented to tolerate noise levels at or below 70dB(A) (Cutts and Burdon, 2009). The noise levels associated with the works as per the noise assessment identifies, based on the worst-case construction activity noise, that the noise levels fall below 70dB within 55m of the works.

As outlined previously no evidence of utilisation of the works area by any SCI species was noted during the site walkover. Further, Malahide Estuary SPA is located a significant distance from the proposed works area. There is no potential for direct impact to core supporting habitat for SCIs. Likewise, there is no potential for disturbance effects to core roosting or foraging habitat for any SCI species.

As such, given the location of the works relative to the European sites, there is no potential for impact to any European sites caused by noise and vibration associated with the proposed development including the construction. operation and decommissioning phases.

4.1 Plans or Projects Which Might Act In-Combination

Article 6(3) of the Habitats Directive requires that:

'*Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives.*'

It is therefore required that the potential impacts of the proposed works are considered in combination with any other relevant plans or projects.

4.1.1 Plans

The project falls within lands zoned for Heavy Industry by Fingal County Council. The following is outlined in the Natura Impact Report[8] for the Draft Fingal County Development Plan 2023-2029[9];

It has been objectively concluded by Scott Cawley Ltd., at this stage of the plan making process, following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts associated with the Draft Plan and that the implementation of protective policies and objectives listed in Section 8 of this report (at this stage of the iterative process) that the Draft Plan will not adversely affect (either directly or indirectly) the integrity of any European site, either alone or in combination with other plans or projects.

The plan requires that projects are screened for Appropriate Assessment (AA) and subject to AA if they are likely to have significant effects on a European Site.

The current Fingal Development Plan (2017 – 2023) is also considered in relation to Appropriate Assessment. This plan (Objective DMS01) ensures all plans and projects in the County which could, either individually or in combination with other plans and projects, have a significant effect on a European site or sites are subject to Screening for Appropriate Assessment. Relevant projects are outlined below in Section 4.1.2.

4.1.2 Planning Applications

A detailed list of relevant planning applications has been reviewed to inform this AA screening. The nature and scale of other developments has been evaluated and the potential for spatial and temporal overlap within the topic-specific zone of influence (ZoI) has been assessed, having regard to the potential for in-combination effects on relevant European sites outlined in Table 3.4. This list of planning applications with descriptions is provided in Appendix A.

Several developments which overlap with, or are in proximity to the proposed development, or are within the same river catchment were considered to have the potential for in-combination effects on European sites. Those specific developments which warranted further investigation are discussed in more detail below.

Greater Dublin Drainage Project [Irish Water] (ABP SID Application GDD: PA0055 & PA06F.312131)

Greater Dublin Drainage Project consisting of a new wastewater treatment plant, sludge hub centre, orbital sewer, outfall pipeline and regional biosolids storage facility. The proposed RBSF is to be constructed at Newtown, Dublin 11. The site comprises approximately 11ha of partially developed land approximately 1.6km north of Junction 5 (Finglas) on the M50 motorway. The facility is designed to meet a 2040 storage target of approximately 35,400m3, which requires two storage buildings, each 105m long, 15.5m in height, with some small stacks to 18m, and 50m wide. The project is currently pending decision.

A screening for Appropriate Assessment carried out for the project determined the need for a Stage 2 NIS. The NIS concludes "*beyond reasonable scientific doubt that the proposed Project with the implementation of the prescribed mitigation measures will not give rise to significant*

[8] https://consult.fingal.ie/en/system/files/materials/22444/Natura%20Impact%20Report.pdf

[9] https://www.fingal.ie/fingal-development-plan-2023-2029-0

impacts either individually or in combination with other plans and projects, in a manner which adversely impacts the integrity of any designated site within the Natura 2000 network."

The mitigation measures outlined in the NIS for the Greater Dublin Drainage Project were in relation to surface-water pollutants and disturbance to SCI (bird) species at adjacent SPA sites. These features are not within the ZOI of the proposed development.

Given the nature and scale of the proposed development, and the developments distant location in relation to European sites, no potential for in combination effects are identified with this project.

Renewable Bioenergy Plant Upgrades [Huntstown BioEnergy Limited] (FW18A/0082)

The development is a wastewater treatment plant comprising a 3m high bunded area enclosing self-bunded chemical tank 1 (c.100m³ & 8.49m high), ammonia stripping plant (up to 12.15m high & c. 98m2), solid separation building (c. 62.66m² & 5.55m high), digestate storage tank (c. 2,000m³ & 9.94m high), digestate treatment tank (c. 1,267m³ & 9.94m high), flotation unit building (c. 51m² & 9.94m high), vacuum degassing tower (18m high), roof mounted blowers (2m high), 4no. mixing tanks (rectangular tanks: c. 8m³ & 2m high, cylindrical tanks: c. 3.5m³ & 2m high).

A screening for Appropriate Assessment was carried out for this project and concluded that "*the proposed modifications to the WwTP at the Renewable Bioenergy Plant at Huntstown, individually or in combination with other plans or projects, will not have a significant effect on any Natura 2000 site(s).*"

Given the nature and scale of the proposed development, and the developments distant location in relation to European sites, no potential for in combination effects are identified with this project.

This WWTP is now operational and is included and conditioned in the Industrial Emissions for the Renewable BioEnergy Plant (P0993-02).

Data Hall Buildings [Huntstown Power Company Ltd] (FW21A/0151)

The development comprises the construction of 2 no. data hall buildings comprising data hall rooms, mechanical and electrical galleries, ancillary offices including meeting rooms, workshop spaces, staff areas including break rooms, toilets, shower/changing facilities, storage areas, lobbies, outdoor staff areas, loading bays and docks, associated plant throughout, photovoltaic panels and screened plant areas at roof levels, circulation areas and stair and lift cores throughout.

A Natura Impact Statement was provided to inform the Appropriate Assessment was carried out for this project to Fingal County Council (FCC). This project was granted planning permission by Fingal County Council (FCC) who conducted an Appropriate Assessment. Suitable precautionary mitigation was outlined in the NIS that ensured no adverse effects are likely to distant European sites, and this was accepted by FCC as planning was granted.

Given the nature and scale of the proposed development, and the developments distant location in relation to European sites, no potential for in combination effects are identified with this project.

'Mooretown' 220kV substation [Huntstown Power Company Ltd] (FW21A/0151)

The development comprises construction of a 2 storey 220kV GIS substation known as 'Mooretown', four underground transmission cables and all associated and ancillary site development and construction works.

The planning report submitted for the project[10] outlined that the overall development would *maintain and enhance the ecological value of the site through a substantial green belt around the northern, eastern and southern boundaries and the integration of surface water attenuation basins, landscaping and planting to provide a wild life corridor and a soft transition to neighbouring sites and the public realm*.

The AA screening submitted concluded;

It can be excluded, on the basis of objective information and in the absence if mitigation measures, that the Proposed Development, individually or in combination with other plans or projects, will have a significant effect on a European site. An appropriate assessment is not, therefore, required.

Given the nature and scale of the proposed development, the location in relation to European sites, and this development, no potential for in combination effects is identified.

Electrical infrastructure between Huntstown Power Station and Finglas substation [TLI Group Ltd] (FW21A/0144)

The development comprises installation of electrical infrastructure between Finglas substation and Huntstown Power Station to facilitate the retirement of existing Electricity Supply Board overhead powerlines and facilitate site clearance for the future development of a data centre and substation.

The AA screening submitted concluded;

It can be excluded, on the basis of objective information and in the absence if mitigation measures, that the Proposed Development, individually or in combination with other plans or projects, will have a significant effect on a European site. An appropriate assessment is not, therefore, required.

This project was granted planning by Fingal County Council on 5th October 2021.

5 Screening Statement

The current assessment investigated the potential for significant effects on the Natura 2000 Network arising from the proposed development. The assessment considered whether the proposed project, alone or in combination with other projects or plans, will have potential for significant effects on any European sites. It is concluded that, in the absence of mitigation, there is no potential for significant effects on any European sites from the proposed project, either alone or in-combination with other plans and/or projects, in view of best scientific information and the sites' conservation objectives.

No measures are required to avoid or reduce harmful effects on European sites.

Table 5.1: Finding of No Significant Effects Matrix

Findings of No Significant Effect	
Description of the project or plan	The project comprises a temporary emergency power generation facility consisting of thirty-eight 1.43MWe generator units (Janbacher J420) on a site within the Huntstown Power Station, Finglas, Dublin 11.
Name and location of European sites	• Malahide Estuary SAC (000205) 9.8km from the Proposed Development • Malahide Estuary SPA (004025) 9.8km from the Proposed Development
Is the project or plan directly connected with or necessary to the management of the site?	No
Are there other projects or plans that together with the project or plan being assessed could affect the site?	No. There are no identified plans or consented projects which have the potential to act in-combination with the proposed development during all phases including construction, operation and decommissioning.
The assessment of significance of effects	
Describe how the project or plan (alone or in combination) is likely to affect the European site.	Hydrological connectivity was identified between the works area and the European sites.
Explain why these effects are not considered significant	The works area is located a significant distance from European sites, within an existing power plant. Given the nature, scale and location of the proposed development in relation to the European sites, and the nature of QI/SCI species for which it is designated, no potential for significant effects was identified.
List of agencies consulted: provide contact name and telephone or e-mail address	None
Response to consultation.	N/A
Data collected to carry out the assessment	
Who carried out the assessment?	Erin Johnston and Roger Macnaughton Ecologists with Mott MacDonald Ireland.
Sources of data?	Listed throughout this document.
Level of assessment?	Desktop and field study

6 References

Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities. (Department of Environment, Heritage and Local Government, 2010 revision)

Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 & PSSP 2/10

Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission, 2001)

British Standard (2014) Code of construction practice for noise and vibration control on construction and open sites – Part 2: Vibration

EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC Commission Notice C (2018) 7621.

EC (2021) Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC.

NRA (2006) Guidelines for the Treatment of Otters Prior to the construction of National Road Scheme.

Office of the Planning Regulator (March 2021). Appropriate Assessment Screening for Development Management. OPR Practice Note PN01.

Updated Commission guidance document on the strict protection of species of Community interest under the Habitats Directive (October 2021).

Appendices

A. Projects within 1km radius considered in In-combination Assessment

Table A.1: Planning Applications of Significance in the vicinity of the site (typically within 1km)

Planning/Licence Reference	Description of Development	Date Granted/Licenced
Developments directly overlapping with the Planning Application Boundary		
P0483-04	Industrial Emissions Licence for Huntstown 1 CCGT	Licenced 12/02/2013
P0072-02	Industrial Emissions Licence for Huntstown 2 CCGT	Licenced 30/01/2013
FW21A/0144	Installation of electrical infrastructure between Finglas 220kV Substation and Huntstown Power Station to facilitate the retirement of existing Electricity Supply Board overhead powerlines and facilitate site clearance for the future development of a data centre and substation (subject to separate planning applications).	Granted 05/10/2021
Strategic Infrastructure Development application VA06F.311528	Construction of a 2 storey 220kV GIS substation known as 'Mooretown', 4 underground transmission cables and all associated and ancillary site development and construction works (Fingal Co.Co. Ref. SID/03/21 – the application was made concurrent with the proposed data hall development proposal – Ref. FW21A/0151)	Pending decision by ABP (Decision date publicly listed as 08/04/2022)
Other Industrial, Utility Infrastructure and Commercial Developments within 1km		
W0277-03	Waste Licence for Huntstown Inert Waste Recovery Facility. This relates to the infill of a quarry void using natural stone and soil and to the recovery of C&D waste at the new C&D waste recovery facility.	Licenced 11/10/2018
P0993-02	Industrial Emissions Licence for the operation of an anaerobic digestion plant (including the associated wastewater treatment plant) operated by Huntstown BioEnergy Limited)	Licenced 27/08/2020
FW19A/0015	The development will consist of a Battery Energy Storage System (BESS) which will include up to 9 no. containerised battery storage modules (up to 14m length, 2.44m wide and 2.9m high) and ancillary equipment	Granted 30/04/2019
SID/02/18 (ABP 301798-18)	Regional Biosolids Storage Facility (Strategic Infrastructural Development) – as part of Ringsend WwTP upgrade SID	Granted 24/04/2019
FW18A/0159	An increase in the annual volume of waste to be imported to the permitted bioenergy plant at Huntstown, North Road, Finglas, Dublin 11. The proposed increase is 9,900 tonnes, which would take the permitted volume from 90,000 tonnes to 99,900 tonnes.	Granted 30/01/2019
FW19A/0090	Installation of 10 no. containerised gas fired generating units with an export electricity capacity of 20 megawatts and underground cabling route c 1.45km along the R135 road.	Granted 10/01/2020
FW20A/0021	The development will consist of storage and logistic facilities comprising yards, warehouses, workshops and ancillary offices at Plots 1, 3, 4, 5, 6, 7, and 9 and	Granted 02/07/2020

Planning/Licence Reference	Description of Development	Date Granted/Licenced
	amendment to permitted development (Reg. Ref. FW19A/0101 and F18A/0139) at Plot 8 and internal road network at Dublin Inland Port. All development to take place on a site of c. 10.4 ha. The application is for a 10 year planning permission.	
FW20A/0219	Permission for an amendment to the original planning permission, at this site, for a gas peaking facility with 10 no. containerised gas fired generating units, with an export capacity of 20 megawatts (MV) under planning reference FW19A/0090. Amendments are proposed to the gas peaking will consist of the installation of 6 no. battery storage units with an export electricity capacity of 10-15 MV and 4 no. containerised gas fired generating units with an export electricity capacity of 10MV, in replacement for the 10 no. containerised gas fired generating units, granted under planning reference FW19A/0090. 3 no. inverter transformers will also be added to the site, being the battery storage units.	Granted 25/02/2021
Strategic Infrastructure Development application PA06F.301908/PA06F.312131	Greater Dublin Drainage Project consisting of a new wastewater treatment plant, sludge hub centre, orbital sewer, outfall pipeline and regional biosolids storage facility	Granted by ABP with conditions 11/11/2019. Board's Decision quashed by Order of the High Court (Perfected on 16th July 2021), New Case Number ABP-312131-21.
FW20A/0211	The development will consist of 3 no. buildings for industrial/warehouse/logistics use (Units 3,4 and 5) with gross floor area of 24,356sq.m. Each building will measure 18.1m high (at parapet level) and have 2 storey ancillary offices. Elevational signage will be provided. The units will form Phase 2 of the Vantage Business Park, with Phase 1 to the south (units 1 and 2) under construction. The proposed development includes 39 HGV parking spaces, 224 car parking spaces, 134 cycle parking spaces, 29 dock levellers and 7 grade loading bays. All associated site works including diversion of existing foul rising main, boundary treatments, landscaping, service yards, internal road and footpaths, swales, lighting, 3 no. free standing signs, signage at entrance, refuse storage, substation, foul pumping station, extension of foul infrastructure from Phase 1, modified vehicular entrance off the R135 (including new entrance gate and pillars) and dedicated new footpath and cycleway along the east side of the R135.	Granted 19/05/2021
FW20A/0126 (ABP-309855-21 -1st party appeal)	The development will comprise the provision of 4 No. warehouses with marshalling offices, ancillary office space, staff facilities and associated development. The buildings will have a maximum principal height of 17.070 No. metres to the top of the parapet above ground floor level and will comprise the following areas: Unit 1 will have a gross floor area of 21,578 sq.m. including a warehouse (20,252 sq.m.), marshalling office (66 sq.m.), ancillary office space (1,216 sq.m.) and plant (44 sq.m.); Unit 2 will have a gross floor area of 9,206 sq.m. including a warehouse (8,347 sq.m.), marshalling office (66 sq.m.), ancillary office space (757 sq.m.) and pant (36 sq.m.); Unit 3 will have a gross floor area of 16,525 sq.m. including a warehouse (15,478 sq.m.), ancillary office space (944 sq.m.) and plant (37 sq.m.); and Unit 4 will have a gross floor area of 7,342 sq.m. including a warehouse (6,648 sq.m.), marshalling office (66 sq.m.), ancillary office space (589 sq.m.) and plant (39 sq.m.). A	Granted 12/07/2021 Decided by ABP (11/10/20221)

Planning/Licence Reference	Description of Development	Date Granted/Licenced
	gate house with a gross floor area of 14 sq.m. will be positioned to the south-west corner of the site. The development will also include the repositioning of the access from the L3125 Road to the north of the site to provide a new entrance and a second vehicular access will be provided from the R135/Elm Road to the south-west. Road upgrade works are proposed along the L3125 to the north of the site which include the partial upgrade of Kilshane Cross signalised junction to incorporate a left turning lane and upgraded signals on the L3125 Local Road eastern approach arm and the provision of cycle paths and pedestrian footpaths. There will also be internal roadways; pedestrian access; 502 No. ancillary car parking spaces; bicycle parking; HGV parking and yards; level access goods doors; hard and soft landscaping; boundary treatments; ESB substations; signage; PV panels; lighting and associated site development works above and below ground. The total gross floor area of the development is 5,763 sq.m. (including warehouse structures, gate house and ESB substations).	
FW21A/0151 / PL06F.313583 (3rd Party appeal)	Construction of 2 no. data hall buildings (Buildings A and B) comprising data hall rooms, mechanical and electrical galleries, ancillary offices including meeting rooms, workshop spaces, staff areas including break rooms, toilets, shower/changing facilities, storage areas, lobbies, outdoor staff areas, loading bays and docks, associated plant throughout, photovoltaic panels and screened plant areas at roof levels, circulation areas and stair and lift cores throughout.	Granted 20/04/2022 Currently on appeal to An Bord Pleanála (Appeal decision due 19/09/2022)
FW22A/0068	The development will consist of 1 no. building for warehouse/logistics use, to be known as Unit 6, with a gross floor area of 9,821 sq.m. The building will measure 18.1m high (at parapet level) and have 2 storey ancillary offices. Elevational signage will be provided. The unit will form part of Phase 2 of Vantage Business Park along with Units 3, 4 and 5 (permitted under reference FW20A/0211), Phase 1 to the south consists of Unit 1 under construction and Unit 2 complete in 2019. The proposed development includes 6 no. HGV parking spaces, 82 no. car parking spaces, 58 no. cycle parking spaces, 8 no. dock levellers and 2 no. grade loading bays. All associated siteworks including diversion of existing foul rising main, boundary treatments, landscaping, service yards, internal road and footpaths, dry detention basins/swales, lighting, 1 no. free standing sign, security and access control room, signage at entrance, refuse storage, heat pumps and all associated siteworks including drainage infrastructure.	Decision made 03/06/2022 (Final Grant pending)

B. Drawings

229101133-MMD-00-XX-DR-D-0001

229101133-MMD-00-XX-DR-D-0002

229101133-MMD-00-XX-DR-C-0010

229101133-MMD-00-XX-DR-D-0011

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