

3.0 DESCRIPTION OF DEVELOPMENT

3.1 OPERATIONAL OVERVIEW

The proposed 110kV electrical substation (hereafter referred to as the “Baldonnell Substation”) and associated grid connection are being developed to provide a connection from the adjacent peaking power plant to the existing electricity transmission system.

Electrical power will be exported from the power plant’s main transformers through the proposed Baldonnell Substation to the existing Barnakyle 110kV substation, which is operated by EirGrid and owned by ESB. The associated grid connection works will consist of underground cabling.

The gas fired peaking power plant will operate when electricity demand is higher than average, typically during morning and evening peak usage times. The need for peaking plants on the Irish electricity grid has grown, as renewable forms of power generation increase their penetration onto the system. The variability of renewable generators increases EirGrid’s challenge to operate an efficient, safe, and secure electricity system. The modular design of the Profile Park peaker plant, and its fast response capability, means it can react quickly to vary its output, mirroring the peaks and troughs of electricity generation, from renewable generators.

The development of the peaker plant with its associated substation and grid connection, are in line with policies set out in the National Development Plan and the Climate Action Plan 2021. The development is also consistent with Ireland’s strategy to achieve its binding 2030 emission targets.

The proposed development will comprise of:

- EirGrid/ ESN Control Room building
- Associated Internal 15kV and 110kV Underground Cabling
- Installation of a 15/110kV Transformer (TRAFO) with associated equipment including:
 - Cable Sealing End
 - Surge Arrestor
 - Earth Disconnect
 - Current /Voltage Transformer
 - Circuit Breaker
- 110kV underground cable to Barnakyle 110kV substation 3 No Power Ducts and 2 No Telecoms Ducts.
- Diesel Generator
- Security Fencing, Security Cameras and Poles
- Lights/Lamp Poles
- Lightning Masts
- Temporary Construction Compound
- And all other associated site development plant and equipment and other works including surface water and foul wastewater drainage, within an overall redline boundary measuring approximately 2.6 hectares.

3.2 DESCRIPTION OF PROPOSED DEVELOPMENT

3.2.1 Substation

The proposed Baldonnell 110kV substation site measures approximately 87.75m long, 22.25m wide and will be bounded by a 2.6m high palisade fence.

The compound will house a 126m² EirGrid 110kV substation control building which will measure 14m long x 9m wide x 6.7m high and will be finished externally with scud render & float in sand, white cement plaster, nap finish. The roof of the building will consist of standard Selected Blue/Black slate finish.

Associated outdoor electrical equipment will include:

- 1 no. 110kV transformer.
- 110kV Switchgear.
- an associated internal 15kV underground cable.
- an internal access track.
- a diesel generator.
- Lightning masts* measuring 18m in height.
- Approximately 15 Light Poles** measuring 3.5m in height.
- 2 no. security cameras and poles will be installed.

The site has been designed to meet EirGrid's specifications.

Access to the substation compound will be provided via the adjacent gas fired power plant site, with 2 no. 4.9m wide access gates proposed along the eastern boundary of the proposed substation site.

*Lightning Mast Design will be subject to a lightning survey and confirmed during the detailed design stage of the project.

** Lamp Poles will be the subject of a light survey and the exact number to be provided will be confirmed during the detailed design stage of the project.

It should be noted that within this planning application to An Bord Pleanála the location of the proposed IPP compound is overlapping with an IPP compound already approved under the adjacent Gas Fired Peaking Power Plant application Reg. Ref. SD21A/0167. However the infrastructure proposed as part of this planning application differs slightly. It is intended to build the IPP compound as set out under this planning application with any changes or amendments to application SD21A/0167 to be captured under a separate future consents process.

3.2.2 Grid Connection

The proposed grid connection will consist of underground cabling (UGC).

The underground cable route exits the proposed Baldonnell 110kV Substation from the northside fence and heads in a westerly direction. The route follows the private road (Falcon Avenue) west for approximately 250m until it reaches the entrance to Barnakyle 110kV Substation. The cable then turns south to enter the Barnakyle substation through existing ducts.

This section of the route is almost entirely within the road except for the crossover into the substation.

A site layout of the proposed Baldonnell 110kV substation and associated grid connection is provided under Figure 3-1.

The UGC works will consist of the installation of 6 No. ducts in an excavated trench to accommodate 3 No. power cables, 2 No. fibre communications cable to allow communications between the Baldonnell and ESB Barnakyle 110kV Substation and one earth continuity conductor (ECC).

3.2.3 Temporary Construction Compound

A temporary construction compound will be provided approximately 185m southeast of the proposed development site, the location of which is indicated in Figure 3-2.

The compound will comprise of areas for temporary site offices (portacabins), staff welfare facilities, car parking, material and equipment storage and material laydown areas. Potable water, foul water and electrical connections will be provided to accommodate the above.

The site will be fully reinstated upon completion of all works.

3.3 GAS FIRED PEAKING POWER PLANT

For the purpose of cumulative assessment, this section of the report provides a description of the adjacent gas fired peaking power plant infrastructure. The power plant will comprise the following main components:

- Site Entrance.
- Engine Hall comprising up 5 no. gas engines and 2 no. exhaust stack clusters.
- Electrical Annex Building.
- Workshop Building.
- Security Hut.
- Radiator Coolers.
- Gas Above Ground Installation (AGI).
- Tank Farm comprising; 2 No. Diesel Oil Storage Tanks, 2 No. Lube Oil Storage Tank. 1 No. Urea Storage Tank
- Fencing;
- Car Parking; and
- Landscape planting around perimeter of site.

A site layout of the gas fired power plant is provided under Figure 3-3.

3.4 CONSTRUCTION PHASE ACTIVITIES

3.4.1 Construction Phase Description and Duration

It is expected that construction will commence in 2023 with design, construction, and commissioning activities lasting for approximately 12 months. The proposed Baldonnell 100kV substation is expected to become fully operational, along with the gas fired power plant , which

is currently expected to be operational in 2024, subject to timely receipt of the necessary statutory consents.

The total number of construction staff on-site will vary during the construction phase of the works but are expected to peak at approximately 20 persons per day.

Standard working hours for construction will be 7.00am to 7.00pm Monday to Friday and 8.00am to 9.00pm on Saturday (if required), with no works on Sundays or Bank Holidays except in exceptional circumstances or in the event of an emergency. All site personnel will be required to wear project notification labelling on high visibility vests and head protection so that they can be easily identified by all workers on-site.

Please refer to Appendix 3-1 of this report, for a full description of the construction methodology for the proposed development.

3.4.2 Construction Environmental Management Plan

The primary objective of the Construction Environmental Management Plan (CEMP) is to safeguard the environment, site personnel, and nearby sensitive receptors, i.e., occupiers of residential and commercial properties, from site activity which may cause harm or nuisance. It is therefore intended to provide a framework to ensure transparent and effective monitoring, prevention, management, and compensation measures to address the environmental impacts associated with the proposed substation.

During construction, an EPC Contractor(s) will be appointed with responsibility for constructing the proposed substation. Performance of the EPC Contractor(s) will be monitored on a regular basis. The following activities will be undertaken throughout the duration of the construction period:

- Review contractor documents against the requirements of the CEMP;
- Undertake regular audits;
- Continuously check records;
- Set up a contractor reporting structure; and
- Conduct regular meetings where the Environment, Health & Safety (EHS) matters will be an agenda item.

It will be the responsibility of the EPC contractor(s) to implement the construction phase management and monitoring measures outlined in the CEMP. The EPC Contractor(s) will be required to undertake regular monitoring and inspections, keep up to date records as prescribed in the CEMP, and report regularly to Greener Ideas Limited project management team.

During operation, Greener Ideas Limited will have responsibility for the operation of the adjacent gas fired power plant and part of the proposed Baldonnell 110kV substation, with the other half of the substation site owned and operated by ESB and EirGrid.

A copy of the CEMP is provided in Appendix 3-2.

3.4.3 Construction and Demolition Waste Management Plan

A Construction and Demolition Waste Management Plan (CDWMP) has been prepared in accordance with the Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for Construction & Demolition Projects, published by the EPA in November

2021. These guidelines replace the 2006 guidelines previously published by the former Department of the Environmental, Heritage and Local Government (DOEHLG) and the National Construction and Demolition Waste Council (NCDWC).

The main objective of these guidelines is to provide a practical and informed approach informed by best practice in the prevention and management of C&D wastes and resources from design to construction of a project (including consideration of deconstruction). The guidelines provide those involved in a project, including clients, developers, designers, practitioners, contractors, sub-contractors and competent authorities, with a common approach when preparing Resource and Waste Management Plans (RWMPs) for C&D projects.

The requirement to develop, maintain and operate this CDWMP to a detailed Construction & Demolition Waste Management Plan (CDWMP) will form part of the contract documents for the project.

On commencement of the project, the EPC Contractor appointed to undertake the works will be responsible for the development of this CDWMP and the implementation of all necessary protocols and measures to ensure regulatory compliance, including the provision of data to Greener Ideas Limited to enable fulfilment of reporting obligations.

The CDWMP is included in Appendix 3-3 of this EIAR.

3.4.4 Pre-Construction

The pre-construction phase of development includes preparatory works (i.e., post planning surveys and reporting) and consultation with statutory bodies and the public.

It will be required to carry out site investigations along the cable route, prior to construction, to confirm design assumptions. The following investigation methods may be carried along the grid connection cable route:

- Slit trenches at locations of service crossings (Full road width).
- Trial holes along the route to ascertain ground conditions and thermal resistivity of the soil.

Following this process, site clearance activities will commence. Typical activities will include preparation of the construction working area and topsoil stripping. Prior to the commencement of construction activities, the area for development will be fenced off, and the site will be levelled to 74.6 AOD. Soil management proposals will be developed and will indicate:

- The intended soil stripping depth;
- Options for separating and keeping different soils apart;
- Methods for handling soil;
- The location and height of soil storage mounds and how long they will be present; and
- Proposals for reinstating or disposing of soils.

Site mobilisation will see the establishment of temporary facilities to accommodate competent construction staff, their plant, equipment, and materials. During mobilisation the site staff will establish safe systems of work, to ensure construction can proceed without endangering the environment, the public or themselves. Training in health and safety will be provided for all staff during the mobilisation period, and all staff will be required to hold SAFEPASS or equivalent certification.

3.4.5 Civil and Construction Works

Concrete pouring and filling will be fully controlled to ensure that cement bound materials do not present any pollution risk. All concrete pouring and filling will be supervised and monitored.

Trucks, mixers, and concrete pumps that have contained concrete will be washed out in a designated impermeable area to prevent pollution. Where possible, washout water will be stored and re-used.

A Construction Traffic Management Plan (CTMP) will be prepared in advance of the construction phase of development in order to ensure safe movements and interactions between vehicles and pedestrians, both on and adjacent to the site. The CTMP will cover all expected work activities, delivery and storage areas, and shall be expanded and / or amended to cover new or altered activities as they arise. The main components of the CTMP will be:

- Description and scope;
- Staging of the works;
- Traffic control during construction;
- Trucks movements to the site;
- Road signs for full and partial road closure;
- Parking for workers and subcontractors;
- Pedestrian safety;
- Site traffic management supervisor; and
- Abnormal load (i.e., for substation transformer) and associated permit applications applied for and secured from/by South Dublin County Council in advance of abnormal load delivery to site.

The CTMP will also provide for the requirement that entrances and roads are kept clean and clear of obstructions to prevent the spillage or deposit of clay, rubble, or other debris on the entrance and other roads throughout the contract period.

3.5 OPERATIONAL PHASE ACTIVITIES

3.5.1 Hours of Operation

The proposed Baldonnell 110kV substation will operate in parallel with the adjacent gas fired power plant. Its actual operating hours will be determined by EirGrid, who are the Transmission System Operator (TSO). They will issue dispatch instructions to the plant from the National Control Centre using an Electronic Dispatch Instruction Logger system (EDIL).

The environmental modelling undertaken as part of this EIA Report has predicted no significant environmental effects based on a worst-case operating scenario (i.e., operating 24 hours a day, 365 days per year unless otherwise stated).

3.5.2 Operational Staff

The proposed Baldonnell 110kV substation will be unmanned.

3.5.3 Utilities and Services

Surface Water Drainage

It is proposed to discharge surface water generated on the site into a Soakaway located beneath the proposed car parking area. Due to the poor infiltration rate of the site, it is proposed to provide an overflow pipe within the soakaway to discharge surface water into the new infrastructure on the neighbouring power plant site. Surface water discharge rate will be maintained by a flow control device, limiting discharge rate from the site to 2l/s.

The surface water drainage network has been designed and simulated for a range of storm events (including 1 in 5, 1 in 30 and 1 in 100-year storm events) using the Source Control module of MicroDrainage. Refer to Appendix A for simulation results.

As part of the surface water drainage design strategy, the following items have been included in order to effectively manage surface water at the site:

- Petrol Interceptor – Full retention petrol interceptors have been included in the surface water collection system on a precautionary basis. The full retention petrol interceptors will be fitted with visual and audible alarms to ensure containment facilities are adequately maintained. In addition, this alarm will be linked to telemetry facilities such that relevant staff will be alerted if oil is detected at trigger levels;
- Hydrobrake - The rate of discharge from the proposed development will be controlled using a Hydrobrake. The total rate of discharge was determined using the QBAR greenfield runoff method. The total rate of discharge was calculated at 2.00l/s;
- Soakaway - It is proposed to install a soakaway beneath the parking area. The water, once discharged to the soakaway, will be allowed to infiltrate into the groundwater. Groundwater in the area was recorded at approximately 71.8mOD from the standpipe results. When the rate of water being collected by the underground pipes exceeds the infiltration rate into the ground, the collected water will be directed to an overflow pipe. The overflow pipe will discharge the excess water into the surface water infrastructure in the neighbouring Power Plant Site;
- Down Pipes/Gullies – It is proposed that surface water will be collected from roofed buildings via standard rainwater down pipes while runoff from un-roofed structures will drain to the access roads where it will enter the drainage network via road gullies. It is also proposed that gullies and drain entry points will incorporate silt traps to remove any grit or silt which may be washed into the drainage system.
- Flow Control Device – It is proposed to limit the surface water runoff from the site to be similar to the Greenfield runoff as per the requirements of the Great Dublin Strategic Drainage Study. It is proposed to install a Hydrobrake downstream of an attenuation tank to limit the flow from the site to 4.1l/s, which will be located on the adjacent power plant site.

Surface water drainage calculations informing the drainage design are provided in Appendix 3-4.

Foul Wastewater Drainage

Although the proposed substation will be unmanned, any wastewater generated at the proposed development site will arise from a welfare facility, consisting of a sink and toilet for operatives use when on site.

It is proposed to discharge wastewater generated on the site into the permitted new infrastructure on the neighbouring Power Plant site, reducing the number of connections required into the existing network within the Profile Park Campus Falcon Avenue access road. The wastewater layout has been designed in accordance with Irish Water's latest standard details and code of practice.

In relation to the associated Gas Fired Peaking Plant, Irish Water has confirmed via its 'Pre-connections Enquiry' process that water wastewater can be facilitated through the existing network (IW reference: CDS21002228). A copy of Irish Waters confirmation is included in Appendix 3-5.

Lighting

Approximately 15 no. Lights are proposed as part of the proposed development.

3.6 HEALTH AND SAFETY CONSIDERATIONS

3.6.1 Project Supervisor Construction Stage

A Project Supervisor Construction Stage (PSCS) will be appointed by Greener Ideas Limited for the construction phase of the substation. The PSCS will be responsible for managing and co-ordinating the safety and health issues on site.

The PSCS will develop a suitable Safety and Health Plan for the project prior to the commencement of construction. The plan will explain how the key safety and health issues will be managed. The other responsibilities of the PSCS include the following:

- Co-ordinate the implementation of the construction regulations by contractors;
- Organise co-operation between contractors and the provision of information;
- Co-ordinate the reporting of accidents to the Health and Safety Authority;
- Notify the Health and Safety Authority before construction commences;
- Provide information to the site safety representative;
- Co-ordinate the checking of safe working procedures;
- Co-ordinate measures to restrict entry on to the site;
- Co-ordinate the provision and maintenance of welfare facilities;
- Co-ordinate arrangements to ensure that general construction workers and security workers have a Safety Awareness card, e.g., Safe Pass and a Construction Skills card where required;
- Co-ordinate the appointment of a site safety representative where there are more than 20 persons on site;
- Appoint a safety adviser where there are more than 100 on site;
- Monitor the compliance of contractors and others and take corrective action where necessary; and

- Notify the Authority and the client of non-compliance with any written directions issued.

It is important to note that the presence of a PSCS does not release other contractors/employers of their obligation to comply with their statutory safety and health obligations.

3.6.2 Seveso

No substances will be stored on the proposed Baldonnell 110kV substation site and as such the project is not subject to any of the requirements contained in the Chemical Act (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2015.

3.6.3 Chemical Storage

Batteries will be on site within the EirGrid compound building as part of normal operation. The transformer will be oil filled but there is no requirement for additional oil to be stored on site. The diesel generator will require diesel onsite for power outage situations only. It is not expected to have diesel stored on site. Otherwise, no chemicals will be stored on site.

3.6.4 Firefighting Systems and Controls

A dedicated private fire ring main and hydrants, will be installed as part of the adjacent power station, that will serve the proposed substation. They will comply with IS 391:2020 Fire mains for buildings - Installation, commissioning, maintenance, and testing. A minimum of seven hydrants are being provided on the site, three of which are within close proximity of the proposed substation and on a route accessible by fire appliances. The hydrants will comply with the requirements of BS 750:2012 Specification for underground fire hydrants and surface box frames and covers. All hydrants will be conspicuously marked in accordance with BS 3251:1976 Specification of indicator plates for fire hydrants and emergency water supplies. The hydrants will be located such that they are not less than 6m or more than 46m from a building, and the distance from a hydrant to a vehicle access roadway or hard standing for fire appliances is not more than 30m.

A water storage tank will be provided on the power station site to ensure the security of the water supply for operational and firefighting needs. The tank shall serve both the ring main and hydrants. The latest calculations as provided to Irish Water, indicate that the water tank shall have a dedicated firefighting water storage capacity of circa 545m³, which will provide water at a rate of 75L/minute for 90 minutes.

3.7 DECOMMISSIONING

The proposed Baldonnell 110kV substation is expected to be operational in accordance with the adjacent gas fired power plant. The power plant is expected to be operational for at least 25 years. On cessation of activities, the plant will either be redeveloped as a power related facility or the site will be redeveloped in an alternative form.

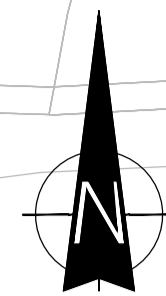
In the event that the substation is decommissioned, the following programme will be implemented:

- All plant equipment and machinery will be emptied, dismantled, and stored under appropriate conditions until it can be sold. If a buyer cannot be found, the material will be recycled or disposed of through licensed waste contractors and hauliers. If plant and

machinery is required to be cleaned on site prior to removal, all necessary measures will be implemented to prevent the release of contaminants.

- All waste will be removed from the facility; and
- The site and all associated buildings will be secured.
- Waste will be recycled wherever possible. All waste movement, recycling, and disposal operations will be controlled by licensed waste contractors.

Details of provisions to decommission and render safe or remove all materials, waste, ground, plant, or equipment contained on or in the site that may result in environmental pollution will be agreed with the Environmental Protection Agency as part of the Industrial Emissions Licensing process.



Map Series:
Prime2 Vector Data - 1:2500

Map Sheets:
3325-B, 3326-A, 3325-D & 3326-C

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PROJECT

110kV Baldonnell Substation

CLIENT

Greener Ideas

CONSULTANTS

NOTES:

- All proposed routes shown are indicative only at this stage and are subject to further assessment.
- Additional watercourses and services may be encountered.
- The property boundaries shown (while an accurate representation) are for information purposes only. Precise digital boundaries will be obtained from PRAI & mapped in advance of any formal Section 53 Wayleave or Deed A / Deed B being served on the landowner.

LEGEND:

- Proposed 110kV Grid Connection UGC (0.266km) ---
- Planning Boundary shown thus ---
- *Approved gas fired Power Plant application reference SD21A/0167 - currently under construction* shown thus ▨
- Barnakyle 110kV Substation shown thus ▨
- Existing ESB Underground UG Cable shown thus ---
- Existing ESB Castlebagot - Inchicore 220kV Underground UG Cable shown thus ---
- Existing Irish Water Network shown thus ---
- Existing Surface Water Network shown thus ---
- Existing GNI Gas Network shown thus ---
- Existing Contour Lines shown thus ---

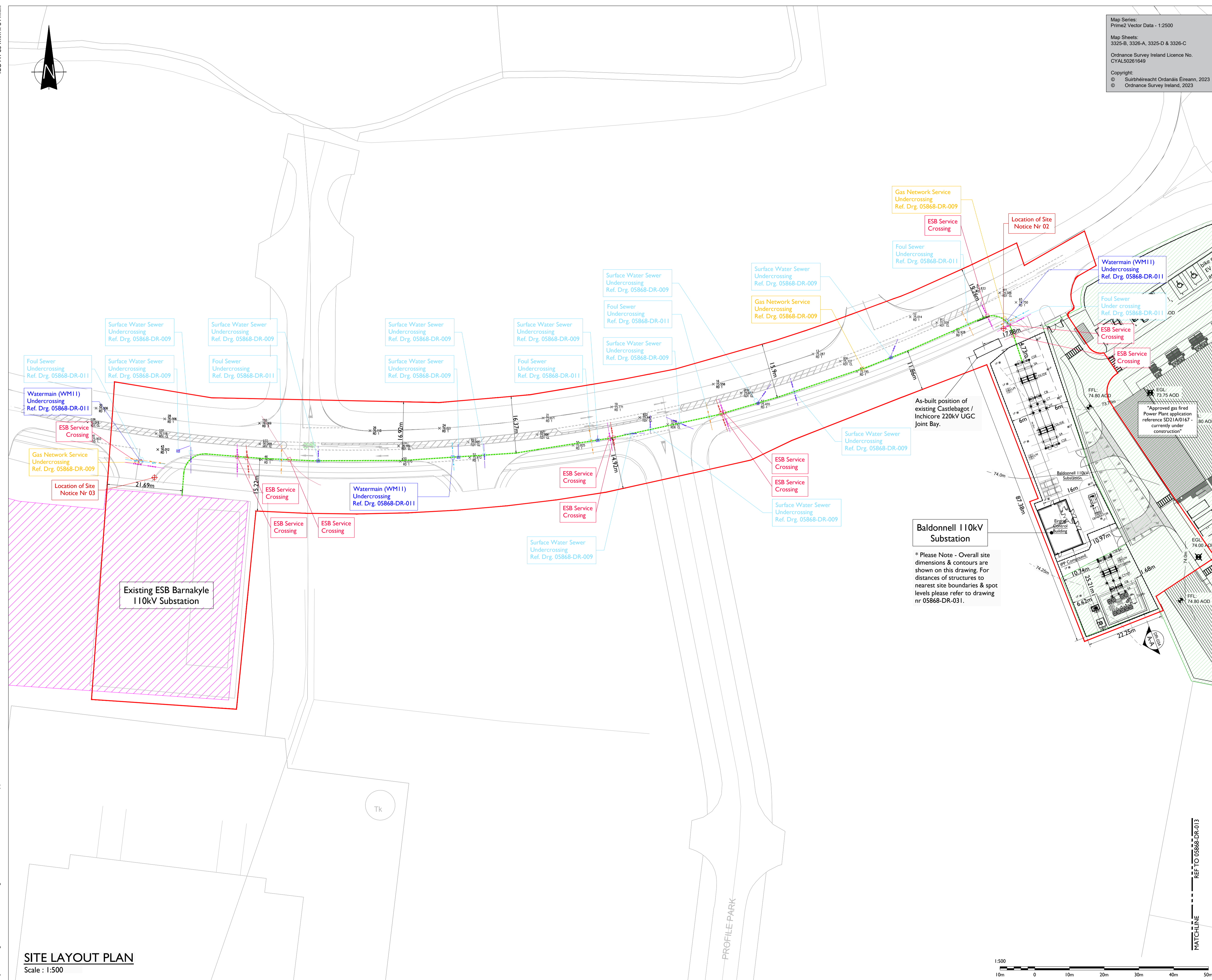
ISSUE/REVISION

NO.	DATE	DESCRIPTION
P6	31.05.23	Issued for Planning
P5	23.05.23	Issued for Planning
P4	19.05.23	Issued for Planning
P3	11.05.23	Issued for Planning
P2	15.03.23	Issued for Planning
P1	24.02.23	Issued for Planning
I/R	DATE	DESCRIPTION

PROJECT NUMBER
05-868

SHEET TITLE
Figure 3-1
Site Layout Plan -
UGC Grid Route

SHEET NUMBER
05868-DR-004

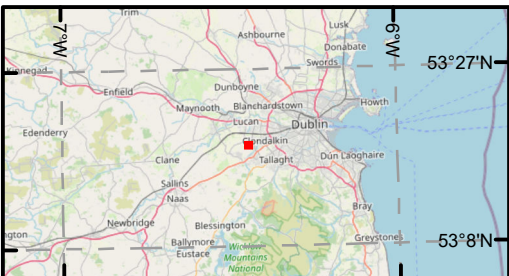


Project Management Initials: Designer: GD Checked: KC Approved: GH

SITE LAYOUT PLAN
Scale : 1:500

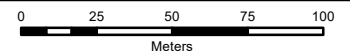
PROFILE PARK

MATCHLINE
REF TO 05868-DR-003



Legend

- Planning Application Boundary
- Proposed Temporary Construction Compound



- NOTES**
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
 2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
 3. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
 4. ALL LEVELS RELATE TO ORDANCE SURVEY DATUM AT MALIN HEAD

Rev	Date	Description	By	Chkd.
A	25/05/2023	Final issue	S.P	C.N

Client: 

Project: Profile Park power plant - Substation Application

Title: Figure 3-2: Proposed Temporary Construction Compound

Scale @ A3: 1:2,500

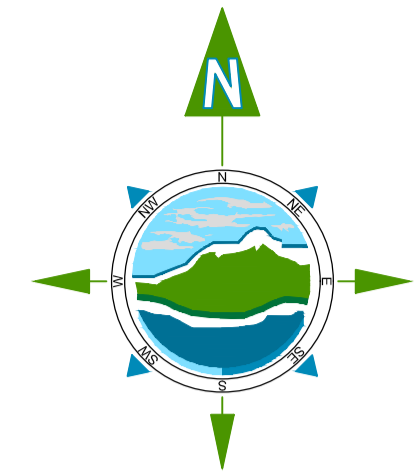
Prepared by: S.Pezzetta Checked by: C.Naughton Date: May 2023

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Map Ref: 11069-010-C.C-AE-TOB-A Draft: A

Grange Castle Golf Course



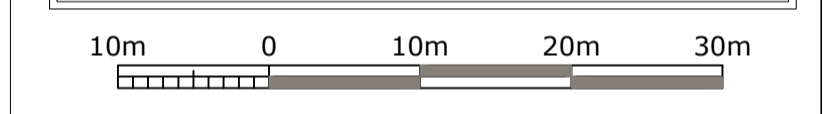
GENERAL LEGEND

PLANNING APPLICATION BOUNDARY		GRAVEL SURFACED ACCESS ROADS	
TARMAC SURFACED ACCESS ROADS		CRUSHED ROCK HARDSTAND AREA	
CRUSHED ROCK HARDSTAND AREA		GRASSCRETE PARKING AREA	
GRASSCRETE PARKING AREA		ATTENUATION POND	
ATTENUATION POND		PEDESTRIAN FOOTPATH	
PEDESTRIAN FOOTPATH		OPEN LAND DRAIN	
OPEN LAND DRAIN		2.4m HIGH PALADIN SECURITY FENCE	
2.4m HIGH PALADIN SECURITY FENCE		EXISTING GROUND LVL.	
EXISTING GROUND LVL.		EXISTING BALDONNELL STREAM CULVERT	
EXISTING BALDONNELL STREAM CULVERT		EXTERNAL BOUNDARY TREATMENT	
EXTERNAL BOUNDARY TREATMENT		FINISHED FLOOR LVL.	
FINISHED FLOOR LVL.			

As agreed with South Dublin County Council in the pre-application consultation meeting the final finishes, including cladding materials and colour codes, will be agreed with the Council post planning through planning condition. Greener Ideas Limited will ensure only Council approved finished are applied on site.

- NOTES:**
- FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.
 - ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
 - ENGINEER/EMPLOYERS REPRESENTATIVE, AS APPROPRIATE, TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
 - THE CONTRACTOR SHALL UNDERTAKE A THOROUGH CHECK FOR THE ACTUAL LOCATION OF ALL SERVICES/UTILITIES, ABOVE AND BELOW GROUND, BEFORE ANY WORK COMMENCES
 - ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

CO. DUBLIN
 OSI 1:2,500 Sheet No's: 3325-B, 3325-D, 3326-A & 3326-C.
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Rev	Date	Description	By	Chkd.
C	01.07.22	LICENCE ISSUE	MN	RH
B	23.05.22	CFI ISSUE	MN	LB
A	01.03.22	PLANNING ISSUE	MN	MMCC



Project:
Baldonnell 110kV substation

Title:
FIGURE 3-3 APPROVED GAS FIRED POWER PLANT SITE LAYOUT PLAN

Scale @ A1: **1:500**
 Prepared by: M. Nolan
 Checked: M. McCarthy
 Date: March 2022
 Project Director: S. Tinnelly
 Drawing Status: Planning

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 Drawing No.: **11069-2003** **C**

BUILDING & PLANT ID KEY

Item ID	Item Name
1	Gas Engine Hall
2	Electrical Annex
3	Radiator Coolers
4	Gas AGI
5	Workshop
6	Exhaust Stack
7	Tank Farm Bund
8	Attenuation Pond
9	Diesel Oil Storage Tank - 966m³
10	Diesel Oil Storage Tank - 966m³
11	Urea Storage Tank - 73m³
12	Lube Oil Storage Tank - 26m³
13	Lube Oil Maintenance Tank - 26m³
14	Effluent Collecting Tank - 26m³
15	Sludge Discharge Pump Module
16	Urea Container
17	Tank Farm Building
18	Fire Water Tank
19	Fire Pump Station
20	Water Treatment Unit Shelter
21	Treated Water Tank
22	Gas Pressure Reduction Skid
23	Heater Withdrawal Area
24	Gas Outlet Valve
25	Gas Inlet Valve
26	Temporary Pig Trap
27	Standby Diesel Set
28	FM200
29	Emergency Exit / Escape
30	Transformer
31	Gas Engine Hall Ventilation Inlet
32	Gas Engine Hall Exhaust Gas Silencer
33	Pipe Way to Cooler Area
34	Pipe Rack
35	Pipe Bridge
36	Grasscrete Parking Area
37	Entrance 1 Gate
38	Entrance 2 Gate
39	Security Fence
40	Platform / Gantry
41	Platform Access
42	Security Hut
43	Electrical Cable Duct
44	Pre-Heat Gas Boiler

PROPOSED ELECTRICAL SUBSTATION TO BE OWNED AND OPERATED BY THIRD PARTY OPERATORS. UNDER SEPARATE PLANNING APPLICATION.

PROPOSED GAS INFRASTRUCTURE TO BE OWNED AND OPERATED BY THIRD PARTY OPERATORS.

