Appendix II

Planning Statement Incorporating Environmental Considerations - prepared by Entrust Limited

PROPOSED 110kV SUBSTATION AND 110kV UNDERGROUND GRID CONNECTION

LAND AT GREAT ISLAND,
KILMOKEA, CO. WEXFORD

(N: 522833669; E: 698524645 - Y 615117.34, X 669236.6 (ITM))

PLANNING STATEMENT

INCORPORATING ENVIRONMENTAL CONSIDERATIONS

Prepared by

Entrust Limited

January 2024

Contents

1. Introduction

1.1 This Planning Statement incorporating Environmental Considerations **(the Statement**) has been prepared by Entrust Limited, a firm of Chartered Planning Consultants (**the Agent**), on behalf of Kilmannock Battery Storage Limited (**the Applicant**), in support of an application for planning permission (**the Application**) to An Bord Pleanála (**the Planning Authority**) for development described as:

Construction of an electrical infrastructure installation and associated underground grid connection (UGC) on lands within the townland of Great Island measuring approximately 2.58Ha./25812 square metres in overall area. The installation would consist of a 110kV tail-fed substation and underground grid connection measuring approximately 838m in overall length. The 110kV substation would consist of a 110kV transformer; house transformer; disconnect, individual current and voltage transformers, combined current/voltage transformer, surge arrestors; circuit breakers and cable sealing end; a blastwall measuring 8.00m in overall height; 4no. lightning masts measuring 18.00m in overall height; palisade fencing measuring 2.60m in overall height; pole-mounted security cameras and lamp posts. An Eirgrid substation building with an overall footprint of approximately 180.00sqm and overall height of 4.20m would be located at the western end of the substation area. An IPP substation with an overall footprint of 132sqm and height of overall 4.20m would be located at the eastern end. The typical UGC installation would consist of standard ESB ducting details of the following 1no. trench (0.82m wide; 1.31m deep) measuring approximately 838m in overall length to carry 3no. 160mm power ducts and 2no. communication ducts and an ECC duct, connecting the proposed substation to an existing 110kV Eirgrid substation at Great Island. The typical trefoil trench will need to be adapted to a flat formation to accommodate for any service crossings encountered along the route. A typical width of trench for a flat formation trench would be approx 1.60m with varying depths. A temporary construction compound would be constructed within the site boundary for construction phase of the development, after which it would be removed.

1.2 The Statement is to be read in conjunction with other reports, plans and documents submitted in support of the application. These are:

- Planning Drawings – prepared by TLI Engineering – See Appendix I
- Planning Statement – prepared by Entrust Limited – See Appendix II
- Archaeology & Cultural Heritage – prepared by Courtney-Deery See Appendix III
- Screening Report for EIA – prepared by Entrust Limited – See Appendix IV
- Ecology (AA Screening; EcIA) – prepared by Moore Associates Ltd. - See Appendix V
- Flood Risk Assessment – prepared by IE Consulting Ltd. - See Appendix VI
- Environmental Noise Assessment – prepared by PDA Acoustics Ltd. - See Appendix VII
- Landscape & Visual Assessment – prepared by Doug Harmann CMLI Chartered Landscape Architect - See Appendix VIII
- Landscaping Plan – prepared by Cathal O' Meara Ltd. - See Appendix IX
- CEMP – prepared by IE Consulting Ltd. - See Appendix XI

- Transport Management Plan – prepared by Local Transport Solutions Ltd. – See Appendix XII
- Air Quality Report and Climate Report – prepared by AWN Consulting Ltd. - See Appendix XIII
- Population and Human Health – prepared by AWN Consulting Ltd. - See Appendix XIV
- COMAH (Seveso 2022 Site Screening) Report – prepared by AWN Consulting Ltd. - See Appendix XV
- Site Specific Soils and Geology Report – prepared by Ciaran Reilly Associates – See Appendix XVI

Summary of Proposed Development and Planning Justification

1.3 The proposed development is for an energy installation as set out above in the description of development. The development would consist of the construction of a 110kV substation with two substation buildings and a connection to the national grid via an underground grid connection "UGC" from the proposed installation to an existing 110kV Eirgrid substation at the SSE Energy Great Island Power Station.

1.4 Release of electricity from the substation to the national grid would occur via existing electrical infrastructure. As set out in the Direction and Inspector's Report issued by An Bord Pleanála and submitted with this application, the proposed development for which planning permission is sough falls under the scope Strategic Infrastructure Development as defined in Section 182A of the Planning and Development Act 200 (as amended), necessitating an application directly to the Board.

1.5 Further to development that was considered to be outside the scope of SID, the proposed development is being planned in conjunction with other electrical infrastructure on the Site consisting of a 38kV substation, battery energy storage system (BESS) and 38kV underground cabling connection to an existing 38kV substation at Great Island Power Station on the distribution system. A planning application for this development has been submitted to Wexford County Council and is currently live (LPA Ref. 20231294).

1.6 National planning policy aims to support international efforts to combat the adverse effects climate change through decarbonization. The recently adopted Wexford County Development Plan 2022-2028, hereafter referred to as "the Development Plan", contains planning policy supporting renewable energy projects as part of an overall transition to a greener economy in a substantive way.

1.7 In its Energy Strategy, the Wexford County Development Plan 2022-208 ("the Plan")

recognises the role of battery energy storage in maintaining a stable and flexible national electricity grid system, with its capability to release energy to the national grid during shortages. Battery storage therefore supports and promotes a green economy through improving reliance on renewable energy sources. The purpose of the proposed development is to provide with connection to the national grid via existing electrical infrastructure at Great Island. **Objective PT03** of the Plan, contained within Chapter 9 – Infrastructure Development supports development of new electricity substations in locations that do not have a significant negative impact on nearby residents and are subject to landscaping screening.

1.8 A previous planning permission (Wexford Co. Co. Ref. 20180506), granted in 2018, approved development for a similar energy infrastructure facility on the Site, albeit on a smaller scale. Precedent in terms of principle of such a land-use on the Site is therefore established, subject to planning policies contained in development plans published after 2018. All supporting information required by standards of the current Development Plan, set out in the Development Management Manual, has been submitted with this application. Reports and supporting information demonstrate that the development can be implemented without any social, environmental or cultural detriment to the Site or its surrounds.

1.9 The Site adjoins Great Island Power Station and the Greenlink UK-Ireland Interconnector and therefore. The siting of a renewable energy storage system in close proximity to existing and new-build energy infrastructure represents a sustainable land-use, where existing infrastructure would be used to make a direct connection to the national grid. The proposed Underground Grid Connection would occur entirely on privately owned lands, previously developed for internal access to existing and new-build energy infrastructure.

1.10 Detail on the decommissioning and deconstruction has been submitted as part of the Construction and Environmental Management Plan (CEMP).

2. The Application Site

Location and Surrounds

2.1 The application site "the Site", which measures 2.58Ha. in overall area, is situated approximately 12.60 kilometres (kms) south of New Ross Town and lies wholly within the townland of Great Island, being located directly east of Great Island Power Station. The village of Campile is approximately 3.1kms east of the Site, as the crow flies. The Site is located in a rural and sparsely populated area. There are no RPS or NIAH sites located within the proposed development site or immediately adjacent to it. The closest structure on the RPS is Kilmokea House, RPS ref. WCC0882 and it is located c. 1.5km to the north of the subject site. The Barrow Bridge (NIAH 12404401) located approximately 0.6km west of the existing energy plant is considered to be of national importance and has been identified as an important component of the built heritage of south County Wexford and Kilkenny.

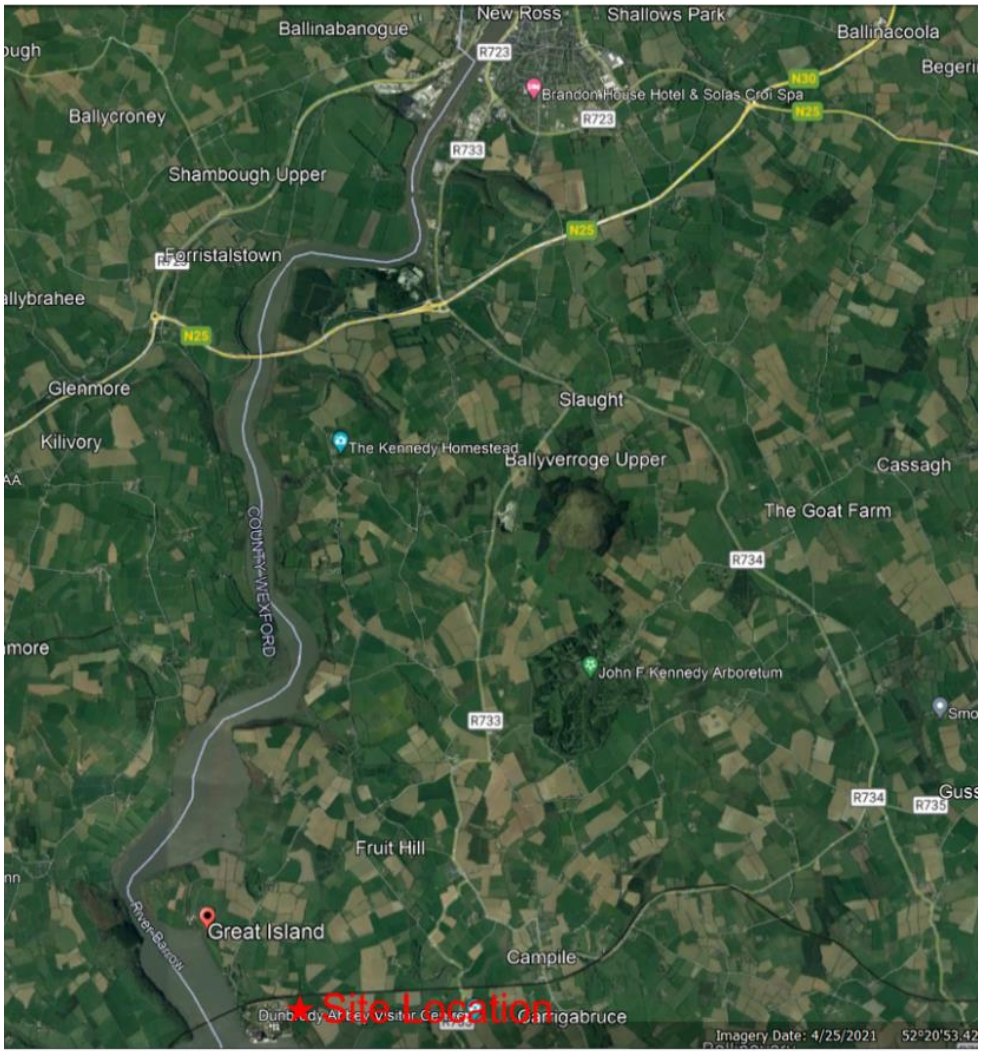


Figure 1 – Site Location in relation to New Ross

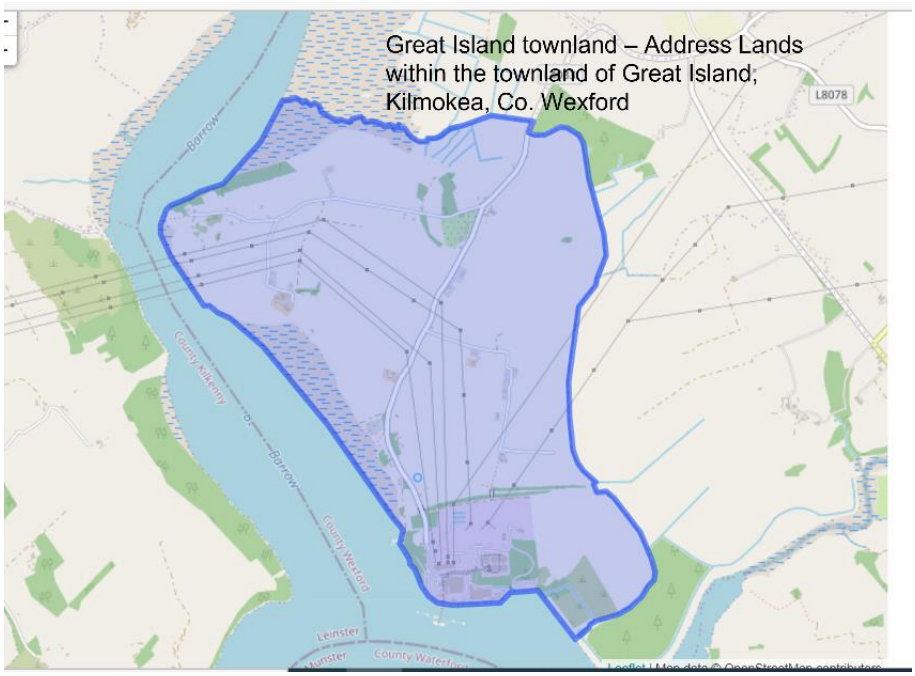


Figure 2 – Site boundary within Great Island townland, Kilmokea, Co. Wexford

Application Site "The Site"

2.2 The Site is a greenfield site located immediately north of Greenlink Interconnector converter station that is currently undergoing construction. Access to the Site is off the L4033 local road, on a branch access road from the Greelink Interconnector Convertor Station access road, an unsealed road comprising clean, hard 30 mm natural gravel or crushed stone to a compacted thickness of 150 mm and lightly rolled. The Site slopes south-north, where the existing highest level of 22m ASL is in the south-west of the Site and lowest level of 5m ASL in the north-east of site (Refer to Dwgs. 05951-DR-100 - Topographic Site Survey and 05951-DR-101 Topographic Site Survey Sections Appendix I – Planning Drawings). The Site is characterised as rough grassland with encroachment of brambles and scrub, bounded by hedgerows on northern and eastern boundaries; Greenlink Interconnector on southern boundary; access to Site on western boundary. Great Island Power Station is immediately to the west. Access to Site from L4033 (entrance road to Great Island Power Station) shared with Greenlink Interconnector, past the Siemens temporary construction compound.

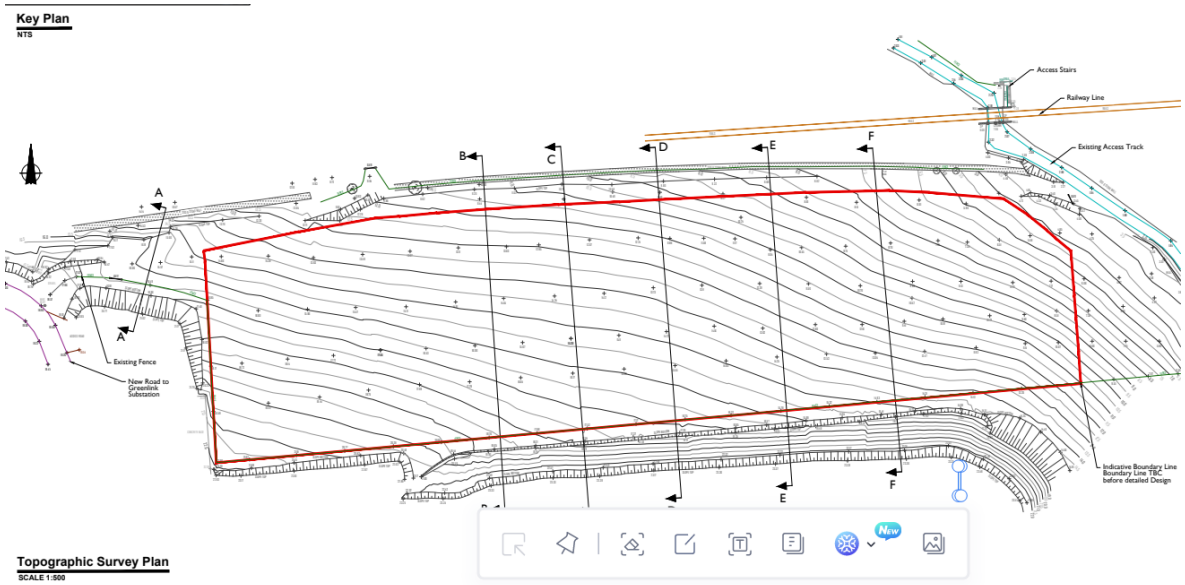


Figure 3 – Existing Levels, Great Island, Kilmokea - Dwgs. 05951-DR-100 - Topographic Site Survey

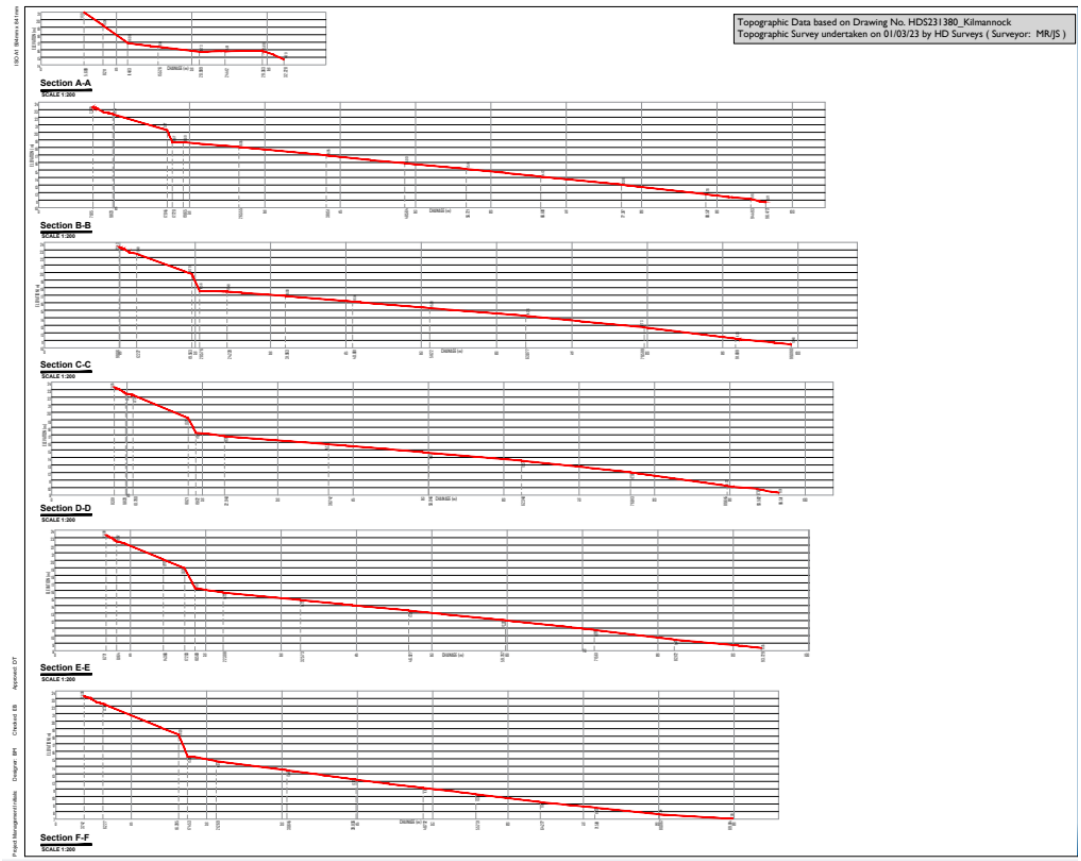


Figure 4 – Existing Levels, Great Island, Kilmokea - Dwg. 05951-DR-101 Topographic Site Survey Sections

Figure 5 – Site visit photographs – Lands at Great Island, Kilmokea, Co. Wexford

2.3 Due to its proximity to the SSE Energy Great Island Power Station, the Site comes Seveso 2022 designation (Major Accidents Directive). Further to pre-application consultation with the HSA (see Covering Letter), a COMAH Screening Report has been submitted as part of this application.

2.4 The nearest watercourse to the application is the Newtown Stream (EPA Ref. Newtown 14), approximately 18.00m east of the site boundary at the nearest point, and separated from the Site by a hard-surface track running beneath the railway bridge north of the Site. The stream drains farmland to the north of the railway line and farmland and forestry south of the railway line with no connectivity to the proposed development areas. The River Barrow, River Suir and Campile River are located 253m, 255m and 914m beyond the western, western and southern site boundaries respectively. Area within the Site excluding the Underground Grid Connection is shown as falling within an area designated as ‘Land Commission Benefited Lands’.

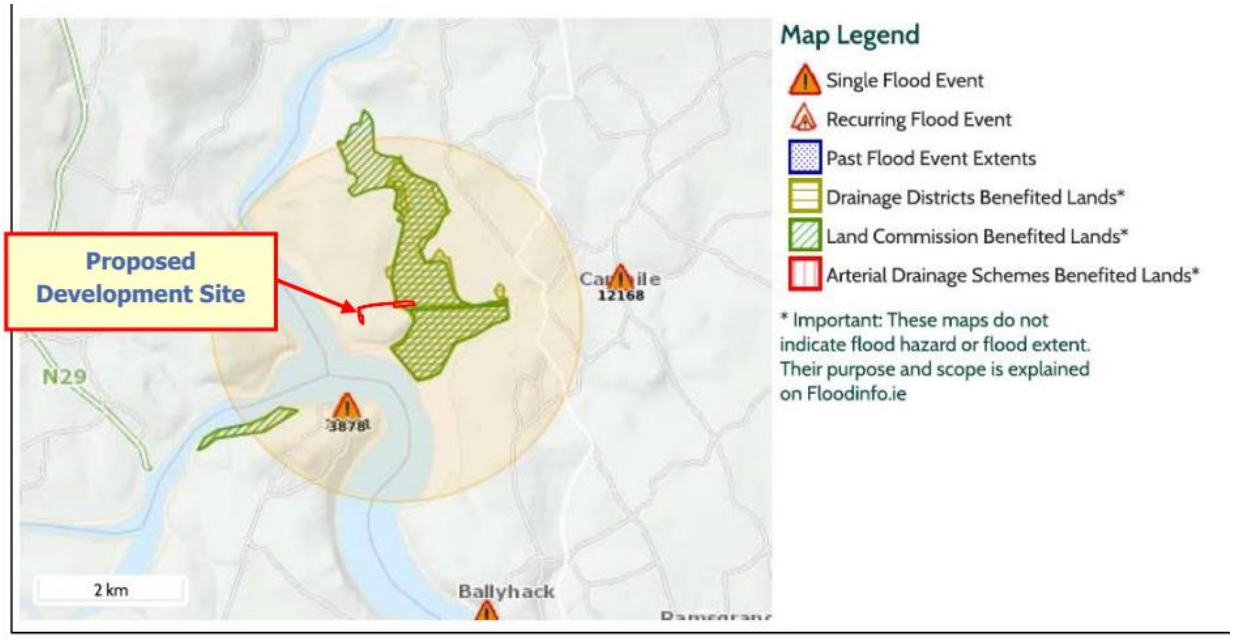


Figure 6 – Site within Land Commission Benefitted Lands (extracted from Flood Risk Assessment produced by IE Consulting Ltd.)

Application Site: Designations Planning History and Renewable Energy Projects in Surrounding Area

2.4 The Site is located within a Stronger Rural Area, as defined in the Core Strategy of the Wexford Development Plan 2022-2028. The Site is not within the Coastal Zone. The Site is within a Seveso designation, lower tier, due to its situation within 300m of Great Island Power Station.

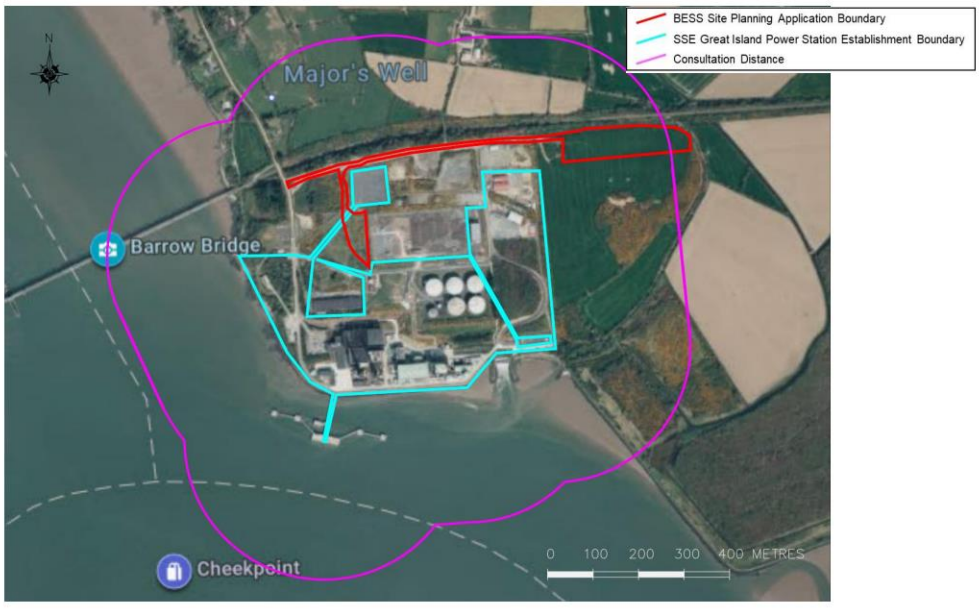


Figure 7 – Environmental Sensitivity Mapping - extracted from COMAH Screening Report, prepared by AWN Consulting Ltd.

2.5 A previous planning permission (Ref. 20180506) was granted June 08, 2018 for similar facility as that proposed, albeit on a smaller scale. The description of development for the approved development reads as:

DATE OF APPLICATION:	19 April 2018
APPLICANT:	GRID SYSTEM SERVICES LIMITED
TYPE OF APPLICATION:	PERMISSION
PROPOSED DEVELOPMENT:	PERMISSION FOR THE DEVELOPMENT OF A GRID SYSTEM SERVICES FACILITY WITHIN A TOTAL SITE AREA OF UP TO 1.15 HECTARES, TO INCLUDE 1 NO. TSO COMPOUND INCLUDING 1 NO. SINGLE STOREY TSO ELECTRICAL SUBSTATION BUILDING AND 1 NO. SINGLE STOREY CUSTOMER SUBSTATION, ELECTRICAL INVERTER/ TRANSFORMER STATION MODULES, CONTAINERISED BATTERY STORAGE MODULES ON CONCRETE SUPPORT STRUCTURES, HEATING, VENTILATION AND AIR CONDITIONING UNITS (HVAC UNITS), ACCESS TRACKS AND UPGRADED SITE ENTRANCE, ASSOCIATED ELECTRICAL CABLING AND DUCTING, SECURITY GATES, PERIMETER SECURITY FENCING, CCTV SECURITY MONITORING SYSTEM, LANDSCAPING WORKS AND ALL ASSOCIATED ANCILLARY INFRASTRUCTURE ON LAND
LOCATION:	GREATISLAND, KILMOKEA
DECISION:	GRANTED subject to CONDITIONS **as listed hereinafter.**
DATE OF DECISION:	8 June 2018

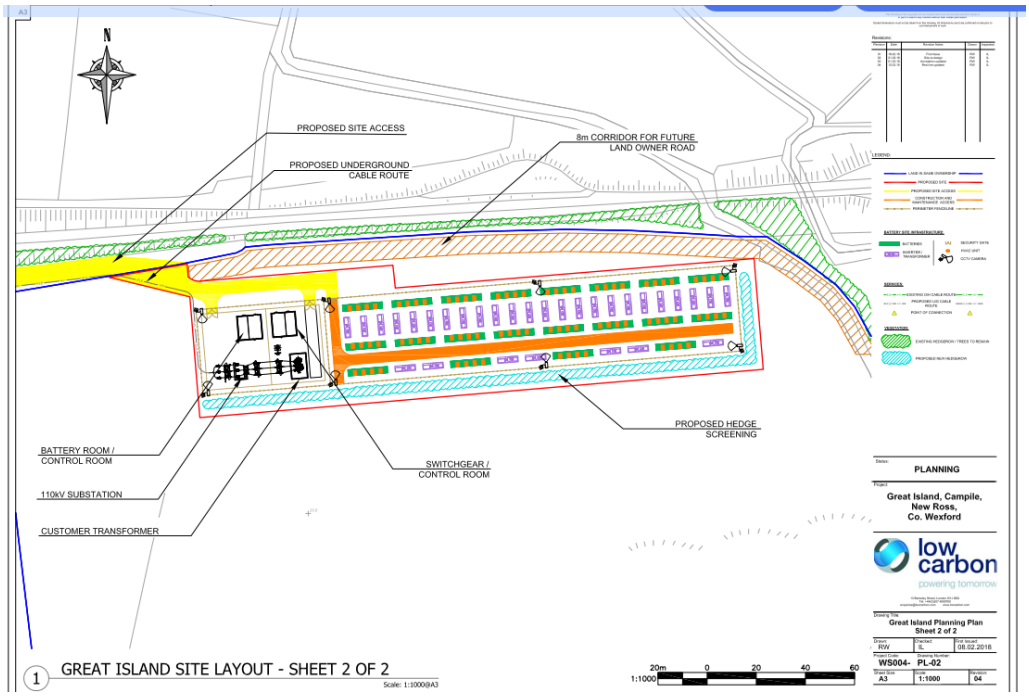


Figure 8 – Approved Site Layout Application Ref. 20180506 – Lands at Great Island, Kilmokea, Co. Wexford

Under Section 42 of the Planning and Development Act 2000 (as amended), the permission was granted an extension of time, with the final date of the permission altered from July 10th 2023 to

October 19th 2023.

2.6 Immediately to the south of the Site and in the surrounding area, planning permission for development known as the Greenlink Interconnector convertor station, which comprises part of a major electrical infrastructure project linking the existing Great Island facility with a generating station in Wales. Planning permission was granted for an Electricity Development Application by An Bord Pleanála (ABP Ref. 308096) on 23rd June, 2021. The approval for land-based converter station (220kV), associated construction compound and substations. The converter station, currently under construction, adjoins the Site to the south and an underground electrical cabling routing. A description of the development from ABP documents reads as:

Proposed development will form part of the Greenlink Interconnector and will consist of the development of a new converter station, tail station, MV substation and 23km of high voltage direct current (JVDC) electricity cables, 420m of high voltage alternating current (HVAC) cables, 23.42km of fibre optic cable and all associated site works with an overall proposed development site area of 83.8ha.

2.7 A description of the converter station element reads as:

Converter Station - *a converter station situated close to the existing EirGrid 220 kilovolts Great Island substation in Wexford in the townland of Great Island. Permission is being sought for two alternative converter station site layouts. Particulars of both alternatives are included in the application. Both will include a converter hall, converter transformers which will be surrounded by 9 metre high precast fire walls where appropriate, AC switchgear and busbars, harmonics filters, up to 26 metres high lightning towers, ancillary plant such as cooling bank and a diesel generator, and a control building. The dimensions of buildings associated with Alternative 1 are as follows: Control room with an area of 740 square metres and a height of 5.1 metres, converter and DC halls with a total area of 4,305 square metres and a height of 20.9 metres and the spare parts building with an area of 360 square metres and a height of 8.4 metres. Dimensions for Alternative 2 are as follows: control room with an area of 280 square metres and a height of 10.8 metres, two valve halls with a total area of 2,080 square metres and a height of 17.7 metres, AC reactors hall with an area of 790 square metres and a height of 15.1 metres, a pump room with an area of 130 square metres and a height of 6.2 metres, a spare parts building with an area of 320 square metres and a height of 5.6 metres and a cable storage building of 300 square metres and a height of 6.1 metres. Stormwater will be discharged via an attenuation pond to an existing stream. Foul water will be contained in a holding tank. The converter station site will have a double perimeter fence consisting of a 2.40 metre high security fence and a 3.4 metre high electrified security fence.*

Figure 9 – Greenlink Converter Station (under construction) – clockwise from left to right – converter station from southern boundary of Site; converter station from centre of Site; converter station access road; access road to Site

2.8 Significant planning history attached to the SSE Great Island Power Station, which is summarized in Appendix 1.

2.9 An application was submitted to Wexford County Council on behalf of the Applicant, where the application was received on October 27th (Ref. 20231294). The site boundary for this submitted application amounts to the same lands as those submitted under this application. The proposed development consisted in summary of:

- 38kV Battery Energy Storage System (BESS) (16no. BESS units)
- 38kV tail-fed electrical substation - measuring 0.13Ha. in overall area and laid out as per dwgs. 05951-DR-303 and 05951-DR-304. The substation would sit on a platform at 16.00mASL and would comprise the following buildings and infrastructure:

➢ Substation building of block construction with sand/cement render finish and blue/black cement fibre slate roof with an overall footprint of 95.00sqm, measuring 5.70m in

overall height. Floor layout would consist of ESB Control Room, IPP Control Room and IPP Switch Room – Layout Plan provided on Dwg. Ref. 05951-DR-307 and Elevations on 05951-DR-308;

- Blastwall - 8.00m in overall height;
- 38kV transformer – 4.30m in overall height;
- Diesel generator;
- House transformer – 0.90m in overall height;
- Disconnect/Earth Switch – 3.80m in overall height;
- Individual current and voltage transformers – 1.50m in overall height;
- Combined current/voltage transformer – 1.50m in overall height;
- Surge arrestors;
- Circuit breakers – 2.50m in overall height;
- Cable sealing end - 4.70m in overall height;
- 2no. lightning masts measuring 18.00m in overall height (see Dwg. Refs. 05951-DR-304 and 05951-DR-311);
- Palisade fencing measuring 2.60m in overall height (see Dwg. Ref. 05951-DR-316);
- Pole-mounted security cameras and lamp posts;

- 38kV Underground Grid Connection (UGC), connecting proposed substation to existing 38kV ESB substation at Great Island Power Station
- Ancillary development and all associated site works - comprising including the following:

- Earth works and recontouring of the Site consisting of a cut and fill engineering works consisting of removal of topsoil from the southern portion of the Site to the northern portion of the Site to create 2no. level platforms, occurring across the existing landfall from south-west to north-east (Dwg. Ref. 05951-DR-131). As per Drawing Ref. Dwg. Ref. 05951-DR-302, 1no. level platform in the western portion of the Site would sit at an elevation 16.00m above sea-level (ASL), where the platform on the eastern portion of the Site would sit 4.00m lower, at 12.00m ASL. The cut and fill is designed to extract 15000m3 cut from the southern portion of the Site and 18000m3 fill in the northern portion, where surplus material required would be imported onto the Site, with material temporarily stored in the eastern portion of the Site at the lower level.

- Northern boundary of the Site would be finished a sloped earthen bank approximately 5.50m above existing levels in the eastern portion (12.00mASL platform) and 9.00m above existing levels in the western portion (16.00ASL platform).
- As per the drawing attached to the Construction and Environmental Management Plan (Ref. IE2816-CEMP-004 a temporary construction compound measuring approximately 924.00sqm would be installed. The compound would consist of:
    - Entrance, wheel-wash facility and vehicle turning area;
    - Material stockpile;
    - Skip;
    - Site office/canteen;
    - Refueling area;
    - Temporary lighting;

The compound would be installed during the engineering works described above.

- Access road measuring approximately 55.00m in overall length 5.00 wide serving as entrance to the Site and formed off the existing access road to the Greenlink Convertor Station. Double-gated entrance consisting of tubular steel gates (Dwg. Ref. 05951-DR-315) attached to the palisade fencing (see below) on the northern side and a retaining wall on the southern side – see Dwg. Ref. 05951-DR-302 Site Layout Plan.
- Palisade fencing measuring approximately 2.60m AGL in overall height would enclose the 38kV substation and BESS areas – see Dwg. DR-302 and DR-316;
- A timber post and rail fence measuring 1.20AGL in overall height would extend around the northern and eastern boundaries of the Site at the bottom of the profiled slope – See Dwg. DR-315.
- Retaining wall would enclose the Site on the southern and western boundaries – see Dwg. 05951-DR-145. The wall would separate the Site from the Greenlink convertor station, adjoining the Site on the southern and western boundaries. Sections provided in the above drawing illustrate height differentials between the proposed 2no. platform levels of the Site and sloping land to the south;
- Drainage: An overall drainage layout plan has been provided (See Dwg. 05951-DR-309) indicating provision for surface water and land drainage and effluent interceptors.

As per the dwg. the surface water drainage system would be built into hard-surfaced areas within the Site. 3no. soakaways would be provided overall, each measuring approximately 3.00sqm in area. One would be located in the western portion adjacent to the 38kV substation compound, where the other would be in the eastern portion of the site to facilitate drainage for the 110kV element to be submitted to An Bord Pleanála under Strategic Infrastructure Development (See Figure 17). A further soakaway would be positioned at the bottom of the profiled earth slope, which would serve a gravity-fed land drain extending around this slope on the northern and eastern boundaries of the Site (See Figure 18). Soakaway detail is provided on a section drawing Dwg. Ref. 05951-DR-314. Details of road drainage channeling, road gullies, channel drains and downpipes attached to the ESB substation are provided in Dwg. 05951-DR-313. Details of foul water drainage are provided on section drawing Dwg. 05951-DR-314.

2.10 The proposed development described above is subject to consideration by Wexford County Council (Ref. 20231294). Preparation of the Site for construction of the 110kV electrical infrastructure proposed under this application was included in the application to Wexford County Council. Further, the 110kV BESS that will be subject to a further application will be subject to the application to Wexford County Council and is therefore not part of the An Bord Pleanála consent regime.

2.11 For the purposes of completeness and an overall understanding of planning development for the Site, plans submitted with this application provide reference to elements considered under other applications:

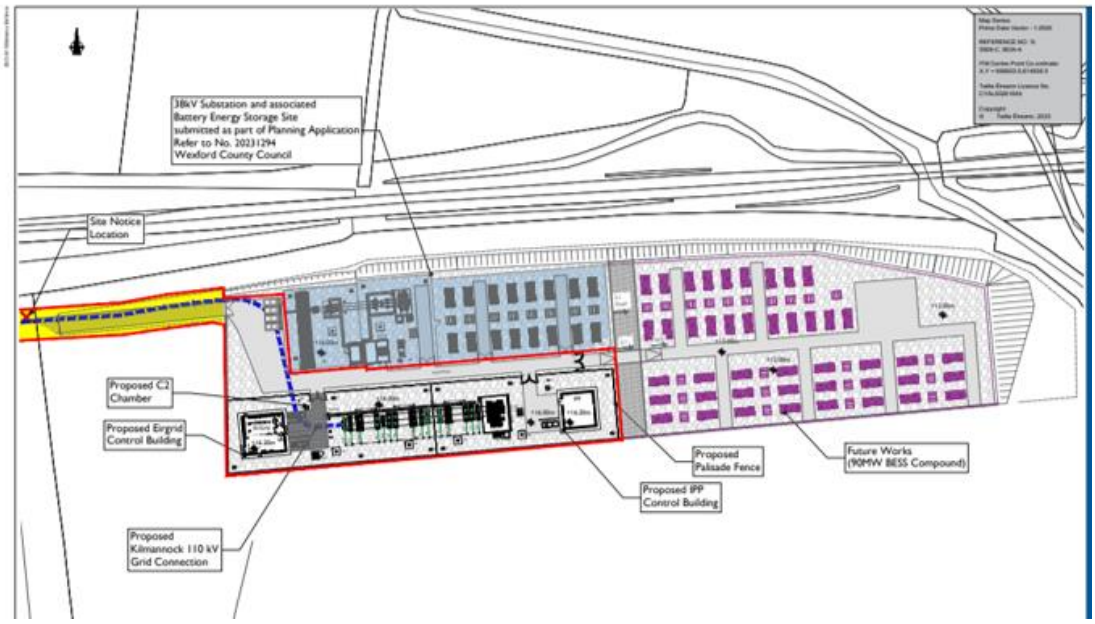


Figure 10 - Overall Site Layout (including electrical infrastructure proposed under different consent regimes) – Dwg. Ref. 05951-DR-700

2.12 The following section provides a detailed description of the development being applied for under this application.

3. Proposed Development

3.1 In summary, the proposed development consists of:

- 110kV substation compound;
- Underground Grid Connection from proposed 110kV tail-fed substation to existing 110kV Eirgrid substation at Great Island.

Proposed Development – 110kV substation

3.2 Measuring approximately 1323.00sqm in overall area, the 110kV substation compound would be located on the 16.00m ASL platform immediately south of the proposed 38kV substation compound as submitted under 202231469 and to the east of the 110kV battery energy storage system.

Figure 11 – 110kV proposed substation compound – Dwg. Ref. 05951-DR-701

3.3 The substation compound would consist of the following electrical infrastructure and ancillary development:

- 110kV transformer;
- House transformer;
- Disconnect;
- Individual current and voltage transformers,
- Combined current/voltage transformer,
- Surge arrestors;
- Circuit breakers
- Cable sealing end;

- A blastwall measuring 8.00m in overall height;
- 4no. lightning masts measuring 18.00m in overall height located at spaced intervals in the substation infrastructure;
- Palisade fencing measuring 2.60m in overall height around the compound perimeter;
- Pole-mounted security cameras and lamp posts;
- 2no. SCADA (Supervisory Control and Data Acquisition systems) poles measuring approximately 10.00m in overall height and located adjacent to the substation buildings;
- An Eirgrid substation building with an overall footprint of approximately 180.00sqm and overall height of 8.21m located at the western end of the substation compound;
- An IPP substation with an overall footprint of 132sqm and height of overall 7.33m located at the eastern end of substation compound.

3.4 As per drawing 05951-DR-703 the Eirgrid substation building would consist of:

- Rendered walls with roughcast finish measuring 13.92 in overall width and 12.92 in overall depth;
- Dual-pitched roof with a blue or black slate finish;
- Black uPVC fascia and rainwater goods;
- 4no. galvanized steel doors to ESB specification;
- Blast vent on southern elevation (Elevation 2) serving Generator Room;
- Roof ventilation;
- Solar pv array on northern elevation (Elevation 1);
- Lightning finial on roof ridgeline;
- Telecommunications dish on roof ridgeline;
- Internally: Generator Room; Battery Room; Relay Room; Hall; w/c.

3.5 As per drawing 05951-DR-704 the IPP substation building would consist of:

- Rendered walls with roughcast finish 15.63m in overall width and 12.42m in overall depth;

- Dual-pitched roof with a blue or black slate finish
- Black uPVC fascia and rainwater goods;
- 6no. galvanized steel doors to ESB specification;
- 2no. windows on gable walls
- Roof ventilation;
- Lightning finial on roof ridgeline;
- Internally: Switchgear Room; Control Room; Storage Room; Hall

Proposed Development – 110kV Underground Grid Connection (UGC)

3.6 Measuring 0.9Ha. in overall area (redline boundary) and wholly within private land the proposed UGC route would measure approximately 838.00m in overall length, running west from the proposed substation along an existing internal access road before turning south to Great Island Power Station and an existing 110kV substation located on these lands (See Dwg. Ref's 05951-DR-604 to 05951-DR-609). The UGC would consist of 1no. trench measuring approximately 0.6m wide and 1.22m deep to carry 1 no. trefoil trench approximately 0.82m wide and 1.31m m deep to house – 5 x 110 mm ducts – 3 power ducts; 2 communications ducts and 1 ecc duct. A precast communications chamber measuring approximately 1.30m in length, 1.02m in width and 1.20m in overall height would be installed outside both substations.

3.7 The gird connection cable would run west-east for approximately 460m along previously disturbed land along the internal access to the Site, before turning southward toward the existing SSE Great Island facility.

Figure 12 – Westerly and southerly UGC routes - Courtesy of Courtney-Deery

3.8 Detail drawings of the cable route and cross-sections of its proposed construction have been submitted with this application – See Dwg. Ref's 05951-DR-502 to 05951-DR-514. In summary, the cable routing extends for 720m. The cabling route will require crossing ESB underground cable crossings and gas pipeline within land folio WX51685F; Uisce Eireann watermain crossings and in the vicinity of ESB infrastructure, namely 110kV pole sets and pylons (See Table 2 – Summary of 38kV Underground Cable Route – TLI Construction Methodology).

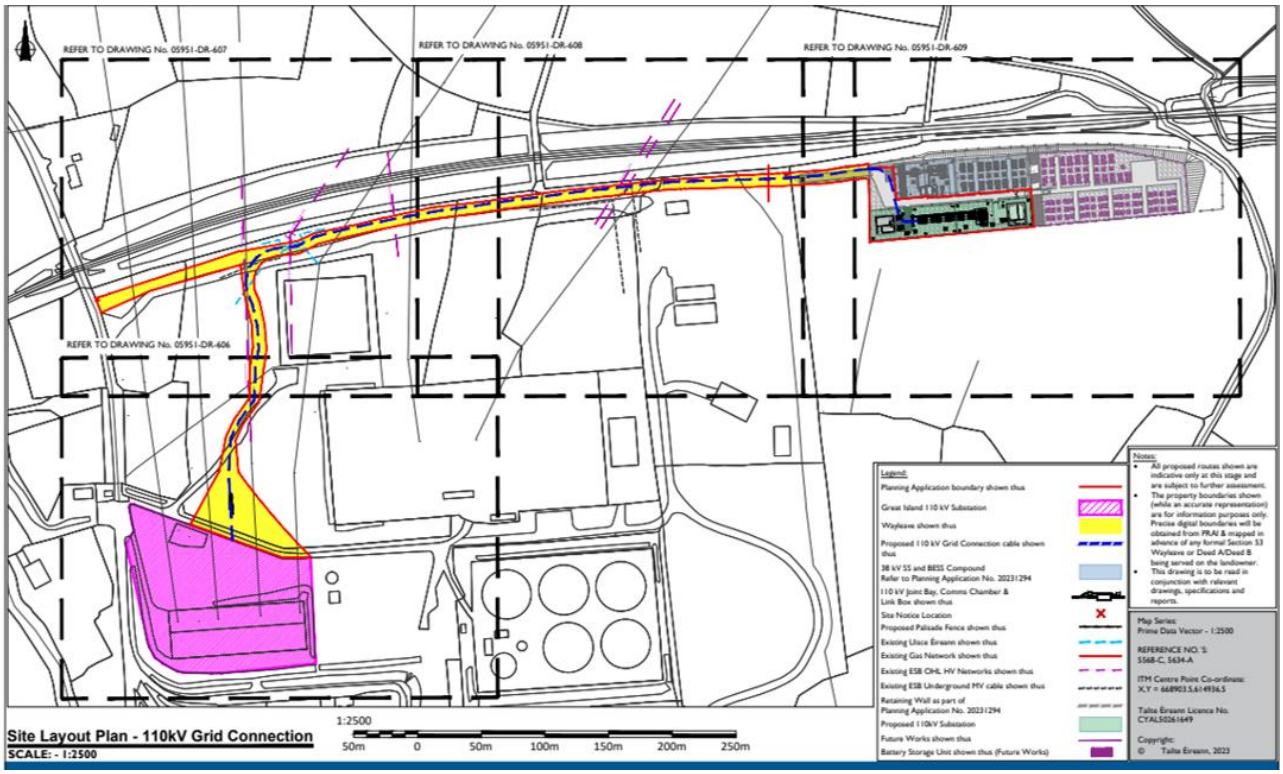


Figure 13 – 110kv Underground Grid Connection Route – proposed tail-fed 110kV substation to existing 100kV Eirgrid substation at Great Island, Kilmokea, Co. Wexford – Dwg. Ref. 05951-DR-605

4. Planning Policy Context – International, National, Regional and Local

International and National Renewable Energy and Climate Change Policy Context

International Context

4.1 Climate change is widely recognised as the greatest threat to the planet and the greatest challenge facing humanity. The main cause is a rise in the concentration of carbon dioxide (CO_2) in the atmosphere, with the use of fossil fuels to generate electricity a principal factor. In Ireland, the Government has made it clear the extent of the challenge facing the country and the pronounced need to realise commitments made to the European Union in relation to the reduction of greenhouse gases via the development of renewable energy sources that will reduce carbon emissions, such as the Proposed Development.

4.2 The United Nations Framework Convention on Climate Change (UNFCCC) (January 2014) is the international legal framework for addressing climate change at a global level. The ultimate objective of the Convention is to stabilise global greenhouse gas (GHG) concentrations. Ireland's target is part of the pledged EU target of at least 40% reduction in domestic GHG emissions by 2030 compared to 1990. The 2015 Paris Agreement, (12 December 2015), marks the latest step in the evolution of the UN climate change regime and builds on the work undertaken under the Convention. The Paris Agreement seeks to accelerate and intensify the actions and investment needed for a sustainable low carbon future, while individual member state targets have yet to be agreed.

European Union Context

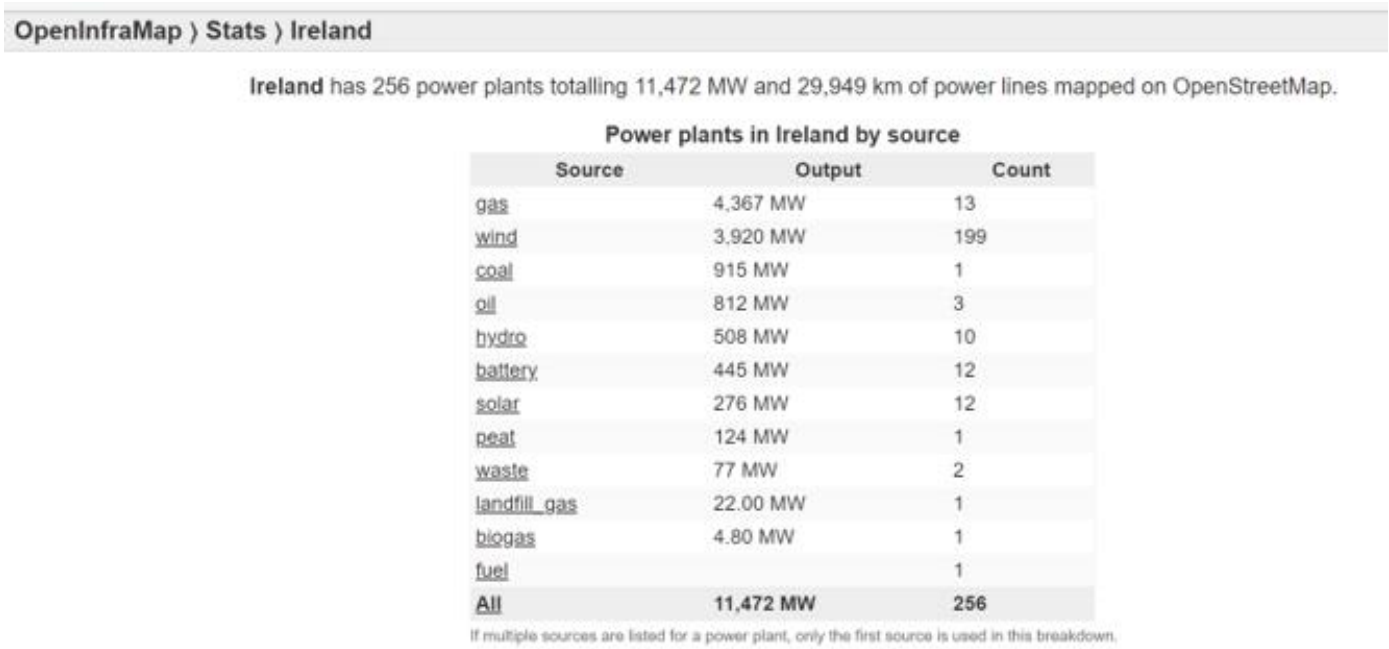
4.3 The EU's Energy Roadmap 2050 aims for the EU to be climate neutral by 2050, meaning that the EU will operate an economy with net-zero greenhouse gas emissions. This objective is at the heart of the European Green Deal and in line with COP21. The EU has set a long-term goal of reducing greenhouse gas emissions by 80-95%, when compared to 1990 levels, by 2050. The transition to a climate-neutral society is both an urgent challenge and an opportunity to build a better future for all. All parts of society and economic sectors will play a role – from the power sector to industry, mobility, buildings, agriculture and forestry. The EU can lead the way by investing into realistic technological solutions (solar is an established technology), empowering citizens and aligning action in key areas such as industrial policy, finance and research, while ensuring social fairness for a just transition. The Roadmap examines the transition of the energy system in ways that would be compatible with this greenhouse gas reductions target while also increasing competitiveness and security of supply. It is recognised that in order to achieve these goals, significant investments need to be made in new low- carbon technologies, renewable energy, energy efficiency, and grid infrastructure. The scenarios in the Energy Roadmap 2050 explore routes towards decarbonisation of the energy system. These scenarios

examine the impacts, challenges and opportunities of possible ways of modernizing the energy system. This includes increasing the share of renewable energy. The Energy Roadmap 2050 recognises that much of the energy infrastructure in the EU (including Ireland) that was built 30 to 40 years ago, needs to be replaced, and that replacing it with low-carbon alternatives immediately can avoid more costly changes in the future.

National Policy Context

Government White Paper - Ireland's Transition to a Low Carbon Energy Future (2015-2030)

4.4 The government's White Paper on Energy, 'Ireland's Transition to a Low Carbon Energy Future (2015-2030)', set out how Ireland will increase its renewable energy generation and reduce greenhouse gas emissions, based on a target to increase the share of final energy consumption, made up of renewable energy sources to 16%. This target is divided into three key sectors, with individual targets for each sector; 40% for electricity supply, 12% for heating and 10% for transport. In addition, a target of a 20% improvement in energy efficiency by 2020 has been set. Currently, the MW output of solar farms is approximately double that of Ireland's only peat-fired generation station at Edenderry.



OpenInfraMap › Stats › Ireland

Ireland has 256 power plants totalling 11,472 MW and 29,949 km of power lines mapped on OpenStreetMap.

Power plants in Ireland by source

Source	Output	Count
gas	4,367 MW	13
wind	3,920 MW	199
coal	915 MW	1
oil	812 MW	3
hydro	508 MW	10
battery	445 MW	12
solar	276 MW	12
peat	124 MW	1
waste	77 MW	2
landfill_gas	22.00 MW	1
biogas	4.80 MW	1
fuel		1
All	**11,472 MW**	**256**

If multiple sources are listed for a power plant, only the first source is used in this breakdown.

Figure 19 – MW output by source - Ireland - Open Infrastructure Map (openinframap.org)

National Mitigation Plan 2017

4.5 Ireland's first statutory National Mitigation Plan (NMP), published in July 2017, gives effect to the provisions of the Climate Action and Low Carbon Development Act 2015, and represents a landmark national milestone in the evolution of climate change policy in Ireland and provides for the statutory basis for the transition to a low carbon, climate resilient and environmentally sustainable economy by 2050.

4.6 The NMP reiterates that the objective of a low carbon future will involve radically changing behaviour as citizens, industry and government and becoming significantly more energy efficient. In this regard, the NMP has made it clear that Ireland has abundant, diverse and indigenous renewable energy resources, which will be critical in decarbonising our energy system, including energy generation.

4.7 The NMP addresses the role of Planning Authorities in facilitating the transition to a low carbon economy and recognises that this requires engagement from all levels of government and that a bottom-up approach is also essential to promote awareness and engagement with communities across Ireland.

4.8 The NMP further states that there is a *"recognition within the Local Authority sector of the need for the sector to assume a leadership role within their local communities to encourage appropriate behavioural change"*. Moreover, the plan emphasises that Local Authorities also have a key role to play *"in addressing climate change mitigation action and are well placed to assess, exploit and support opportunities within their administrative areas, in cooperation with each other and with national bodies, and through the involvement and support of local communities"*.

4.9 Ireland's Grid Development Strategy, Your Grid, Your Tomorrow, 2017, identifies the need for investment in the electricity transmission system and for a long-term strategy to develop the electricity grid to ensure a long-term sustainable and competitive energy future for Ireland and identified the need to explore more interconnection with other countries in the context of the change to a competitive, low carbon energy system.

Climate Action Plan 2019

4.10 Through the Climate Action Plan 2019, Ireland has set ambitious plans to meet 70% of its electricity needs by 2030 under the plan. Within the plan, solar is identified as a key contributor to meeting the ambitious carbon neutral targets set for 2050. The plan states that:

> *Through the commercial State sector and other public bodies, we will seek to leverage the significant volumes of private sector capital that is available for well-structured projects, including wind and solar electricity generation, interconnection and major transport infrastructure*

National Planning Framework 2018 - 2027

4.11 The National Planning Framework (NPF) provides a framework to guide national, regional and local planning and investment decisions for the duration of the plan. The NPF is the vehicle by which the high-level strategies set out in the NPF will be delivered. A key focus throughout the NPF is the fostering of a transition towards a low carbon, climate resilient

society. Some key strategies that are set out in respect of the transition are:

- New Renewable Electricity Support Scheme to support up to 4.5 Gigawatts of additional renewable electricity by 2030.
- Energy research funding to accelerate diversification away from fossil fuels to low carbon energy, including wind, solar, wave, biomass, biofuels, biogas and hydrogen.
- Climate Action Fund to leverage investment by public and private bodies in climate action measures.
- Piloting of 'climate smart countryside' projects to establish the feasibility of the home and farm becoming net exporters of renewable electricity through adoption of smart metering, smart grids and small-scale renewable technologies, for example solar, heat pumps and wind.

4.12 The National Planning Framework recognises the vital importance of ensuring Ireland's transition to a low carbon economy in the near future, which the proposed development would support.

Wexford County Development Plan 2022-2028

4.13 The Wexford County Development Plan 2022-2028 "the Plan" was adopted by the Elected Members of Wexford County Council on 13th June and came into effect on Monday, 25th July 2022. The Plan sets out the policies and objectives for the development of the County over the plan period. The Plan is divided into 13 volumes, where Volume 1 consists of a Written Statement and Volume 2 a Development Management Manual. An Energy Strategy is set out in Volume 10.

Volume 1 – Written Statement

4.14 In addition to recognising historic initiatives implemented by the Authority **Chapter 2 – Climate Action** of the Plan recognises that mitigation and adaptation to climate change can be achieved through spatial planning and through implementation of development plan policies and objectives. Mitigation measures identified include use of new technologies and renewable energies and making older equipment more energy efficient. Energy is recognized as critical infrastructure, where it is stated that new infrastructure must be climate resilient. are set out in Objectives CA1 to CA16. The proposed development supports the these objectives, where Objectives X to X are particularly relevant.

4.15 The introduction **Chapter 6 – Economic Development Strategy** of the Plan makes reference to the opportunities presented by transition to a low carbon economy. The chapter makes specific reference to climate action and economic development, stating support for

a green economy and development that contributes to reduction in carbon emissions. The chapter makes reference to national policy Energy (White Paper-Ireland's Transition to a Low Carbon Energy Future 2015-30), quoted in the preceding section of this statement. **Objectives ED01-ED12** set out how economic aims set out in the Plan will be delivered. Objectives ED13-ED25 focus on how economic opportunities for the existing workforce and population within Wexford can be improved. **Objectives ED55-ED58** set out economic objectives for a green economy. The proposal contributes to the green economy through provision of energy storage capable of stabilizing the national grid and providing better opportunities for reliance on renewable energy sources.

4.16 **Chapter 9 – Infrastructure Strategy** of the Plan sets out planning policy and objectives as they relate to the Council's responsibilities and functions with regard to public and private infrastructure, including climate action and infrastructure planning. A link between economic development and infrastructure provision is established in the chapter introduction. Infrastructure relates to water, wastewater, waste, crematoria, telecoms and ICT, flood-risk management and power transmission.

4.17 In relation to power transmission, the Plan states:

The Council will support the reinforcement of the electricity transmission grid to improve energy supply to the county.

where **Objective PT01** of the Plan states as an objective an in-principle improvement to energy networks provided social, cultural and environmental impacts have been considered, including assessment in accordance with Article 6 of the Habitats Directive; and **Objective PT03** supports development of new electricity substations in locations that do not have a significant negative impact on nearby residents and are subject to landscaping screening.

4.18 **Chapter 10 – Environmental Management of the Plan** sets out the Plan's strategy and objectives as they relate to the implementation of environmental standards with regard to water quality, air quality, noise pollution and light pollution. Objectives relating to the Major Accidents Directive are set out in this Chapter. These objectives are considered further in this Statement and the proposed development is within a Seveso 2022 designation.

Volume 2 – Development Management Manual

4.19 **Volume 2 – Development Management Manual** sets out the standards and criteria against which all applications for proposed development are assessed by the local authority. No standards specifically for energy installations are set out in the Manual. Section 8 of the Manual deals with Infrastructure and Environmental Management. Great Island Power Station .

Accompanying reports addresses the Site's location within a Seveso designation.

Volume 10 – Energy Strategy

4.20 **Volume 10 – Energy Strategy** of the Plan sets out the Council's future plans for a range of energy sources and is encapsulated in the Vision for Energy Strategy:

To maximise Wexford's renewable energy potential and its transition to becoming a more energy secure, low carbon county in line with national energy targets whilst balancing the need to protect the environmental, social and heritage assets of the county.

The strategic aims of the Strategy broadly support the attainment of renewable energy and carbon reduction goals. The Strategy includes the maximization of renewable energy whilst safeguarding against harm to the environment and residential amenities. The Strategy includes proposals for the National Grid which aim to support a transition from fossil-based sources to renewable energy. These proposals include the construction of an interconnector (the Celtic Interconnector Project) with France which will enable excess power to be exported.

4.21 **Objective ES35** of the Plan aims to facilitate the provision of and improvements to energy networks in principle, provided that certain criteria regarding social, environmental and economic sustainability are met.

4.22 The Strategy recognises that battery storage can be deployed at different levels of the national grid. The proposed development would be at transmission and distribution level, for which the Strategy states:

Batteries can offer several ancillary services to stabilize the electricity grid, improving its working conditions, extending its capacity and making it more secure, reliable, and responsive. Batteries can rapidly store energy or feed in energy, even in milliseconds, in order to balance a grid area so as to avoid frequency instability.

4.23 With specific regard to battery energy storage systems **Objective ES37** states:

To facilitate the development of Battery Energy Storage Systems and other energy storage technologies such as air storage and synchronous condensers at appropriate locations to ensure a reliable and secure energy supply, subject to normal planning and environmental criteria, including residential and visual impacts.

4.24 The above-named considerations are, among others, dealt with in the following section.

5. Planning Considerations/Specialist Reports

5.1 As outlined in the previous section policies contained within national, regional and local planning policy documents demonstrates support and commitment to the furtherment of renewable energy sources and technologies within Wexford County. As part of this approach, in the context of transitioning to a green economy, alternative uses for former industrial peatlands are addressed in this planning policy, with renewable energy cited as one of those potential uses. However, any proposals are subject to all other planning and environmental considerations and in the interests of sustainable development. The application has retained the input of individual consultants and specialists to address matters that, on foot of legislation, regulation and policy, statutorily require considering as part of a planning application for the proposed development.

Archaeology and Cultural Heritage

5.2 **Section 7.1** of the Development Management Manual sets out local planning policy requirements in relation to archaeology and cultural heritage. These include the requirements for planning applications submitted on lands within the vicinity of archaeological sites and conditions that the planning authority may impose in granting planning permission.

5.3 A Cultural Heritage Impact Assessment Report has been prepared by Courtney-Deery Consultants (See **Appendix III**) to investigate and assess potential impacts, if any, on the existing archaeological conditions within the application site and in the surrounding area. The Archaeological Impact Assessment considered the Sites and Monuments Record of Monuments and Places, National Monuments, National Inventory of Architectural Heritage, Record of Protected Structures, Cartographic Analysis, Toponomy, Previous Archaeological Investigations, Previous Archaeological Finds recorded in Topographical Files, Archaeological Inventory of County Wexford, Wexford County Development Plan 2010-2016, Literary Sources and Cartographic Sources.

5.4 In summary, the report found that there are no national monuments or recorded archaeological monuments (RMP / SMR sites) within the proposed development site – the closest national monument is Dunbrody Abbey (National Monument Number 192 and WX039- 030001), a Cistercian house located just over 1.6km to the east of the proposed development (see paragraph 5.5). Substantial parts of the site have already been disturbed during the construction of the Greenlink Interconnector facility. As part of the application for the Interconnector, a geophysical survey was carried out by Wessex Archaeology (Licence Ref 21R0315), which covered the Site. Seventeen test trenches were proposed but due to ground conditions, the presence of overhead lines and a gas pipeline

wayleave, this was altered on site and fourteen trenches were dug (Licence Ref. 21E0854). The test excavation did not encounter any evidence of prehistoric activity on the site. Neither is there any evidence to suggest any medieval domestic or industrial activity associated with any known settlement on Great Island, it was concluded that historically the site had been used for pasture. The geophysical anomalies were found to be degraded and weather rock outcrop, natural and not archaeological in origin.

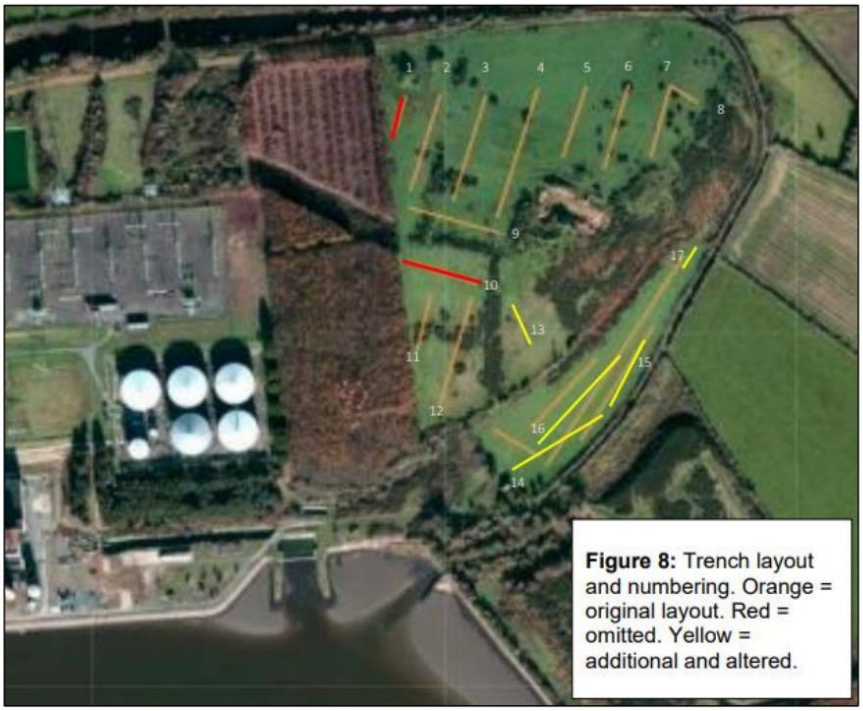


Figure 12 Site Investigations at the Converter site

Figure 20 – Map of test trenching undertaken for Greenlink Interconnector ABP Ref. 308096 - *Extracted from Archaeology, Architecture and Cultural Heritage Report Kilmannock 110kV Substation and 110kV Grid ConnectionGreat Island, Co. Wexford (pg.15)*

5.5 A visual assessment of potential impacts of the proposed development on Dunbrody Abbey was undertaken as part of the report. The report found that the proposed development would not negatively impact the Abbey in visual terms, stating (pg. 24):

The only clear view is located at the northwest corner of the site where the stone wall has been replaced with a fence line and there are no brambles. From this view point, the substation will be visible but it will not dominate the skyline or detract from the setting or experience of the monastery. This view is located outside the Abbey buildings to the west (Plate 10). Given the distance, existing hedge rows and the focus on the internal aspect of the monument (Plate 11 and Figure 17), it is not expected that the proposed development (Figure 18) will have a

significant effect on the setting or amenity value of Dunbrody Abbey and will not visually detract from the monument.

5.6 It is recommended that a comprehensive programme of archaeological test excavation be undertaken across the footprint of the proposed development in advance on construction. The report recommends that archaeological monitoring takes place during any earthmoving activity associated with the site preparation and construction stages of the proposed development. Due to anomalies in geo-physical readings on adjoining sites, it is considered that further geophysical analysis, would not be beneficial in determining the subsurface archaeological potential of the site and that archaeological testing is the preferred mitigation strategy. Further recommendations may be required based on the results of the archaeological monitoring, and may include preservation by record, design or in situ if any well-defined, subsurface features are identified. Archaeological testing may also be required to establish the nature, extent, and date of any potential archaeological sites or features that lie within the proposed development site. All recommendations made in the report are subject to the approval of the National Monuments Service of the DHLGH and the National Museum of Ireland.

5.6 The report recommends that groundworks for the development be monitored by a suitably qualified archaeologist. In the event that archaeological features are identified through this exercise, all works will cease in the vicinity of the feature which will be cordoned off and the appropriate authorities will be contacted in order to agree a suitable strategy to proceed. This is due to the proposed development's location in proximity to significant archaeological sites.

Ecology

5.7 The Energy Strategy set out in Volume 10 of the Plan requires that proposals for energy infrastructure be assessed in accordance with requirements of Article 6 of the Habitats Directive. **Chapter 10 – Environmental Management** of the Development Plan sets out the framework by which the environment is sustainably managed, ensuring that land use and future developments protect and enhance, where possible, environmental quality and contribute to the health and wellbeing. The chapter sets out priorities with regard to climate action and the environment. Section 10.4 of the chapter sets out goals and strategies with regard to environmental management, including the appropriate assessment of proposals (Objective EM02) and requirements for an EIA under European law as transposed into national legislation (Objective EM01). Objective EM05 deals directly with specific environmental considerations, e.g. water, noise, air quality and climate that are dealt with separately in this statement.

5.8 In accordance with **Objective EM02**, Moore Associates Ltd. was retained as a project ecologist to report and inform on the baseline ecological conditions of the application site and surrounding area, and to determine whether the proposed development would, either individually or in combination with existing and/or proposed plans or projects, have a significant effect on a European-designated site through the carrying out of an appropriate assessment. The findings of the work are contained in the:

- Screening for Appropriate Assessment;
- Ecological Impact Assessment (EcIA) incorporating bat and bird surveys prepared by Eire Ecology Ltd.

Screening for Appropriate Assessment

5.9 A Screening for Appropriate Assessment "the Assessment" was carried to determine if the proposed development on the basis of objective information, individually or in combination with other plans or projects, would have a significant effect on a European site and whether:

- the project poses no potential for the possibility of a significant effect and as such requires no Stage 2 assessment; or

- the project has potential to have a significant effect (or this is uncertain and therefore cannot be excluded) and therefore a Stage 2 Appropriate Assessment of the project is necessary.

As per standard practice and guidance, the Assessment was undertaken using a four-stage process to complete the AA and outlines the issues and tests at each stage.

5.10 A Zone of Influence (ZoI) of the proposed development was established by considering the Proposed Development's potential connectivity with European sites, in terms of:

- Nature, scale, timing and duration of all aspects of the proposed works and possible impacts, including the nature and size of excavations, storage of materials, flat/sloping sites;
- Distance and nature of potential pathways (dilution and dispersion; intervening 'buffer' lands, roads etc.); and
- Location of ecological features and their sensitivity to the possible impacts.

On this basis, two in the Natura 2000 network sites were identified as being within this ZOI:

002137	Lower River Suir SAC	1.67km
002162	River Barrow and River Nore SAC	0.37km

5.11 Using the Source-Pathway-Receptor model for establishing whether there was any potential for connectivity between the application Site and these sites, it was found that, in the case of

the Lower River Suir SAC there are no pathways or connectivity to the habitats and/or species of this site. For the River Barrow and River Nore SAC it was found that there are no pathways or connectivity due to distance and the lack of any relevant ex-situ factors of significance to bird species or wetland habitat.

5.12 A concurrent GIS analysis of the proposed Natural Heritage Areas (pNHA) and designated Natural Heritage Areas (NHA) in terms of their role in supporting the species using Natura 2000 sites was undertaken along with GIS investigation of European sites.

5.13 To establish connectivity between the application Site and sites with ecological designations a review of aerial photography, Ordnance Survey Ireland (OSI) mapping and OSI Geographical Information System (GIS) data for rivers and streams found that there are no notable surface water features onsite and no direct hydrological pathways to offsite surface water bodies. This was confirmed during fieldwork on habitat assessment on 27th July 2023. There is therefore no connectivity to any European sites within or outside the potential Zone of Influence.

5.14 As assessment of likely significant effects of the proposed development on ecologically-designated sites, both in isolation and in-combination with other relevant developments, is included in the Assessment.

5.15 The Assessment objectively concluded:

- The proposed development is not directly connected with, or necessary to the conservation management of the European sites considered in this assessment;
- The proposed development is not likely to either directly or indirectly significantly affect the Qualifying interests or Conservation Objectives of the European sites considered in this assessment;
- The proposed development, either alone or in combination with other plans or projects, is not likely to have significant effects on a European site;
- It is possible to conclude that significant effects can be excluded at the screening stage.

Ecological Impact Assessment (EcIA)

5.16 The EcIA submitted was carried out using a combination of desktop assessment and field study in accordance with guidelines and publications outlined in Section 2.2.3 of the report

5.17 Habitats that comprise the Site were surveyed on the 27th of July 2023 by conducting a study area walkover covering the main ecological areas identified in the desktop assessment. The EcIA established the following habitats on the Site:

- Improved Agricultural Grassland (GA1)
- A thin strip of Recolonising Bare Ground (ED3) along the northern boundary where earth has been disturbed in the past year.

The grassland area has typical species of improved grassland, e.g. Perennial Rye Grass (*Lolium perenne*) Meadow Foxtail (*Alopecurus pratensis*), Crested Dogs Tail (*Cynosusrus cristatus*), False Oat-Grass (*Arrhenatherum elatius*) and Broad-leaved Dock (*Rumex obtusifolius*). Barish patches from machinery have been colonised by Knotgrass (*Polygonum* sp.) and Redshank (*Persicaria maculosa*). A narrow portion of the north of the site been disturbed in the recent past, presumably during scrub clearance, and has recolonized. There were no invasive species recorded at the proposed development site.

5.18 Signs of mammals such as badgers and otters were searched for while surveying the study area noting any sights, signs, or any activity in the vicinity especially along adjacent boundaries. Birds were surveyed using standard transect methodology and signs were recorded where encountered during the field walkover surveys. It was found that:

- No otter habitats existing in the study area and no potential for otters on the site;
- No badger setts existing in the study area and no potential for badgers on the site. The field boundaries were surveyed, and no setts were recorded;
- There is low potential for bat habitats or bat commuting on site;
- The areas of scrub and hedgerow to the north of the site are low and patchy and of relatively low value to foraging bats.

5.19 The report finds that:

- The habitats under the footprint of the proposed development are of low local ecological value.
- The loss of habitat for all elements of the proposed development is **permanent** but **imperceptible**;
- There are no predicted in-combination or cumulative effects with other adjacent and concurrent proposed developments;
- Should best practice guidelines for the prevention of invasive species spread be adhered to, no potential for the spread or introduction of high impact invasive species are foreseen as a result of this Scheme.

Birds

5.20 Three vantage point surveys were conducted between July and October 2023, where the vantage point was located in the northeastern corner of the Site. Hinterland point counts were conducted during the breeding and wintering periods. Target species for the surveys included all migratory birds such as swans and geese given the close proximity to an estuary and grassland as these species graze on grass. In addition, raptors, birds of prey, ducks, plovers, lapwings, sandpipers, gulls and terns. In line with I-WeBS methodology, Cormorant, Shag, Little Egret, Grey Heron, and Kingfisher were also included. A breeding bird transect was conducted on the 26th of July 2023 within the site and the adjacent co-development.

5.21 Species of the target list recorded from the Vantage Point are presented in Table 5-5. In summary. Species recorded in the hinterland survey are presented in Table 5-7, where none of the numbers recorded are close to nationally important numbers. In summary, Black headed gull, Buzzard, Herring gull, Meadow Pipit, Sparrowhawk and Yellowhammer were recorded within the site. Multiple other species were noted within a 500m buffer of the site and in the greater area. The only species of noted recorded was Meadow Pipit. This ground nesting bird was probably breeding within the southern field. Though Yellowhammer was noted from the Vantage point survey within the site and in the 500m buffer, it was not recorded during the transect. Better habitat can be found to the north where mature treelines and hedges border tillage grain fields. Blackbird was recorded breeding, Dunnock and Meadow pipit were probably breeding and Bullfinch, Stonechat and Wren are possibly breeding.

5.22 The potential impacts of the proposed development on the bird population within the Site and in the surrounding hinterland was assessed using the Percival method. The criteria for assessment are contained in Tables 5-9, 6-1 and 6-2. Tables 5-10 and 6-3 summaries the importance of species of interest interacting with the Site and assessment of impacts respectively. With all 9no. species of bat and bird, the assessment of impacts is determined as Low or Very Low.

5.23 In relation to potential impacts on bird populations in ecologically-designated areas within the ZOI, the report found that no wintering waders and no Conservation Objective species associated with the Bannow Bay SPA (Site Code 004033), located c. 11.36km to the southeast, were recorded within the site.. None of the 22no. bird species utilizing the river and estuary within the River Barrow and River Nore SAC, located 370m to the west of the Site, were recorded from within the Site. While the surrounding agricultural lands provide good feeding and roosting areas, the subject site has lower potential given the enclosed nature of the site; the existing power-station to the west, railway bank to the north, treeline to the east

and construction site to the south. These barriers prevent the site from offering ex site effects on the SPAs and birds associated with SAC's located in the wider vicinity of the Proposed Development.

5.24 In light of the above, the report proposes the following mitigation measures:

- An Ornithologist ECoW will conduct two days surveys in the bird breeding season during the construction period to identify if any rare or protected birds are breeding in areas with potential for disturbance.
- Vegetation removal could impact on nesting passerines such as blackbird and wren thus ideally this activity should be carried out only outside the bird-nesting season March 1st – August 31st in order to avoid impacts on nesting birds. In the event this work is required earlier an ecological clerk of works should be onsite to ensure no nesting birds are present. Should an occupied nest be found the clearance works will have to waits until after fledging.
- Yellowhammer and Meadow Pipit were recorded within the site. As such wildflower seed mix areas should be planted to allow a food source for such species still occupying the greater area.

Bats

5.24 In order to assess the level of bat activity and the suitability of the Site for bat roosts. A preliminary walkover survey was carried out by 13th of September 2023 to examine the potential for any features suitable to host a bat roost. Two static bat detectors were placed within the Site between September 13th and Septebmer 20th.

5.25 Where the potential for bat roosts is concerned, it was found that the Site does not contain any buildings and hedgerows within the site have no potential to host a bat roost. Similarly, the block and brick of the railway bridge immediately to the north of the Site has no gaps of sufficient depth to provide suitable roosting features for bats. Four species of bat were positively identified during the various bat surveys:

- Common Pipistrelle (*Pipistrellus pipistrellus*),
- Soprano Pipistrelle (*Pipistrellus pygmaeus*),
- Brown Long-eared bat (*Plecotus auritus*) and
- Leisler's bat (*Nyctalus leisleri*).

In addition, two unidentified Myotis bat species were recorded, these being either Whiskered, Natterers or Daubenton's bats. The overall bat pass per hour rate for both sites, rates are more in line with upland bog habitats. The report suggests that lighting from the nearby power station

reduces favourability of the site for bats.

5.25 In relation to potential impacts on bat roosting and requirement for mitigation measures the report summarises in the following paragraph:

No loss of bat roosting potential will occur due to the development. Highest activity recorded was from Common Pipistrelle and Leisler's bat, both species adept at hunting over artificial surfaces thus the transformation of the site may result in only a medium negative to neutral impact. It is important to limit artificial lighting within the site to ensure no additional light pollution occurs on bat friendly habitat features.

A request to consider the effects of lighting on bats associated with the proposed development was issued during the pre-planning process. In the absence of any specific Irish guidance the report has included UK guidance on the matter. on lighting has been based on the Bats & Lighting document; (BCI, 2010), the Bats and artificial lighting in the UK Guidance Note 08/23 (BCT, Bats and artifical lighting at night, 2023) and 08/18 (BCT, 2018) and Guidelines for consideration of bats in lighting projects. EUROBATS Publication Series No. 8 (Voigt, 2018). It is considered lighting can be imposed by way of a suitably-worded planning condition.

Hydrology and Flooding

5.26 Objectives WQ1 through to WQ18 of Chapter 10 – Environmental Management of the Plan set out objectives to conserve existing water quality and improve upon existing standards where possible for all sources of water.

5.27 Accordingly, a site-specific Flood Risk Assessment has been submitted to accompany this application, as prepared by IE Consulting Ltd.. A summary of the assessment is:

- The assessment has determined that there are three hydrometric gauging stations located on the River Barrow and one hydrometric gauging station located on the River Suir in the general vicinity of the proposed development site;
- No historical or recurring flooding events, including groundwater flooding, have been recorded within or in the vicinity of the boundary of the proposed development site. The site is partially shown as falling within an area designated as 'Land Commission Benefited Lands';
- The Site is primarily underlain by bedrock at surface with the remainder underlain by Made Ground. Alluvium deposits are not mapped within or in the vicinity of the Site;
- The area of the site where development is proposed falls within Flood Zone 'C'. No

development is proposed within Flood Zone 'A' or Flood Zone 'B'. In this regard the development as propose is not subject to the requirement of The Justification Test.

- The primary potential flood risk to the proposed development site can be attributed to an extreme fluvial and/or tidal/coastal flood event in the River Barrow Estuary and/or the River Suir Estuary and/or the Campile River located 253m, 255m and 914m beyond the western, western and southern boundaries of the site respectively and/or to an extreme fluvial flood event in the Newtown Stream located beyond the eastern boundary of the site;
- The site of the proposed development does not fall within a predictive present day scenario 1% AEP (1 in 100 year) or 0.1% AEP (1 in 1000 year) fluvial flood zone;
- The site of the proposed development does not fall within a predictive present day scenario 0.5% AEP (1 in 200 year) or 0.1% AEP (1 in 1000 year) coastal/tidal flood zone;
- The proposed development site does not fall within a predictive mid-range future climate change scenario 1% AEP + CC (1 in 100 year + climate change) or 0.1% AEP + CC (1 in 1000 year + climate change) fluvial flood zone;
- The proposed development site does not fall within a predictive mid-range future climate change scenario 0.5% AEP + CC (1 in 200 year + climate change) or 0.1% AEP + CC (1 in 1000 year + climate change) coastal/tidal flood zone;
- A minor area adjacent to the eastern boundary of the site falls within a predictive present day scenario 0.5% AEP (1 in 200 year) and 0.1% AEP (1 in 1000 year) NCFHM coastal/tidal flood zone. It is noted that no development is proposed at this specific location of the site;
- A minor area adjacent to the eastern boundary of the site falls within a predictive mid-range future climate change scenario 0.5% AEP + CC (1 in 200 year + climate change) and 0.1% AEP + CC (1 in 1000 year + climate change) NCFHM coastal/tidal flood zone. It is noted that no development is proposed at this specific location of the site;
- Reference to the proposed site layout drawing produced by TLI Group indicate that the finished ground levels within the site range from 16.00m OD (Malin) within the western area of the site to 12.00m OD (Malin) within the eastern area of the site. These proposed finished ground levels are significantly elevated above the predictive 0.1% AEP + CC (1 in 1000 year + climate change) NCFHM coastal/tidal flood level listed above;

- The development as proposed is therefore not expected to result in an adverse impact to the existing hydrological regime of the area or increase flood risk elsewhere;
- In consideration of the findings of this Site Specific Flood Risk Assessment, it is considered that the development as proposed is appropriate from a flood risk perspective.

Noise

5.28 Wexford County Council has prepared a Noise Action Plan (NAP) in accordance with the requirements of Environmental Noise Regulations 2018 (S.I No. 549 of 2018) which give effect to the EU Directive 2002/49/EC relating to the assessment and management of noise. Section 2 of the Development Management Manual Common Principles for All Developments outlines planning policy requirements applicable to all types of new development. These requirements include noise. The requirements set out the acceptable level and nature of noise measured from the outside of a dwelling from a proposed development. The requirements state a noise assessment can be requested by the planning authority. Section 2.6 Amenity of the Wexford County Development Plan document suggests that all developments should be designed to protect the amenities of adjoining properties and properties in the vicinity. In relation to noise it states:

Noise emanating from any proposed development shall not cause to be measured at the facing elevation (outside) of any dwelling in the area, during the hours 0700 – 2100 a noise level of 55 dB(A) (LAeq 1 hour) and during the hours 2100 – 0700 and Sundays and Bank Holidays a noise level of 42 dB(A) (Laeq 1 hour). The noise shall not be impulsive in nature or have any tonal element which is 4 dB(A) above the adjacent frequencies.

As and when required by the Planning Authority, a survey of noise levels at monitoring stations on adjacent properties (to be agreed with the Planning Authority) shall be undertaken by an agreed professional (at the expense of the developer) and the results submitted to the Planning Authority within one month of such a request.

5.29 An Environmental Noise Assessment prepared by PDA Acoustics (**See Appendix VII**) has been submitted with the planning application. The assessment examines potential noise impacts on identified receptors surrounding the application site both during the construction phase and operational phase of the proposed development, and the cumulative impacts of the proposed development with development associated with a 38kV electrical infrastructure submitted to Wexford County Council (Ref. 20231294). For completeness, the report includes an assessment of potential noise effects from the 110kV battery energy storage system (BESS), which will be

subject to a separate planning application. The potential noise effects of the 110kV substation proposed in this application are assessed separately.

5.30 For the proposed development, potential impacts have been identified as the externally mounted plant associated with the proposed substation installation, consisting of a 110 kV transformer, individual current and voltage transformers, a combined current/voltage transformer and substation building. We have been informed that the exact plant is yet to be selected, however the proposed transformer plant will not have a sound pressure level value greater than <65dB(A) at 10m, which is indicative of a worst-case scenario.

5.31 The locations of the closest noise sensitive dwellings to the development have been identified – see Figure 4 of Report. The Soundplan model would suggest the following noise levels calculated at the closest noise sensitive receivers. For these receptors, the report states that the calculated noise levels meet the proposed outdoor noise limits, primarily due to the separation distance to the noise sensitive receivers.

5.32 It is considered the potential noise impacts of the proposed development are in accordance with the relevant guidelines and therefore in accordance with relevant policies of the Development Plan.

Landscape and Visual Appraisal

5.33 **Chapter 11 – Landscape and Green Infrastructure** and **Volume 7 Landscape Character Assessment** of the Plan define the authority's goals, objectives and management strategies of the various landscape characters across Wexford County. Section 11.2 Climate Change and Landscape of Chapter 11 sets out landscape objectives as they relate to climate change mitigation and adaption, including the preservation of wetlands and vegetated dunes; the protection of natural and cultural heritage assets, river channels and riparian zones; the support of renewable energy projects assisting in reducing greenhouse gas emissions and the creation of carbon sinks.

5.34 **Objectives L4-L14** set out requirements for new development as these requirements relate to landscape and visual impact. These requirements range from appropriate siting of development; ensuring any visual impact of development is minimized, particularly for Upland, River Valley, Coastal or Distinctive Landscape Character Units; ensuring developments are not visually obtrusive; enhancing degraded landscapes through new development; adopting a presumption against elevated or exposed sites.

5.35 **Objectives L14 and L15** of the Plan set out submission requirements, where L14 requires a Landscape and Visual Impact Assessment to be submitted with development proposals, which may have significant impacts on landscape. **Objective L15** requires digital terrain modelling, slope analysis and 3d visualisations, as resources allow, and make them available alongside

CDP landscape designations to be used by applicant and the Council alike in the assessment of visual impacts. Accordingly, a Landscape and Visual Appraisal "the Appraisal" has been prepared by Douglas Harmann, a Chartered Landscape Architect, using mapping based on both Digital Terrain Modelling and Digital Surface Modelling. This LVA has been informed by a desk-based analysis of existing data and other information gathered through a field survey undertaken during November 2023. Based on a 5 km radial study area, it identifies the baseline against which the effects of the Proposed Development are assessed and concentrates on predicting the likely adverse effects during the operational phase.

Landscape and Visual Appraisal (LVA) – Landscape Impact

5.36 The Appraisal identifies the Site as being within the Barrow River Valley Landscape Character Unit (LCU), which shares similar characteristics to that of the Lowlands LCUs but exhibit a more scenic appearance due to the presence of the rivers and their associated topography, and riparian and woodland habitats. The landscape sensitivity for the LCU is **Moderate-High**. The wider study area within Wexford County to the east and north-east of the Site is characterised by the Uplands LCU, which is classed as **High** sensitivity.

5.37 There are no nationally important landscape designations within the study area and at a local level, there are no Distinctive Landscapes within the 5 km study area; the nearest Distinctive Landscape, namely Slieve Coillte, is located approximately 6 km to the north-east. Although this is beyond the study area, given its landscape and visual importance, a viewpoint assessment from the summit of this landscape has been undertaken.

5.38 As a general overview, the study area exhibits a relatively low level of settlement dispersal, typified by a pattern of small villages, and dispersed farmsteads and dwellings nestled within rural farmland. However, containing upland landscapes to the north and north-east east of the wider study area are largely unsettled.

5.39 With a medium susceptibility to change and medium value of view, the overall sensitivity of a relatively small number of local road is assessed as **Medium**. The study area includes a section of the Norman Way, a heritage route accommodating cyclists and walkers that runs along the south coast of County Wexford. A number of medieval sites are located along it, including Kilmokea Cross and Dunbrody Abbey. The Eurovelo cycle route also leads south from Ballyhack, approximately 4 km to the south of Site. Recreational users are assessed as having a high susceptibility to change and with a medium value, overall sensitivity is **Medium-High**.

5.40 Based on the SZTV analysis, identification of landscape and visual receptors 9no. viewpoints were selected to undertake an assessment of landscape and visual effects. The viewpoints have been identified as those which are sensitive to change and where open views towards the site are generally experienced. The summary of viewpoint findings are contained in Table 7 of the Assessment, where the Magnitude of Effects ranged from **None-Very Small-Small.**

Landscape and Visual Assessment (LVA) – Visual Impact

5.41 Based on the SZTV analysis, identification of landscape and visual receptors 9no. viewpoints were selected to undertake an assessment of landscape and visual effects. The viewpoints have been identified as those which are sensitive to change and where open views towards the site are generally experienced. The viewpoint locations have been carefully selected to demonstrate the worst-case scenario and in identifying these, a detailed analysis of the surrounding landscape was undertaken to establish the likely visibility of the Proposed Development.

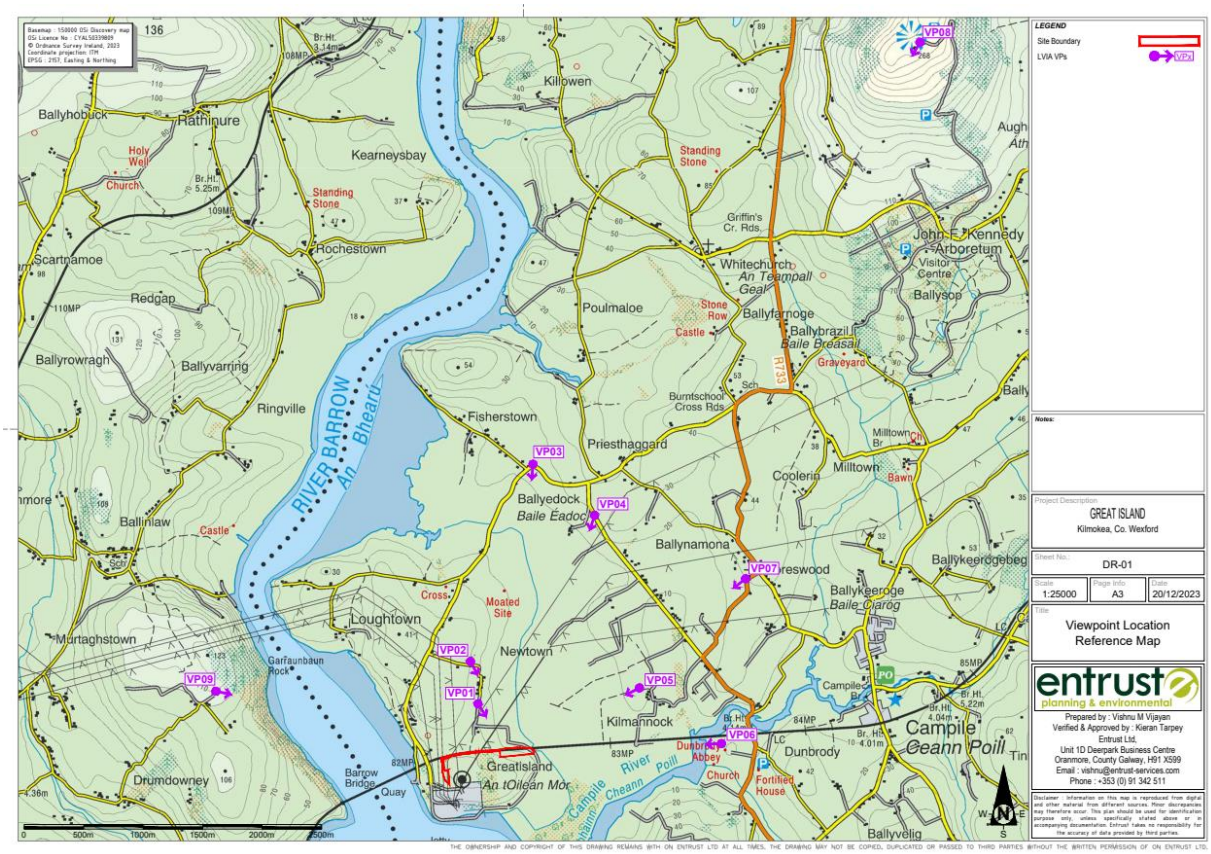


Figure 22 – 110kV SID application – 9no. viewpoints for Landscape and Visual Assessment

5.42 The Magnitude of Effect and Effect and Significance of the visual impact of the proposed development was measured for each of the 9no. viewpoints. The Magnitude of Visual Effect ranged from **None-Very Small-Small-Medium**. In all cases the Significance of the Effect was assessed as **Not Significant**.

5.43 An assessment of potential landscape and visual effects in culmination with other development has been undertaken. The Assessment found that the magnitude of cumulative landscape and visual impacts to be **Minor** and **Not Significant**. The primary considerations for this assessment result is the much larger scale and height of the Greenlink Interconnector building and associated infrastructure. In relation to the proposed 38 kV Substation and associated Battery Energy Storage Site (subject to a separate Planning Application), this would be located immediately to the north of the Proposed Development. If the 38kV Substation is consented therefore, the Proposed Development would be viewed in direct association with this and as such, the magnitude of cumulative landscape and visual effect would be very limited.

Landscaping Management Plan

5.44 **Objective PT03** of the Plan, contained within Chapter 9 – Infrastructure Development supports development of new electricity substations in locations that do not have a significant negative impact on nearby residents and are subject to landscaping screening.

5.45 A full Landscaping Plan taking into consideration findings of the Landscape and Visual Impact Assessment has been prepared in support of this application. In addition to the overall Site Layout prepared in other drawings, the Landscaping Plan includes the of native hedgerow in front of the palisade fencing that runs along the engineered slope on the northern and eastern boundaries. Further screening and increase in potential habitat would be provided by in the form of woodland planting:

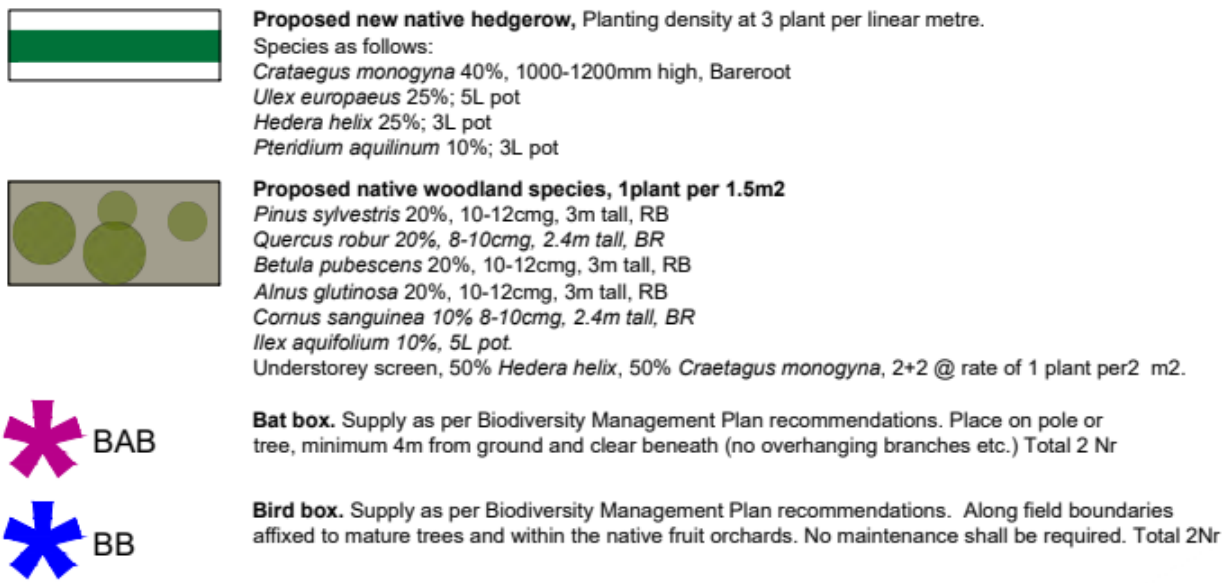


Figure 23 – Planting and biodiversity enhancement measures - Cathal O' Meara Landscape Architects Dwg. Ref. No:2325_LA001_Rev00

Construction Environment Management Plan (CEMP)

5.46 The purpose of the CEMP submitted is to identify and define the specific environmental aspects of the project, the measures that are to be put in place and the procedures to be followed for the duration of the construction works. The CEMP assesses key environmental features, including water, noise, ecology, dust and the potential of pollution during the construction and decommissioning phases of the development, and identifies potential pollution receptors and proposes suitable mitigation measures as necessary.

5.47 The objective is to provide mitigation measures construction, operational and decommissioning phases of the facility. Potential sources of pollution for these phases are outlined in **Section 4** of the report. Potential receptors of this pollution are identified as the Newtown Stream, located approximately 20m to the east of the Site, the Campile River and groundwater aquifer. No other receptors such as turloughs or sinkholes were identified or are mapped within or in the immediate the vicinity of the proposed development site. The proximity of residential properties to the proposed development site is considered to be the primary potential noise pollution receptors, which is considered separately in the Environment Noise Assessment. A 15m buffer on the eastern portion of the Site is shown in Appendix 1 of the report.

5.48 Mitigation measures during the construction phase covers a wide-range from storage and distribution of liquids and materials during the construction phase; dust minimization; control of noise (See also Environmental Noise Assessment – Appendix VII) and protection of soil, surface waters and groundwater. Mitigation measures against dust are outlined in Section 6.2.6 of the report. These can be considered in addition to mitigation measures outlined in the Air Quality Report produced by AWN Consulting Ltd.

5.49 As part of mitigation measures for soil, surface water and groundwater, the requirement for a surface water management plan to be developed to minimise potential impacts on surrounding or downstream watercourses during construction or operation is included. The CEMP states:

The design of the surface water management plan will maintain the existing drainage regime as reasonably as possible. Drainage design, earthworks and environmental measures shall at all times ensure that the water quality and water levels of the on-site drainage channels are not adversely affected. Construction of the site drainage system will only be carried out during periods of low rainfall, and therefore minimum runoff rates.

A Site Drainage Layout Plan – Dwg. Ref. 05951-DR-309 has been submitted with the application, illustrating details of surface water and land drainage management. Overall site drainage will be implemented during the construction phase. Mitigation against pollution of Newtown Stream are outlined in Section 6.1.2 of the report, which states:

5.50 Ecological, environmental and climate considerations have also been taken into account in the

CEMP. As part of mitigation measures Section 6.2.9 of the Report sets out mitigation measures specific to flora and fauna and ecology generally. These include:

- Employment of an Ecological Clerk of Works
- Mitigation against pollution of the Newtown Stream during periods of heavy rainfall
- Identification of bat roosts on Site during construction phase
- Vehicle washing, cleaning and inspection

These criteria overlap with those provided at Section 6.2.15 Biosecurity Invasive Species Best Practice Measures.

Transport and Travel

5.51 Local Transport Projects was retained by the Agent to assess the road network and highways issues pertaining to the application site during construction and operational phases of the solar farm development prepare A Transport Management Plan (TMP) was prepared and submitted with this application, which considers all aspects of traffic and highways considerations during all stages of the proposed development, including:

- Assessment of local road network;
- Proposed construction programme;
- Site access consideration;
- Wider route consideration;
- Road works;
- Traffic impact assessment and traffic management measures;

5.52 As discussed with WCC Roads (David Murphy), all HCVs associated with deliveries arriving and travelling to the site would access the site via N25 – R733 – L4033 – Private Site Access, using the same route in reverse for egress. The L4033 connects with the regional road network via a simple priority T-junction with the R733 approximately 5km north-east of the site access. No signed restrictions (e.g. weight or height restrictions) have been on the identified route. Though there may be some structural weight limitation on the L4033 causeway to the north of the site, it is understood that any vehicles with less than 12-tonnes on each axle are expected to be accommodated without concern.

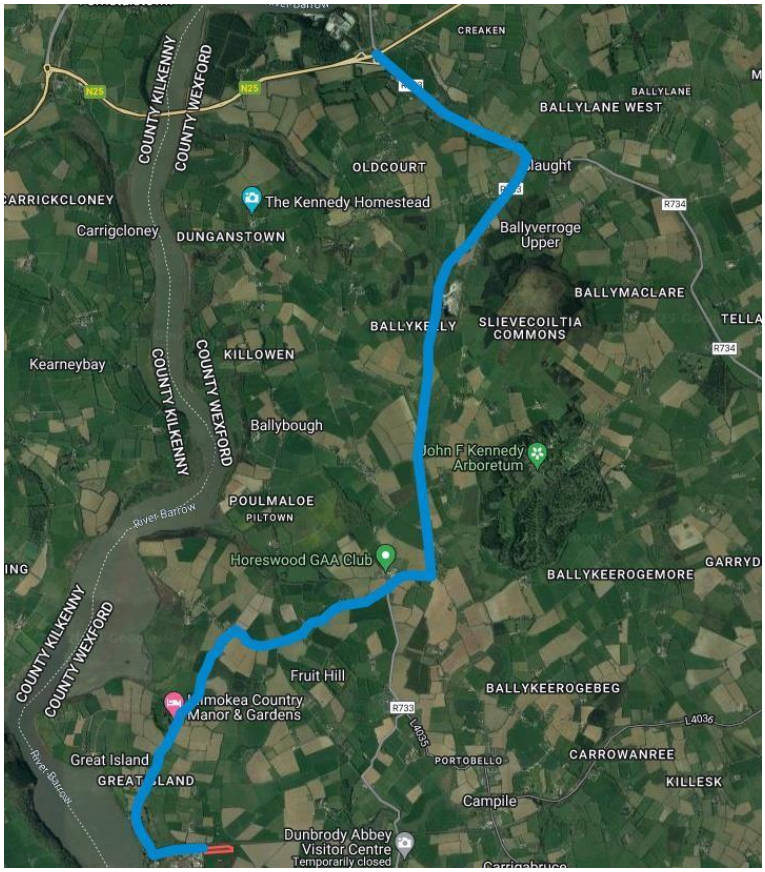


Figure 24 – Proposed route for construction traffic from N25

5.53 Construction vehicular movements during this phase, which is schedule for 20-weeks, is not expected to exceed 20 two-way HCV movements per day and 50 staff, with lower traffic levels on most days of construction. Therefore the proposals are not expected to have a significant traffic impact on the public roads, particularly in the context of the larger traffic generation associated with the approved Greenlink Interconnector (Ref: 308906).

5.54 Car sharing amongst staff is also to be promoted at the site and is expected to form a realistic travel mode for those staff employed by the same company and therefore the number of staff vehicle movements is expected to be significantly lower than the number of operatives on-site. Staff vehicle movements would mostly be repeated at the start and end of each working day and generally not coincide with the movement of large vehicles.

5.55 A cumulative impact of traffic and transportation has been considered in the Plan, which states:

The above referenced approved BESS scheme (Ref: 20180506) was accounted for as a committed development in the Greenlink Interconnector EIAR assessment of cumulative development (ARUP, 2020), and therefore it is reasonable to consider that the impact of a BESS scheme on the proposed site alongside the Greenlink Interconnector has already been assessed and agreed. That said, it is recognised that construction of the Greenlink Interconnector, which is already underway, may be fully complete before the proposed BESS

scheme construction commences, in which case there would be no cumulative impact. Even if there is some overlap, then the low traffic generation of the schemes means that there is not expected to be a significant cumulative traffic impact.

5.56 Traffic management measures outlined include timed deliveries, availability of a banksman, traffic signage and storage of materials within the temporary construction compound.

Air Quality Report

5.57 Chapter 10 of the Development Plan Environmental Management recognises improvement of air quality, through sustainable transport patterns and promotion of renewable energy as a focus for climate action and the environment. The protection of air quality as a strategy to protecting environmental quality is set out in Section 10.4.2 of Chapter 10. Air quality objectives AQ01– AQ06 are set out also and cover adherence to standards and promotion of air quality improvement through development management.

5.58 An Air Quality Assessment has been prepared, in accordance the Air Quality Standards Regulations 2022, which incorporate European Commission Directive 2008/50/EC, which has set limit values for numerous pollutants with the limit values for NO_2, PM_{10}, and $PM_{2.5}$ being relevant to this assessment.

5.59 In accordance with standards, the area sensitivity to dust soil effects on people and property is considered to be Low. Based on implemented standards the Sensitivity of the Area to Dust Related Human Health Impacts is considered to be Low. In relation to ecological impacts of generated dust, a 350m buffer around the Site was established.

5.60 A review of historical 30 year average data for Johnstown Castle meteorological station indicates that on average 200 days per year have rainfall over 0.2 mm (Met Eireann, 2023) and therefore it can be determined that 55% of the time dust generation will be reduced.The report found that the proposed development will not increase annual average daily traffic or heavy duty traffic beyond the limits. Dust generated as a result of traffic during both the construction and operational phases is therefore scoped out. The construction stage traffic has been reviewed and a detailed air quality assessment has been scoped out as none of the road links impacted by the Proposed Development satisfy the TII scoping assessment criteria. It can therefore be determined that the construction stage traffic will have an imperceptible, direct, neutral and short-term impact on air quality.

5.61 Dust emission as a result of earthworks was identified as the highest dust emission risk. The dust emission magnitude for the proposed earthwork activities can be classified as small as

the total material moved (both excavations and infilling works) will be between less than 20,000 tonnes. Despite a medium risk, the risk of dust soiling and human health was found to be **Low** to **Negligible**.

5.62 Mitigation measures appropriate for sites with a low risk of dust impacts are set out in 5.1.1 to 5.1.10 of the Report. This measures, ranging from communications and monitoring to dust suppression during the construction phase aim to ensure that no significant nuisance occurs at nearby sensitive receptors.

Climate Report

5.63 The report provides a description of the baseline climate environment and identification of the sensitivity of the surrounding environment. It then goes on to identify and assess the potential climate impacts associated with the construction and operational phases of the proposed development, based on net impact of the proposed development over its lifetime, which can be positive, negative or negligible. In accordance with the relevant guidance, where greenhouse gas emissions cannot be avoided residual emissions should be reduced at all stages. Where GHG emissions cannot be avoided, the goal of the EIA process should be to reduce the project's residual emissions at all stages.

5.64 In accordance with guidance in relation to climate impact assessments *LA 114 Climate* (UK Highways Agency, 2019), a detailed assessment of traffic related carbon dioxide (CO_2) emissions was not conducted, based on the following:

- A change of more than 10% in AADT;
- A change of more than 10% to the number of heavy duty vehicles; and
- A change in daily average speed of more than 20 km/hr.

5.65 In relation to emissions during the construction phase of the proposed development, the report found is the potential for greenhouse gas emissions to atmosphere. Using the TII Carbon Tool, the proposed development is estimated to result in total construction phase GHG emissions of 3,598 tonnes embodied CO_2, equivalent to 0.002% of the 2030 Industrial sector budget or 0.0002% of Ireland's total national 2022 GHG emissions (excluding LULUCF) when annualised over the project lifespan (assumed 25 years).

5.66 It has been calculated that the BESS will be capable of storing a maximum 263 GW of renewable electricity annually. In reality, the batteries will not store energy 24 hours per day, 365 days per year, therefore storage has been assumed to occur for two thirds of the year (5,840 hours). The report states that the storage of renewable electricity will result in total GHG emissions savings of 54,393 tonnes CO_2e each year over the lifespan of the development,

based on the 2022 electricity generation capacity factor of 331 gCO_2/kWh and once initial emissions from the construction of the development are offset. This GHG saving equates to 0.09% of Ireland's total 2022 GHG emissions of 60.76 Mt CO_2e or 1.8% of the 2030 Electricity sector carbon budget of 3 Mt CO_2e. The savings in CO_2 emissions arising from the storage of electricity from renewable sources were compared against CO_2 emissions from electricity production using non-renewable sources. The calculations were carried out using SEAI published emission rates from non-renewable energy sources (SEAI, 2023). This total CO_2 saving annually and over the lifespan of the project relative to CO_2 emissions from power generation was determined.

5.67 Mitigation measures in relation to emissions are provided in Section 5 of the Report.

Human Health and Population Impact Assessment

5.68 This assessment, which has been prepared by AWN Consulting Ltd., establishes baseline conditions of the existing population within the immediate environs of the Site. It then assesses the potential direct, residual and cumulative impacts of the proposed development on existing population during the construction and operational phases of the development. The report assesses potential impacts on residents and business that have been addressed in previous reports, e.g. noise, traffic, air quality, etc. As a potential benefit of the development the report includes a ***short term, imperceptible, positive*** effect on local business with the limited presence of a very small number of construction workers using local facilities during the construction phase. In relation to the potential impacts associated with electromagnetic fields (EMF) for electronic and magnetic fields the report states that no marked ill-effects on very high levels of exposure have been observed and no significant impacts to populations and human health due to EMP are anticipated. Suggested mitigation measures for the construction phase include measures to prevent the spillage of petroleum-based products and other chemicals, which have previous been covered in the CEMP, Construction Methodology Report and Air Quality Assessment.

COMAH Screening Assessment

5.69 Objective COMAH01 of the Plan sets as an objective the control of the siting of Major Accident Hazard sites, the modification of existing Major Accident Hazard sites and or development in the vicinity of a Major Accident Hazard site for the purposes of reducing the risk or limiting the consequences of a major accident. It is also an objective of the Plan that technical advice of the Health and Safety Authority is sought in assessing planning applications where the Major Accidents Directive and any associated regulations are relevant.

5.70 Pre-application advice was sought from the Health & Safety Authority in relation to the proposed development and correspondence is attached to the covering letter submitted with this application. The response states, *inter-alia*:

BESS do not fall under the COMAH remit as they are classified as an article rather than a substance. The COMAH Regulations have a strong link to the CLP Regulation, covering only substances and mixtures classified in accordance with EC 1272/2008…the planning application pack should include a demonstration that the proposed 16/44 BESSs would neither initiate a major accident at the lower tier site, nor increase the consequence of a major accident. Your proposed approach appears to be in line with this requirement, however if/when you have more details on design/layout etc. we can discuss further.

5.71 A COMAH Screening Report has been prepared by AWN Consulting Ltd for this proposed development and proposed development submitted to Wexford County Council. The report concludes that substations are electrical installations and do not involve the storage, handling or processing of dangerous substances named in Part 2 of Appendix 1 to the COMAH Regulations 2015 or the categories of dangerous substances listed in Part 1 of Appendix 1. It is concluded that the proposed substation, alone and cumulatively with other development proposed under separate consenting regimes, are not of a type to which the provisions of the COMAH Regulations 2015 apply. The cumulative development includes the installation of a 30 MW BESS Plant, a 38 kV electrical substation and a 110 kV substation. At operational stage the cumulative proposed development will be an unmanned site with operations controlled remotely.

Geology Report

5.72 Objectives EM-05 and WQ-15 from Chapter 7 Environmental Management of the Development Plan relate to the protection of groundwater sources. A Geology and Soils report has been prepared by Ciaran Reilly & Associates to establish existing geological, hydrological and geomorphological conditions. Baseline conditions were establish via a walkover survey and ground investigation report prepared by Ground Check in April 2023. Through 4no. borehole results the ground investigation report established the presence of stiff glacial deposits over bedrock encountered at 1.8m-3.5m with no groundwater present at these depths. The bedrock unit underlying glacial deposits proposed is the Campile Formation, which is described as rhyolitic volcanics, grey and brown slates and felsic volcanics. A structural linework feature is shown adjacent to the east of the proposed development area. The bedrock aquifer beneath the proposed substation site can be classified as a regionally important aquifer – fissured. Despite this, only the area of the proposed 110kV UGC connection to the existing 110kV Eirgrid

substation is classified as having groundwater vulnerability (see Figure 4 of report). The landslide susceptibility map, (see Figure 6 of report), shows two isolate areas within the proposed site boundaries to be at moderately high risk for landslides. No landslide events are noted within the proposed development area and there are no GSI recorded karst features noted within vicinity of the proposed development area.

5.73 Impacts of the proposed development have been assessed, where the impact of engineering works for development of the Site on subsoils are categorised as **negative, slight/moderate, direct, likely, permanent effect**. Excavation of made ground for the purposes of underground grid connection is described as **neutral, not significant, indirect, likely and temporary**. The effect of alteration of soil geo-chemistry through potential spillages and leakages of hydrocarbons and other potential pollutants is described as **negative, significant, direct, unlikely and short-term.** Erosion of soil and sub-soil as a result of the development is described as **negative, slight, direct, likely and temporary**. Mitigation measures against potential contamination and/or erosion of soil and sub-soils are provided in the report and given further consideration in the Construction and Environmental Management Plan (IE Consulting Ltd.) and also in the Air Quality Assessment (AWN Consulting Ltd.).

5.74 An assessment of residual effects, likely health effects and worst-case effects is made as these relate to cut-and-fill engineering works and the use and storage of hydrocarbons and other pollutants. These are also given further consideration in the Construction and Environmental Management Plan (IE Consulting Ltd.) and the Air Quality Assessment (AWN Consulting Ltd.).

6. Summary and Conclusion

6.1 The planning application submitted under seeks planning permission for a tail-fed 110kV electrical substation and 110kV underground grid connection, situated within the townland of Great Island, Kilmokea, Co. Wexford, adjacent to the Great Island Power Station and Greenlink Interconnector Convertor Station, currently undergoing construction. The development constitutes Strategic Infrastructure Development (SID) as defined under Section 182A of the Planning & Development Act 2000 (as amended).

6.2 As detailed in this Statement, the purpose of the development is to install electrical infrastructure to enable the connection of a battery energy storage system (BESS) consisting of 44no. battery units to the electrical transmission network. As part of the statutory pre-application process, it has been determined that the BESS does not constitute development defined as SID and therefore falls under a different consent regime.

6.4 A separate electrical installation system is planned for the Site, comprising a 38kV substation, BESS and 38kV UGC to an existing ESB substation at SSE Great Island power station. As this system does not form part of the transmission network the proposed development does not come under the SID remit. An application was submitted to and validated by Wexford County Council on October 27th. Included in this application was development ancillary to the electrical energy infrastructure, including earthworks, landscaping, access, safety, security and needs of future staff. As of December 2023, a Request for Further Information was issued by Wexford County Council (See Covering Letter - Appendix 2). Planning permission for a similar facility was granted by Wexford County Council in 2018 (Ref. 20180506).

6.5 A full review of international and national legislative and policy framework supporting targets for CO_2 emission reduction has been set out in this Statement. A full review of the hierarchy of planning policy in relation to energy infrastructure and climate change has also been conducted. Through the recently adopted development plan and its predecessors, Wexford County Council has strongly promoted the development of renewable energy and transitioning to a green economy. Aims and objectives set out in the Council's Energy Strategy proactively promotes battery energy storage, subject to all other provisions of the Plan.

6.6 Supporting information has been submitted to assess the proposed development in light of all planning considerations and the potential impacts of the development under, on and above the land, both within the Site and in the surrounding environs. Potential environmental health impacts, e.g. noise and pollution, have been assessed with mitigation measures provided where necessary. In terms of ecology, habitat and biodiversity, the objective and

scientific conclusion of the Screening for Appropriate Assessment is that the Site is self-contained and there is no connectivity to existing ecologically-designated sites within a Zone of Influence and therefore the requirements for a Natura Impact Statement or other appropriate assessment has been screened out. The submitted Ecological Impact Assessment advances measures that would assist in increasing biodiversity on the Site and, consequently, the surrounding area. A full assessment of the potential landscape and visual impacts has been undertaken and mitigation measures are provided through the submitted Landscaping Plan, which has the additional residual benefit of minor habitat creation and potential biodiversity increase.

6.7 Where required, appropriate mitigation measures have been included in submitted documents, e.g. archeological monitoring in Archaeological Impact Assessment, to offset any potential impacts. Mitigation measures pertaining to the environment and ecology are set out in the Construction and Environmental Management Plan, Landscaping Plan and Report, Air Quality Assessment and Assessment of Climate Impacts. These include mitigation at construction, operational and decommissioning phases of the development. Mitigation measures

6.8 Where the Major Accidents Directive is concerned it has been demonstrated the proposal is in line with COOAMH regulations and the requirement for an assessment has been screened out.

6.9 In conclusion, and in light of the above, it is requested that full planning permission be granted for the proposed development.