Substation development in the townlands of Gotoon, Coolscart, and Kilfrush in County Limerick

East Limerick Substation Development

Report to inform Environmental Impact Assessment Screening Determination

September 2026

Prepared By:

GRAVIS PLANNING

Gravis Planning

41 Baggot Street Lower
Dublin 2
Ireland
D02 NN67

Contents

Figures

Tables

Appendix A

1.0 Introduction

1.1 Overview

1.1.1 This Environmental Impact Assessment (EIA) Screening report is submitted to An Coimisiún Pleanála ('ACP') by Gravis Planning on behalf of Harmony Solar East Limerick Limited, to accompany an application for the proposed 220kV substation, Battery Energy Storage System and associated grid connection infrastructure within the townlands of Gotoon, Coolscart and Kilfrush in County Limerick, hereafter referred to as the "Proposed Substation Development".

1.1.2 The EIA Screening process requires the competent authority, in this case ACP, to determine whether the Proposed Substation Development would be likely to have significant effects on the environment and therefore require Environmental Impact Assessment, having regard to the provisions of Directive 2014/52/EU ('the EIA Directive'), the Planning and Development Act 2000 (as amended) and the Planning and Development Regulations 2001 (as amended) ['the Act' and 'the Regulations']. This report is provided to assist the competent authority in making that determination.

1.1.3 The Proposed Substation Development forms one component of a wider "Overall Project". The Overall Project comprises the following components:

- A new 220kV substation development, Battery Energy Storage System (BESS) and associated grid infrastructure (the Proposed Substation Development), for which planning consent is sought from ACP as a Strategic Infrastructure Development (SID) under Section 182A of the Planning and Development Act 2000 (as amended); and
- A solar farm and associated cable route (the "Proposed Solar Farm Development"), for which planning consent has been sought from Limerick City and County Council under Section 34 of the Planning and Development Act 2000 (as amended).

1.1.4 The Red Line Boundary for the Proposed Substation Development overlaps with, and is located within, the Red Line Boundary for the Proposed Solar Farm Development. The Proposed Substation Development is required to facilitate the connection of the Proposed Solar Farm Development to the national electricity transmission network.

1.1.5 Notwithstanding the separate consent processes, the Overall Project has been considered throughout this Report. The Proposed Solar Farm Development and Proposed Substation Development have therefore been considered cumulatively as the Overall Project, having regard to the detailed design and environmental information available for both components.

1.1.6 The purpose of this Report is to provide the information required under Schedule 7A of the Regulations and to enable an EIA Screening determination to be made by reference to the criteria contained in Schedule 7.

1.1.7 This report sets out:

- A description of the Proposed Substation Development and Overall Project;
- The EIA screening methodology applied;
- The potential for the Proposed Substation Development and Overall Project to interact with the environment during construction, operation and, where applicable, decommissioning; and
- The EIA Screening Conclusion.

2.0 Project Description

2.1 Site Description and Surrounding Area

2.1.1 The Proposed Substation Development is situated within the townlands of Gotoon, Coolscart and Kilfrush in County Limerick, as identified in Figure 1. The Overall Project additionally extends into the townlands of Ballyhaukish, Millfarm, Coolalough, Ballycahill, Newtown and Knocklong, as identified in Figure 2.

Figure 1: Red Line Boundary of the Proposed Substation Development

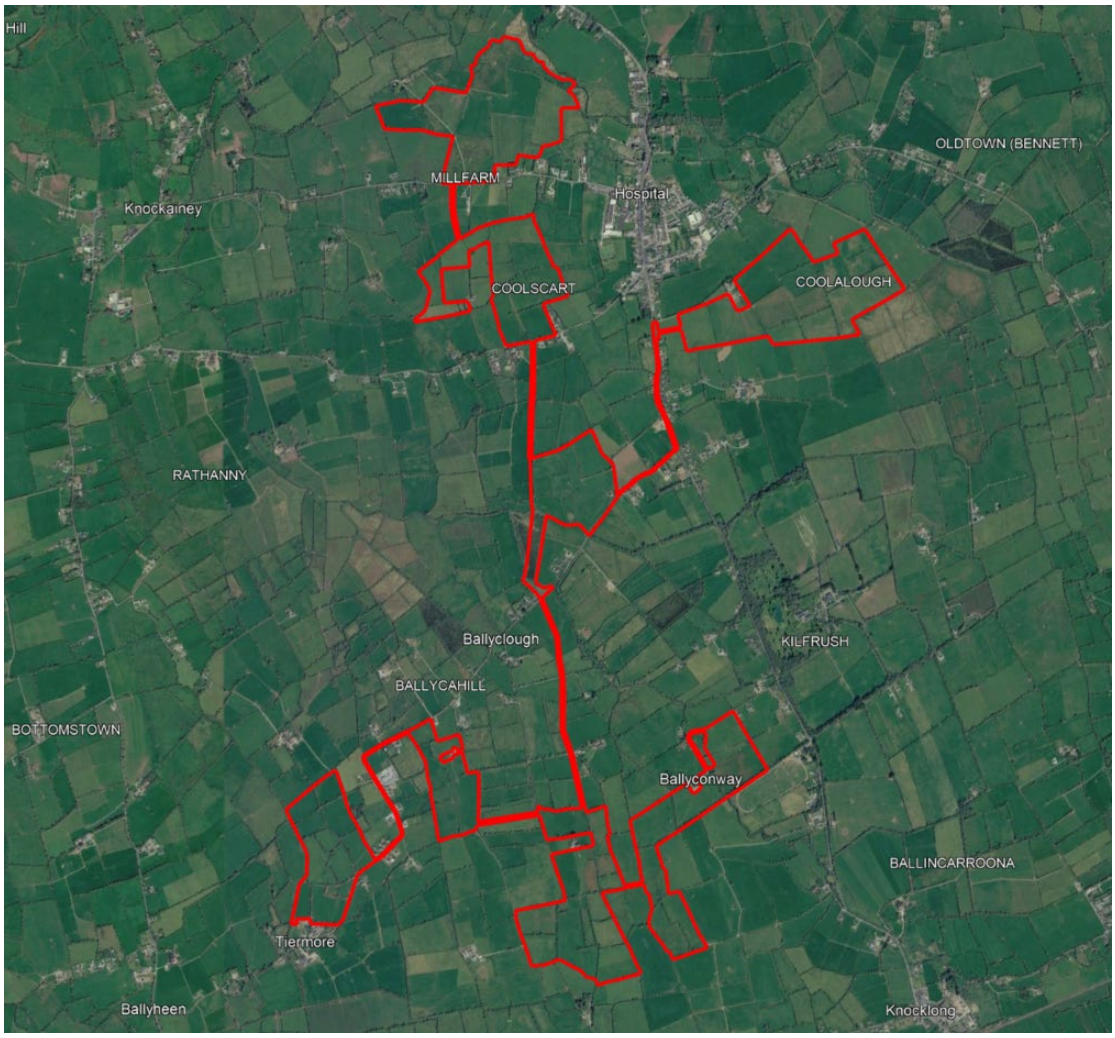

Figure 2: Overall Project comprising the East Limerick Solar Farm and Substation Developments

2.1.2 The Red Line Boundary of the Proposed Substation Development extends to 17.02 hectares and comprises the principal substation and BESS development area, together with additional lands and sections of the public road network required to facilitate site access and the delivery of large electrical equipment, including the 220kV customer transformer.

2.1.3 The principal development area comprises agricultural lands located 800m south-west of the village of Hospital and 3km north-west of Knocklong. The lands are within a rural, predominantly agricultural area of generally flat topography and are currently in agricultural use. An existing agricultural building and a derelict farm building are located within the site, and existing hedgerows define a number of the field boundaries.

2.1.4 The site lies entirely within the Agricultural Lowlands Landscape Character Area as designated within the Limerick Development Plan 2022–2028. The characteristics of this landscape, as set out in the Plan, include relatively flat topography, an agricultural land use pattern and a network of hedgerows and field boundaries.

2.1.5 There are no residential dwellings within the overall red line boundary. There are, however, residential properties and farm holdings throughout the surrounding area, including along the L1509 and R513.

2.1.6 There are no recorded archaeological sites within the Proposed Substation Development area. The Zone of Notification associated with recorded barrow LI040-200 extends partially into the Red Line Boundary; however, no development is proposed within that area. Geophysical surveying identified a number of features of archaeological potential within the principal development area and targeted archaeological test trenching subsequently confirmed archaeological remains. The results of these investigations have informed the site layout, including avoidance and preservation in situ where practicable, with further archaeological mitigation identified in the Archaeological Impact Assessment.

2.1.7 The River Camogue system and associated field drains form part of the local surface water environment. Low-lying lands along the southern part of the site extend into Flood Zones A and B. The proposed substation, BESS and other critical electrical infrastructure are located on higher ground within Flood Zone C, outside the mapped present-day and climate-change flood extents. The proposed access is also located outside Flood Zones A and B.

2.1.8 An existing 220kV overhead transmission line traverses the principal development area and will be reconfigured as part of the Proposed Substation Development to provide the proposed 'Loop In Loop Out' connection.

2.1.9 The lands associated with the Proposed Substation Development are owned by private landowners who have agreements in place with the Applicant to construct the Proposed Substation Development on their lands. Letters of consent from the relevant landowners are submitted with the application to An Coimisiún Pleanála.

2.2 Overview of Proposed Substation Development

2.2.1 The Proposed Substation Development description, as contained on the statutory notices for the planning application, reads as follows:

The proposed development will consist of the construction of a 220kV Loop In Loop Out (LILO) Gas Insulated Switchgear (GIS) substation, Battery Energy Storage System (BESS) and associated works required for a solar farm development within a site of 17.02 hectares which will include the following:

- *Transmission System Operator (TSO) compound with an area of 14,158m², containing a two-storey 220kV GIS substation building with a footprint of 1,844m², a total floor area of 3,550.8m², and a height of 20.7m.*
- *Customer compound with an area of 4,576m², containing a customer building with a footprint of 346.2m², a total floor area of 311.8m² and a height of 7.62m.*
- *220kV customer transformer positioned within bunded enclosures, with a height of 9.5m above finished ground level.*
- *220kV electrical infrastructure including transformers, switchgear, gantries, insulators, conductors, protection and control equipment, and all associated electrical plant and apparatus.*
- *BESS located within a dedicated BESS compound and including:*
    - *55 no. containerised battery storage modules, each measuring 6.06m long, 2.44m wide and 2.9m high.*
    - *28 no. containerised transformer and power conversion / conditioning units, each measuring 6.06m long, 2.44m wide and 2.9m high.*

    - *Ancillary BESS infrastructure including inverters, transformers, switchgear, control equipment, thermal management systems, fire detection and suppression systems, acoustic screening, and associated electrical plant.*
- *Removal of 1 no. existing 25m high steel lattice tower, and the installation of 2 no. steel lattice towers of 26.5m high, foundations and associated insulators, hardware and conductor.*
- *4no. lightning protection masts, with a height of 18m.*
- *1 no. telecommunications mast, with a height of 37.52m.*
- *140m of underground electrical cable and associated ducting, including joint bays, cable sealing end compounds, marker posts and associated infrastructure.*
- *Internal access tracks.*
- *A new access point from the L1509 public road.*
- *Removal of derelict farm building.*
- *Landscaping and biodiversity enhancement measures.*
- *Security gates, boundary fencing and all associated ancillary development, site works and services.*

A Natura Impact Statement will be submitted with the application.

2.2.2 The details of the individual elements of the Proposed Substation Development are as follows:

<u>220kV GIS Substation and Compounds</u>

2.2.3 The Proposed Substation Development will comprise a new 220 kV loop-in/loop-out substation, including a Transmission System Operator (TSO) compound and a Customer compound.

2.2.4 The TSO compound will include a 220kV GIS substation building with a total floor area of 3,550.8m² and a height of 20.7m. It will also include 220kV electrical infrastructure, including switchgear, gantries, insulators, conductors, protection and control equipment, and all associated electrical plant and apparatus required to facilitate the loop-in/loop-out connection to the existing 220kV overhead line.

2.2.5 The Customer compound will include a customer building with a total floor area of 311.8m² and a height of 7.62m, accommodating a switchgear room, Supervisory Control and Data Acquisition (SCADA) room, office, storeroom, hall, mess room and WC. The Customer compound will include a 220kV customer transformer positioned within a bunded enclosure, with a height of 9.5m above finished ground level, together with associated electrical plant, switchgear, control equipment and cabling.

2.2.6 The compounds will include internal access tracks to the two buildings, areas of gravel and hardstanding, service and maintenance access, drainage infrastructure, security fencing and gates. Parking will also be provided within the compounds. Wastewater from the on-site washroom and toilet facilities will be collected in a sealed holding tank and periodically removed by a licensed waste management contractor. Potable water will be delivered to the site as required.

Battery Energy Storage System (BESS)

2.2.7 The Proposed Substation Development will include a Battery Energy Storage System. The BESS will be located within a dedicated BESS compound forming part of the Proposed Substation Development.

2.2.8 The BESS compound will include 55 no. containerised battery storage modules, each measuring 6.06 m long, 2.44 m wide and 2.9 m high. It will also include 28 no. containerised transformer and power conversion / conditioning units, each measuring 6.06 m long, 2.44 m wide and 2.9 m high. The BESS units will generally be supported on concrete rails, with localised concrete slabs provided where required.

2.2.9 The BESS compound will include ancillary BESS infrastructure, including inverters, transformers, switchgear, control equipment, thermal management systems, fire detection and suppression systems, acoustic screening, cabling, ducting and associated electrical plant.

2.2.10 Each BESS unit will be equipped with a comprehensive fire detection and mitigation system, including in-cell temperature monitoring, unit-level off-gas detection, and smoke detection to provide early warning of abnormal battery conditions. Active fire suppression systems, such as aerosol or clean-agent suppression, will be included alongside off-gas ventilation and explosion relief measures designed in accordance with relevant NFPA guidance. The selected BESS technology will have undergone testing to UL 9540A or CSA TS800 standards, demonstrating its capability to limit thermal runaway propagation and reduce the potential for fire spread beyond the affected unit.

2.2.11 Water is not proposed to be used on site for fire suppression or boundary cooling as the testing completed on the BESS units has shown this not necessary to prevent fire propagation to other units.

Overhead Line and Loop In Loop Out (LILO) Works

2.2.12 A 220 kV overhead line currently traverses the Proposed Substation Development site. To facilitate the Proposed Substation Development, the existing overhead line will be reconfigured to provide a LILO connection to the proposed 220 kV substation.

2.2.13 Two new 220kV steel towers will be fitted onto the existing overhead line. These towers will deviate the overhead line for 52m onto two new steel gantries within the EirGrid TSO compound. Associated cable sealing ends and post insulators will transition the overhead line to two circuits of 220 kV underground cable, which will connect into the proposed 220 kV GIS Substation. There will be three associated power cables within a single circuit - this cable trench will enclose 2 no. communication ducts and a single ECC duct. A communication chamber will be required beside the proposed gantry structures to transition the communications link between the overhead line and the underground cable.

Underground Cabling

2.2.14 From the cable sealing ends at the two new gantries, 69m of 220 kV underground cabling will continue to the proposed 220 kV GIS Substation. Associated infrastructure will include ducting, communications link, marker posts and other ancillary works.

2.2.15 Underground cabling and ducting will also be provided within the Proposed Substation Development site to connect the TSO compound, Customer compound, BESS compound, transformer infrastructure and associated electrical plant.

2.2.16 The Proposed Substation Development will be connected to the Proposed Solar Farm Development by way of underground electrical cabling routed across private lands and some sections public road. This solar farm connection cabling is located within the Red Line Boundary for the Proposed Solar Farm Development and is subject to a separate planning application to Limerick City and County Council.

Lightning Protection

2.2.17 The Proposed Substation Development will include 4 no. lightning protection masts, with a height of 18m. Lightning protection will be provided to protect the substation compounds, BESS compound and associated electrical infrastructure.

Telecommunications Infrastructure

2.2.18 The Proposed Substation Development will include 1 no. telecommunications mast with a height of 37.52m. The telecommunications mast will support the operational, control and communications requirements of the Proposed Substation Development.

Site Access

2.2.19 A new access point will be provided from the L1509 public road to serve the Proposed Substation Development. The access will facilitate construction, operation, maintenance and emergency access to the substation and BESS compounds. Internal access tracks will be constructed within the site to provide access to the TSO compound, Customer compound, BESS compound and other operational areas.

2.2.20 The L1509 will also provide the principal route for delivery of the 220kV customer transformer. Localised widening of the L1509 within the public road boundary will be undertaken where required to accommodate the transformer delivery vehicle, together with localised works at its junction with the R513. Any temporary alterations required to the existing footpath, lighting or roadside signage at the junction will be reinstated following completion of the transformer delivery.

2.2.21 A contingency transformer delivery route is also included within the Red Line Boundary, extending northwards across agricultural lands to the R516. This follows the same corridor as the underground cable route associated with the Proposed Solar Farm Development and is included as an alternative delivery option should it be required. No additional hedgerow removal or ground disturbance is anticipated in association with this route, as any necessary works would be undertaken in conjunction with the cable installation. Any works required solely to facilitate the transformer delivery would be temporary.

Parking and Maintenance Access

2.2.22 Service and maintenance parking facilities will be provided within the Proposed Substation Development site. The site will not be open to the public and will be accessed only by authorised personnel for operational, maintenance, inspection and emergency purposes.

Lighting

Lighting will be provided within the Proposed Substation Development. Lighting will ordinarily remain switched off and will only be activated when required for operational, maintenance, switching or emergency purposes. Lighting will be manually activated at the entrance gate and is expected to be required only intermittently during the year.

Fencing and Security Gate

The Proposed Substation Development will include security gates, boundary fencing and all associated security infrastructure. The TSO compound, Customer compound and BESS compound will be secured by perimeter fencing, including palisade fencing, together with post and rail / stockproof fencing.

Closed-Circuit Television (CCTV)

2.2.23 CCTV cameras will be installed and will be directed internally within the development only. They will not monitor lands outside of the boundary. The CCTV will operate using passive infra-red technology.

Temporary Construction Compound

2.2.24 The Proposed Substation Development will include a temporary construction compound located within the red line boundary (2,700 m2). Given the confined area and constraints within the Proposed Substation Development site, construction sequencing will need to be considered at the detailed design phase to facilitate the temporary construction compound, the construction of the cable route and the construction of the substation.

2.2.25 The temporary construction compound will include a 'portacabin' site office with employee parking, welfare facilities that comply with Safety, Health and Welfare at Work (Construction) Regulations 2013-Part 14 Construction Site Welfare Facilities (Construction Site Welfare Facilities) and shall be used for storage of all construction materials and machinery. The compound may also include:

- Bunded fuel storage area.
- Potable water supply.
- Contractor lock-up facility.
- Water tanker.
- Diesel generator.
- First aid facilities.

2.2.26 A layer of granular material will be spread and lightly compacted within the temporary construction compound to provide hardstanding for site offices and storage containers. Areas of the compound may be used as vehicle hardstanding.

2.2.27 The temporary construction compound will be removed on completion of the construction phase, and the area will be reinstated to its original condition.

Landscaping and Hedgerows

2.2.28 Existing hedgerows and field boundaries will be retained where possible. Some hedgerow and vegetation removal will be required to facilitate the substation compound, which includes site access, internal access tracks, electrical infrastructure, cabling, drainage infrastructure and visibility splays.

2.2.29 Landscaping and biodiversity enhancement measures will be provided as part of the Proposed Substation Development. These measures will include new native hedgerow planting, reinforcement of existing field boundaries, grassland enhancement and other biodiversity measures as required.

Removal of Existing Structures

2.2.30 The Proposed Substation Development will include the removal of a derelict farm building within the site. The development will also include the removal of 1 no. existing 25m steel lattice tower and any associated redundant infrastructure required to facilitate the proposed 220kV loop-in/loop-out connection works.

Ancillary Development

2.2.31 The Proposed Substation Development will include all associated and ancillary development, site works and services, including earthworks, localised alterations to the landscape, underground services, ducting, cabling, drainage, signage, lighting, fencing, access infrastructure, landscaping and site reinstatement.

Proposed Solar Farm Development

2.2.32 The Proposed Solar Farm Development is the subject of a separate application to Limerick City and County Council and comprises ground-mounted solar photovoltaic panels and associated infrastructure, including electrical plant, internal access tracks, underground cabling, site access works, and landscaping and biodiversity measures. The Proposed Solar Farm Development lands extend to 210 hectares across eight land parcels in County Limerick.

2.3 Operational Life

2.3.1 The 220kV substation and associated transmission infrastructure are proposed as permanent electricity transmission infrastructure and may remain in situ following decommissioning of the Proposed Solar Farm Development. Accordingly, no fixed operational period is proposed for this infrastructure.

2.3.2 The principal battery and power conversion equipment has an anticipated design life of up to approximately 20 years. It is therefore anticipated that the BESS may be repowered or replaced, with the timing and extent of any repowering dependent on the condition and performance of the equipment, and the technology available at that time.

2.3.3 Operational phase maintenance may include:

- inspection, maintenance and repair of substation and BESS equipment;
- replacement or repowering of BESS equipment, where required;
- maintenance of drainage infrastructure;

- maintenance of landscaping and hedgerows;
- maintenance of fencing, security and CCTV infrastructure; and
- periodic site visits for inspection, monitoring and maintenance.

2.4 Decommissioning

2.4.1 No fixed operational period is proposed for the Proposed Substation Development. Accordingly, the timing and extent of any future decommissioning cannot be defined at this stage.

2.4.2 Should any element of the Proposed Substation Development be decommissioned in the future, the works would be undertaken in accordance with the relevant legislation, guidance and good practice applicable at that time. This would include the safe de-energisation and removal of equipment no longer required, with materials reused, recycled or otherwise managed through appropriately authorised facilities, where practicable.

2.5 Details of the Overall Project

2.5.1 As has been noted, the Overall Project comprises the Proposed Substation Development, which is the subject of this application to An Coimisiún Pleanála, together with the Proposed Solar Farm Development and associated cable route, which are the subject of a separate planning application to Limerick City and County Council.

2.5.2 The Proposed Solar Farm Development comprises 210 hectares of solar photovoltaic development across eight land parcels, together with associated electrical infrastructure, access tracks, underground cabling, site access works, landscaping and biodiversity enhancement measures. Electricity generated by the Proposed Solar Farm Development will be conveyed by underground cabling to the Proposed Substation Development.

2.5.3 The Proposed Substation Development comprises the 220kV LILO substation, Battery Energy Storage System and associated grid infrastructure required to facilitate connection to the national electricity transmission network. The existing 220kV overhead transmission line crossing the site will be reconfigured to connect to the proposed GIS substation. The BESS will provide electricity storage capacity as part of the Overall Project.

2.5.4 The Overall Project therefore comprises the generation, storage and transmission infrastructure required to export electricity from the Proposed Solar Farm Development to the national transmission network.

2.5.5 Notwithstanding the separate consent processes, the Proposed Solar Farm Development and Proposed Substation Development have been considered cumulatively throughout this Report as the Overall Project.

3.0 Screening Considerations

3.1 Screening Methodology

3.1.1 The EIA screening methodology that has been applied is as follows:

- The initial step is to identify if the Proposed Substation Development and Overall Project are listed within Schedule 5, Part 1 and Part 2 of the Planning and Development Regulations 2001 (as amended). Schedule 5, Part 1 lists projects that require a mandatory EIA. Part 2 of Schedule 5 sets out specified limits/thresholds for different development types, above which a mandatory EIA is required.
- The Proposed Substation Development has been considered against Schedule 5, Parts 1 and 2 of the Planning and Development Regulations 2001 (as amended). The Proposed Solar Farm Development has also been considered as part of the Overall Project, insofar as reasonably practicable, including in respect of potential cumulative and in-combination environmental effects.

3.1.2 For the purposes of a robust screening exercise, the Proposed Substation Development and Overall Project are also considered against the criteria contained in Schedule 7 of the Regulations.

3.1.3 As per Environmental Protection Agency (EPA) guidance, a significant effect can be defined as *"An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment"* [1]

3.1.4 Regard has also been given to the Office of the Planning Regulator (OPR) Practice Note on Environmental Impact Assessment Screening, which sets out best practice in the application of the EIA Screening process in Ireland.

3.2 Class of Development

3.2.1 The Proposed Substation Development has been considered against the classes of development specified in Parts 1 and 2 of Schedule 5 to the Planning and Development Regulations 2001 (as amended). The Proposed Solar Farm Development has also been considered as part of the Overall Project. The assessment is set out in Table 1 below.

[1] EPA Guidance 2022, Section 3, Page 30.

Table 1: Environmental Impact Assessment categories/thresholds under the Schedule 5 of the Planning and Development Regulations

Regulatory class	Regulatory Reference	Mandatory Criteria met?
Construction of overhead electrical power lines with a voltage of 220 kilovolts or more and a length of more than 15 kilometres.	Part 1, 20.	**No.** The Proposed Substation Development includes a short, localised reconfiguration of the existing 220kV overhead transmission line to facilitate the LILO connection. The works comprise the removal of one existing 25m high steel lattice tower, installation of two 26.5m high steel lattice towers and diversion of the existing overhead line for approximately 52m to gantry structures within the TSO compound. The works are substantially below the 15km threshold.
Any change to or extension of projects listed in Part 1 where such a change or extension in itself meets the thresholds, if any, set out in Part 1.	Part 1, Class 22	**No.** The localised reconfiguration of the existing 220kV overhead line does not in itself meet the 15km threshold applicable under Part 1, Class 20.
Projects for the restructuring of rural land holdings, undertaken as part of a wider Proposed Substation Development, where the prescribed thresholds relating to field-boundary removal, re-contouring or restructuring are exceeded.	Part 2, Class 1(a)	**No.** The Proposed Substation Development does not involve restructuring of rural land holdings at or above the prescribed thresholds. Field-boundary removal and alterations to ground levels will be limited to those required to facilitate the proposed compounds, electrical infrastructure, access and associated works.
Industrial installations to produce electricity, steam and hot water not included in Part 1 of this Schedule with a heat output of 300 megawatts or more.	Part 2, 3. (a)	**No.** The Proposed Substation Development comprises electricity transmission and storage infrastructure and does not have a heat output of 300MW or more. The Proposed Solar Farm Development comprises photovoltaic electricity generation and likewise does not have a heat output of 300MW or more.
Industrial installations for carrying gas, steam and hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables not included in Part 1 of this Schedule, where the voltage would be 200 kilovolts or more.	Part 2, 3. (b)	**No.** The Proposed Substation Development includes a short, localised reconfiguration of the existing 220kV overhead transmission line to facilitate the LILO connection. The works comprise a localised modification of the existing transmission line rather than the construction of a separate overhead transmission project. Having regard to the nature and limited extent of the works, and the specific threshold applicable to construction of 220kV overhead electrical power lines under Part 1, Class 20, the works are not considered to give rise to a

		requirement for mandatory EIA under Class 3(b).
All private roads which would exceed 2000 meters in length.	Part 2, 10. (dd)	**No.** The internal access tracks associated with the Proposed Substation Development and the Proposed Solar Farm Development are unbound access tracks ancillary to the construction, operation and maintenance of the Overall Project and are not considered to constitute "private roads" for the purposes of Class 10(dd), having regard to Cummins & Ors v An Coimisiún Pleanála [2025] IEHC 521.
Any change or extension of development already authorised, executed or in the process of being executed which would result in the development being of a class listed in Part 1 or paragraphs 1 to 12 of Part 2 and result in the prescribed increase in size.	Part 2, Class 13(a)	**No.** The existing 220kV overhead transmission line is already executed development. The proposed LILO works comprise a localised reconfiguration of this existing infrastructure and do not result in an increase in its overall size of a scale which would meet the criteria under Class 13(a).
Works of demolition carried out in order to facilitate a project listed in Part 1 or Part 2 where such works would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7.	Part 2, Class 14	**No.** The limited removal works associated with the existing steel lattice tower and derelict farm building would not be likely to have significant effects on the environment having regard to the criteria set out in Schedule 7.
Any project listed in Part 2 which does not exceed a quantity, area or other limit specified in that Part in respect of the relevant class of development but which would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7.	Part 2, Class 15	The potential for likely significant environmental effects arising from the Proposed Substation Development, including cumulative effects with the Proposed Solar Farm Development as part of the Overall Project, is considered in detail against the Schedule 7 criteria in Section 3.3 of this Report. As demonstrated by that assessment, the Proposed Substation Development and Overall Project are not considered likely to result in significant effects on the environment.

3.2.2 Having regard to the above, the Proposed Substation Development and Overall Project do not meet the thresholds or criteria requiring mandatory EIA under Part 1 or Part 2 of Schedule 5 of the Regulations.

3.2.3 Notwithstanding this conclusion, and for the purpose of a robust screening exercise, the Proposed Substation Development and Overall Project are assessed against the criteria set out in Schedule 7 of the Regulations in Section 3.3 below.

3.3 Schedule 7 Criteria

3.3.1 For the purpose of a robust screening exercise, this Report evaluates the Proposed Substation Development and Overall Project against the criteria set out in Schedule 7 of the Planning and Development Regulations 2001 (as amended).

3.3.2 The overarching topics to be considered under Schedule 7 are:

- Characteristics of the Proposed Substation Development and the Overall Project
- Location of Proposed Substation Development and Overall Project
- Types and characteristics of potential impacts

3.3.3 Table 2 below considers the Proposed Substation Development and Overall Project against the criteria set out in Schedule 7.

Table 2: Review of the Proposed Substation Development and Overall Project against the Planning and Development Regulations 2001 (as amended) Schedule 7 Criteria

Schedule 7 Criteria	**Commentary**
1. Characteristics of the Proposed Development	
(a) The size and design of the whole of the Proposed Development	The Proposed Substation Development extends to 17.02 hectares and comprises a new 220kV Loop In Loop Out (LILO) substation, including TSO and Customer compounds, associated 220kV electrical infrastructure and a Battery Energy Storage System (BESS). The development also includes the localised reconfiguration of the existing 220kV overhead transmission line, underground cabling, internal access tracks, site access and transformer delivery works, drainage infrastructure, landscaping and associated ancillary development. The Proposed Solar Farm Development has also been considered as part of the Overall Project. It extends to 210 hectares across eight land parcels and comprises ground-mounted solar photovoltaic development together with associated electrical infrastructure, internal access tracks, underground cabling, site access works, landscaping and biodiversity enhancement measures. The Proposed Substation Development and Proposed Solar Farm Development are functionally related but are subject to separate statutory consent processes. Their potential cumulative environmental effects are considered throughout this Screening Report insofar as reasonably practicable.
(b) Cumulation with other existing development and/or development the subject of a consent for proposed development	A planning history review was undertaken in September 2026 for the Red Line Boundary of the Proposed Substation Development. The review considered Limerick City and County Council planning records, Department of Housing, Local Government and Heritage planning and EIA datasets and An Coimisiún Pleanála case records. Development outside the Red Line Boundary was reviewed where

	it comprised major or EIAR development immediately adjoining the site. Details of the search are provided in Appendix A. Other than the Proposed Solar Farm Development, no separate planning application was identified as intersecting the Proposed Substation Development Red Line Boundary, and no separate development accompanied by an EIAR was identified within or immediately adjoining the site. The supporting assessments do not identify significant cumulative effects arising from the Proposed Substation Development and Proposed Solar Farm Development in relation to population and human health, land and soils, water, noise, landscape and visual amenity, archaeology and cultural heritage, traffic and transport or biodiversity. No other development identified through the planning history review is considered likely to alter that conclusion.
(c) The nature of any associated demolition works	<u>Construction Phase</u> The Proposed Substation Development includes the removal of one existing 25m high steel lattice tower and the removal of a derelict farm building. These are limited and localised works. The existing overhead transmission line will otherwise be reconfigured to facilitate the proposed LILO connection. <u>Decommissioning Phase</u> No fixed operational period is proposed for the Proposed Substation Development. Should any element of the development be decommissioned in the future, the works would be undertaken in accordance with the relevant legislation, guidance and good practice applicable at that time. Equipment and materials would be reused, recycled or otherwise managed through appropriately authorised facilities where practicable. The Proposed Solar Farm Development is subject to a separate planning application, and its decommissioning has been considered cumulatively as part of the Overall Project.
(d) the use of natural resources, in particular land, soil, water and biodiversity	Materials used during construction of the Proposed Substation Development and Overall Project will include concrete, aggregate, steel, electrical cabling and specialist electrical equipment. Suitable excavated material will be reused on site where practicable, with construction materials sourced locally where reasonably possible. The Proposed Substation Development will result in the long-term use of an area of existing agricultural land for electricity transmission and storage infrastructure. Existing hedgerows and field boundaries will be retained where possible, with landscaping and biodiversity enhancement measures incorporated into the development.

	Water requirements during construction and operation will be limited, with potable water delivered to the site as required. There will be no surface water or groundwater abstraction on-site during operations.
(e) The production of waste	Construction Phase Waste generated during construction of the Proposed Substation Development and Overall Project may include excavated soil, excess concrete, off-cuts of piping and electrical cabling, metals, packaging materials and other construction waste. Materials will be reused on site where practicable, including suitable excavated material. Waste arising from the removal of the existing steel lattice tower and derelict farm building will also be appropriately segregated, reused or recycled where practicable. Where waste is produced, it will be managed in accordance with relevant European and Irish waste legislation and transported by appropriately authorised waste collectors to facilities holding the necessary licences or permits. A Resource and Waste Management Plan will be prepared by the appointed Contractor as part of the Contractor's CEMP. Operational Phase Waste generation during operation will principally arise from routine maintenance, repair and replacement of electrical equipment. Removed equipment will, where practicable, be returned to the manufacturer or transferred for reuse, refurbishment or recycling through appropriately authorised facilities. Decommissioning Phase Should any element of the Proposed Substation Development be decommissioned in the future, equipment and materials will, where reasonably practicable, be reused, refurbished or recycled. Oils, coolants, refrigerants, suppression media and other materials associated with the equipment will be appropriately managed, with residual waste transferred to appropriately authorised waste facilities.
(f) Pollution and nuisances	Construction Phase During the construction phase, potential pollution sources, pathways, and nuisances include, but are not limited to: • Increases in exhaust emissions to air because of construction machinery; • Noise from use of equipment;

	• Leaks and spills of hydrocarbon containing materials used; and • Dust generation from construction activities. The likelihood and severity of these effects will be reduced through compliance with best practice construction management practices and all relevant waste management legislation as defined in the contractor's CEMP, which will include all measures set out in the CEMP submitted with this application. <u>Operational Phase</u> During the operational phase, potential pollution and nuisance effects associated with the Proposed Substation Development will principally relate to operational noise and the potential for accidental leaks or spills from transformers and other electrical equipment. Relevant equipment will be appropriately contained and bunded where required, and operational controls will be implemented in accordance with applicable standards and procedures. The Proposed Substation Development and Overall Project also have the potential to result in positive effects cumulatively with other renewable energy projects by expanding Ireland's renewable energy and electricity storage infrastructure and contributing to a reduction in greenhouse gas emissions and achievement of national renewable energy targets. <u>Decommissioning Phase</u> Should any element of the Proposed Substation Development be decommissioned in the future, potential pollution and nuisance effects would be similar in nature to those associated with the construction phase.
(g) The risk of major accidents, and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge	The risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge The Proposed Substation Development comprises electricity transmission and battery storage infrastructure and incorporates safety and protection systems appropriate to its operation. The principal BESS-specific hazard identified in the Outline Battery Safety Management Plan is thermal runaway. The BESS will incorporate active and passive safety systems, including monitoring and detection, automatic shutdown and electrical isolation, ventilation, explosion protection and fire protection systems. The final selected equipment will be subject to the applicable certification and large-scale fire testing requirements.

	Flood risk has also been considered. The Site-Specific Flood Risk Assessment confirms that the critical electrical infrastructure is located within Flood Zone C and outside the mapped climate change flood extents. The development will not increase flood risk elsewhere. Having regard to the design of the development and the safety and protection measures incorporated, the Proposed Substation Development is not considered likely to give rise to a significant risk of major accident or disaster.
(h) Risks to human health	<u>Construction Phase</u> During the construction phase, there is potential for impacts on human health associated with dust generation, construction noise and accidental spillages or leaks. Standard construction measures and environmental controls will be implemented during the construction phase, including a Health and Safety Plan and a Contractor's CEMP containing emergency spill response measures and appropriate methods of work. <u>Operational Phase</u> During the operational phase, the Proposed Substation Development will be accessed only by authorised personnel and will incorporate appropriate electrical, security and fire detection and mitigation systems. Having regard to the nature of the Proposed Substation Development and the controls incorporated into its design, construction and operation, no significant risks to human health are anticipated.
2. Location of the Proposed Development The environmental sensitivity of geographical areas likely to be affected by the proposed development.	
(a) The existing and approved land use	The current land use of the lands over which the Proposed Substation Development extends is predominantly agricultural. The principal substation and BESS development area comprises greenfield agricultural land and is traversed by an existing 220kV overhead transmission line. An existing agricultural building and derelict farm building are also located within the site. The Red Line Boundary additionally includes sections of the L1509 public road and its junction with the R513, together with a narrow corridor extending northwards across agricultural lands to the R516. This northern corridor is included as a contingency transformer delivery route, should it be required.

	The wider Overall Project lands are also predominantly in agricultural use. The cable route associated with the Proposed Solar Farm Development is largely within private agricultural lands, with sections traversing the R513 and L1509 public roads.
(b) Relative abundance, availability, quality and regenerative capacity of natural resources.	Construction materials will be sourced locally where practicable. Where materials are not available locally, they will be obtained from appropriately authorised suppliers. Suitable excavated materials will be reused on site where possible. The Proposed Substation Development will result in the use of a relatively limited area of agricultural land for electricity transmission and storage infrastructure. Existing hedgerows and field boundaries will be retained where possible, with landscaping and biodiversity enhancement measures incorporated into the development. The Proposed Substation Development is not anticipated to place significant demand on water or other natural resources. Having regard to the nature and scale of the development and the measures incorporated into its design, no significant effects on the availability, quality or regenerative capacity of natural resources are anticipated.
(c) The absorption capacity of the natural environment	**(i) Wetlands, riparian areas and river mouths:** The River Camogue runs along the south-western boundary of the Proposed Substation Development and field drains within the site discharge towards the river. These features have been considered in the Hydrology and Hydrogeology Assessment, EcIA and NIS. No in-stream or riverbank works are proposed. A minimum 20m buffer will be maintained from the River Camogue and construction-phase drainage, sediment and pollution-control measures will be implemented. No significant effects on the River Camogue or associated riparian environment are anticipated. **(ii) Coastal zones and the marine environment:** Not applicable. **(iii) Mountain and forest areas:** Not applicable. **(iv) Nature reserves and parks:** Not applicable. **(v) Areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive:** The Proposed Substation Development and Overall Project are located outside any European designated site.

	The Appropriate Assessment process identified eight Natura 2000 sites within the hypothetical Zone of Influence of the Overall Project. Following consideration of source-pathway-receptor linkages, only the Lower River Shannon SAC was identified as having a viable pathway, due to hydrological connectivity. A Natura Impact Statement has therefore been prepared. With the implementation of the mitigation measures identified therein, no adverse effects on the integrity of the Lower River Shannon SAC, or any other European site, are anticipated, either alone or in combination with other plans or projects. **(vi) Areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure:** The Proposed Substation Development lies within the DRUMCOMOGE_010 river waterbody, which has Poor Water Framework Directive status and is identified as At Risk. The downstream MAHORE_020 waterbody has Moderate status and is also At Risk, while the site is underlain by the Hospital groundwater body, which has Good status and is Not at Risk. The Hydrology and Hydrogeology Assessment concludes that the Proposed Substation Development will not cause deterioration in the status of any surface water or groundwater body or jeopardise achievement of the relevant Water Framework Directive objectives. **(vii) Densely populated areas:** The Proposed Substation Development is located within a rural agricultural area and is not within a densely populated area. There are no residential dwellings within the Red Line Boundary, although residential properties and farm holdings are located within the surrounding area, including along the L1509. Hospital village is located to the north-east and Knocklong is located to the south. **(viii) Landscapes and sites of historical, cultural or archaeological significance:** The Proposed Substation Development is located within the Agricultural Lowlands Landscape Character Area identified in the Limerick Development Plan 2022–2028. The area is characterised by generally flat agricultural land, with an established network of hedgerows and field boundaries. There are no recorded archaeological sites within the Proposed Substation Development area. The Zone of Notification associated with recorded barrow LI040-200 extends partially into the Red Line Boundary; however, no development is proposed within that area. Geophysical survey identified four probable archaeological

	features within the main development area and targeted archaeological test trenching subsequently confirmed archaeological remains. The findings have informed the design of the Proposed Substation Development, including preservation in situ where practicable and preservation by record where avoidance is not possible. Potential landscape, visual, archaeological and cultural heritage effects are considered further in the supporting assessments and in Section 3 of this Table.
3. Types and Characteristics of potential impacts The likely significant effects on the environment of the proposed development are considered below with reference to the criteria set out under Sections 1 and 2:	
(a) The magnitude and spatial extent of the impact	The potential effects of the Proposed Substation Development will be predominantly localised within the site and its immediate surroundings. Certain effects, including construction traffic, landscape and visual effects and potential hydrological effects, may extend beyond the site boundary; however, the supporting assessments conclude that these effects will not be significant.
(b) The nature of the impact	This Report considers the potential impact of the Proposed Substation Development and Overall Project across several areas. **<u>Population and Human Health</u>** During the construction phase, potential impacts on the local population - in the absence of mitigation measures - would be associated with air pollution resulting from dust and other emissions associated with vehicle movements and use of machinery; accidental spillages and leaks; noise; visual impacts; and traffic disruptions. Taking into consideration the implementation of standard construction measures such as a Health and Safety Plan and Contractor's CEMP, embedded mitigation measures and considering the nature of the Proposed Substation Development and Overall Project, no residual significant, very significant or profound effects on population and human health are anticipated during the construction and decommissioning phase. **<u>Biodiversity</u>** An Ecological Impact Assessment (EcIA) has been prepared in support of the Proposed Substation Development. The report identifies in detail the potential effects of the Proposed Substation Development and Overall Project on habitats and species of conservation value (i.e. ecological features) that have been identified as present, or that have the potential to be present,

	within its receiving environment. The conclusion is that there would be no likely significant adverse effects on any habitats, species, and ecological features. **Land and Soils** Construction will involve excavation, earthworks and the temporary storage and movement of soil, with potential for localised soil erosion, compaction or accidental contamination. Suitable excavated material will be reused within the site where practicable and soil and construction materials will be managed in accordance with the CEMP. The Proposed Substation Development will result in a long-term change in land use within the permanent development footprint. Having regard to the extent of land affected and the agricultural context of the surrounding area, no likely significant effects on land or soils are anticipated. **Noise** Construction and decommissioning activities will give rise to temporary noise associated with site preparation, plant, vehicle movements and installation or removal works. At distances of 50m or more, predicted construction noise levels are at or below the applicable construction threshold. Temporary exceedances may arise at shorter distances; however, the works will progress across the site and are not expected to affect any individual noise-sensitive location for a duration that would result in a significant effect. Construction traffic noise effects are assessed as neutral, imperceptible and short-term. During operation, predicted noise levels at all identified noise-sensitive locations are within the applicable daytime, evening and night-time criteria. No significant operational or cumulative noise or vibration effects are anticipated. **Water** Potential effects principally arise during construction through sediment mobilisation, changes to surface water runoff and the risk of accidental release of fuels, oils, concrete products or other pollutants to the local drainage network and receiving watercourses. With implementation of the measures identified in the Hydrology and Hydrogeology Assessment and CEMP, residual effects on surface water and groundwater are assessed as neutral and not significant. The Proposed Substation Development will not cause deterioration in Water Framework Directive status. The Flood Risk

	Assessment confirms that the critical electrical infrastructure is located within Flood Zone C and that the development will not increase flood risk elsewhere. **Cultural Heritage** There are no recorded archaeological sites within the Proposed Substation Development area. Geophysical survey and targeted test trenching identified previously unrecorded archaeological features. The design provides for preservation in situ where practicable and preservation by record where avoidance is not possible, together with further pre-construction testing within areas of ground disturbance. **Landscape and Visual** A Landscape and Visual Impact Assessment has been prepared for the Proposed Substation Development and considers the development cumulatively with the Proposed Solar Farm Development as part of the Overall Project. The receiving landscape is a predominantly working agricultural landscape with an established framework of hedgerows, mature vegetation and existing electricity infrastructure. Construction-stage landscape and visual effects will be localised, with effects no greater than Moderate in the immediate vicinity of the development and reducing with distance. During operation, landscape effects will be concentrated within the site and its immediate surroundings, with effects no greater than Moderate-slight locally and reducing to Slight or Imperceptible across the wider study area. The visual assessment considers 11 representative viewpoints. Visual effects range from Moderate to Imperceptible prior to mitigation and reduce further following establishment of the proposed landscape planting. The LVIA concludes that the Proposed Substation Development will not result in significant landscape or visual effects. **Traffic and Transport** Construction of the Proposed Substation Development and Overall Project will result in additional traffic on the surrounding road network, including construction staff movements, HGV movements and delivery of materials and electrical equipment. The greatest proportional increases in construction traffic will occur on the lower-volume local roads, including the L51309 and L1509.

	The TTA confirms that all affected roads would continue to operate within capacity during construction and that the Proposed Substation Development and Overall Project can be accommodated on the surrounding road network without creating capacity or safety issues. Operational traffic will be limited to 1–2 trips per week and will not impact the National, Regional or Local Roads.
(c) The transboundary nature of the impact	Having regard to the location, nature and scale of the Proposed Substation Development and Overall Project, no transboundary effects are anticipated.
(d) The intensity and complexity of the impact	The identified potential impacts are associated predominately with the construction phase of the Proposed Substation Development and Overall Project. Mitigation measures have been outlined to reduce effects as far as reasonably possible (e.g. in-situ preservation of cultural heritage sites and inclusion of buffer zones around them). In addition, Contractor's CEMPs will be implemented throughout the construction phase of the Proposed Substation Development and Overall Project.
(e) The probability of the impact	The implementation of appropriate mitigation and monitoring measures as outlined within the supporting technical assessments and construction management documentation, together with best practice measures, will reduce the significance of potential impacts associated with the Proposed Substation Development and Overall Project. Through implementation of these measures, the probability of significant environmental effects is considered low..
(f) The expected onset, duration, frequency, and reversibility of the impact	Details on the potential impact of the Proposed Substation Development, and insofar as reasonably practicable the Overall Project, are provided in the supporting documentation. Conclusions reached are based upon residual effects, taking into consideration the CEMP and the embedded mitigation measures associated with the Proposed Substation Development and Overall Project. • Population and human health: No residual significant, very significant or profound effects on population and human health are anticipated because of the Proposed Substation Development and Overall Project. • Biodiversity: Residual effects on the principal protected species are assessed as neutral following mitigation. No significant negative ecological effects are anticipated, while slight positive effects may arise in relation to a number of habitat features over time. • Land and Soils: No likely significant effects are anticipated because of the construction, operational, and

	decommissioning phases of the Proposed Substation Development and Overall Project on lands and soils. • Noise: Potential construction effects will be temporary. Operational noise and vibration effects will be long-term, neutral and not significant. • Water: No likely significant effects are anticipated as long as the various mitigation measures outlined within the various reports are implemented. • Archaeology and Cultural Heritage: Identified archaeological features will be preserved *in situ* where practicable or preserved by record in advance of construction where avoidance is not possible. Further pre-construction testing will address the potential for additional previously unidentified archaeology. • Landscape and Visual: Construction-stage effects will be short-term and localised. Operational landscape and visual effects will be long-term. Landscape effects will be no greater than Moderate-slight in the immediate vicinity of the Proposed Substation Development and will reduce to Slight or Imperceptible across the wider study area. Visual effects will range from Moderate to Imperceptible prior to mitigation and will reduce further following establishment of the proposed landscape planting. No significant landscape or visual effects are identified. • Traffic and Transport: Construction traffic effects will be short-term. Some local roads will experience moderate increases in traffic during peak construction, however the absolute numbers are low. On higher-volume Regional and National routes, changes will be negligible. Given the low level of operational traffic, no ongoing impacts on material transport are expected.
(g) The cumulation of the impact with the impact of other existing and/or development the subject of a consent for Proposed Development for the purposes of section 172(1A)(b) of the Act and/or Development the subject of any development consent for the purposes of the Environmental Impact	When considering the Proposed Substation Development and Overall Project together with the wider development context, no significant cumulative effects were identified on population, water resources, lands and soils, landscape and visual, traffic and transport, or cultural heritage assets. In terms of effects on ecological features, potential cumulative effects were found to be either unlikely or none at all were identified. Potential cumulative noise effects during the operational phase are likely to be imperceptible to not significant, depending on the receptor, over a long-term/permanent period. It is therefore considered that the Proposed Substation Development and Overall Project, in combination with other

Assessment Directive by or under any other enactment	approved developments within the area, are unlikely to contribute to a significant cumulative impact.
(h) The possibility of effectively reducing the impact	**<u>Construction Phase</u>** Potential construction effects will be reduced through the implementation of the mitigation and management measures set out in the supporting documentation, including the Construction Environmental Management Plan, Drainage Management Plan and Construction Traffic Management Plan (CTMP). Measures include pollution prevention and emergency spill response procedures, silt and surface water controls and management of construction traffic. In relation to traffic, the CTMP provides for the appointment of a Construction Traffic Manager, scheduling and coordination of deliveries, avoidance of peak traffic and school drop-off and collection times, management of HGV movements on secondary routes, appropriate construction signage and measures to keep the public road network clear of mud and debris. **<u>Operational Phase</u>** Potential operational effects will be reduced through measures incorporated into the design and operation of the Proposed Substation Development and through the mitigation identified in the supporting technical assessments, including drainage and pollution-control measures, ecological and landscape measures, noise controls and the safety and monitoring systems incorporated into the electrical and BESS infrastructure. **<u>Decommissioning</u>** Should any element of the Proposed Substation Development be decommissioned in the future, appropriate environmental management and mitigation measures would be implemented having regard to the nature of the works and the relevant legislation, guidance and good practice applicable at that time.

4.0 Consideration of Likely Significant Effects on the Environment

4.1.1 An Coimisiún Pleanála is the competent authority responsible for determining whether the Proposed Substation Development would be likely to have significant effects on the environment and whether Environmental Impact Assessment is required.

4.1.2 The Applicant's consideration of the likelihood of significant environmental effects, having regard to the assessment set out in Section 3 and the supporting technical information, is summarised in Table 3 below.

Table 3: Consideration of Likely Significant Effects on the Environment

Topic	Likelihood of Significant Effects
Population & Human Health	Taking into consideration the nature and duration of the potential effects identified, together with the environmental management and mitigation measures incorporated into the Proposed Substation Development, no likely significant effects on population and human health are anticipated during construction or operation, either alone or cumulatively as part of the Overall Project.
Biodiversity	The EcIA concludes that, with implementation of the identified mitigation measures, the Proposed Substation Development will not result in significant negative ecological effects, either alone or cumulatively as part of the Overall Project. The AA Screening Report concluded that likely significant effects on the Lower River Shannon SAC could not be excluded at screening stage and a Natura Impact Statement was therefore prepared. The NIS concludes that, with implementation of the identified mitigation measures, no adverse effect on the integrity of the Lower River Shannon SAC will arise, either alone or in combination with other plans or projects.
Land and Soils	The potential impacts on the land and soils environment from the construction and operation of the Proposed Substation Development and Overall Project are not considered to be significant. No cumulative effects from other developments are expected.
Construction Phase	With implementation of the measures identified in the CEMP and supporting technical assessments, no significant effects are anticipated as a consequence of the construction phase of the Proposed Substation Development and Overall Project.
Noise	Construction and decommissioning noise effects will be temporary and localised. At distances of 50m or more, predicted construction noise levels are at or below the applicable threshold, and any temporary exceedances at shorter distances will not persist at an individual receptor for a duration that would result in a significant effect. Operational noise levels are predicted to comply with the applicable daytime, evening and night-time criteria. No significant noise or vibration effects are anticipated.
Water	With the implementation of the measures set out in the Hydrology and Hydrogeology Assessment, Drainage Management Plan and CEMP, residual effects on the water environment are predicted to be short-term, neutral and

	not significant during construction and long-term, neutral and not significant during operation. The Proposed Substation Development will not cause deterioration in the Water Framework Directive status of any water body and will not increase flood risk within the site or elsewhere.
Landscape and Visual	The LVIA concludes that the Proposed Substation Development, assessed as part of the Overall Project, will not give rise to significant landscape or visual effects. Landscape effects will be concentrated within the site and its immediate surroundings, with operational effects no greater than Moderate-slight locally and reducing to Slight or Imperceptible across the wider study area. Visual effects are similarly localised and will be reduced through the retention and reinforcement of existing hedgerows, new native planting and the graduated green treatment of the substation built form. The assessment also concludes that no notable cumulative landscape or visual effects will arise.
Archaeology and Cultural Heritage	There are no recorded archaeological sites within the Proposed Substation Development area. Geophysical survey and targeted archaeological test trenching identified previously unrecorded archaeological features within the site. The design provides for preservation in situ where practicable and preservation by record where avoidance is not possible, together with further pre-construction archaeological testing. Subject to implementation of the measures identified in the Archaeological Impact Assessment, the Proposed Substation Development is not expected to give rise to significant adverse effects on archaeology or cultural heritage.
Traffic and Transport	The TTA demonstrates that the Proposed Substation Development and Overall Project can be accommodated on the surrounding road network without creating capacity or safety issues. Some local roads will experience moderate increases in traffic during peak construction, however the absolute numbers are low and the effects will be short-term. On higher-volume Regional and National routes, changes will be negligible. Construction traffic will be managed in accordance with the CTMP. Operational traffic will be limited to 1–2 trips per week and no ongoing impacts on material transport are expected. Accordingly, no likely significant traffic or transport effects are anticipated.
Major Accidents and Disasters	The Proposed Substation Development incorporates safety and protection systems appropriate to the electrical transmission and battery storage infrastructure proposed. The principal BESS-specific hazard identified in the Outline Battery Safety Management Plan (OBSMP) is thermal runaway, and the BESS will incorporate appropriate monitoring, detection, isolation and fire protection systems. The FRA also confirms that the critical electrical infrastructure is located within Flood Zone C. Having regard to the design and protection measures incorporated, the Proposed Substation Development is not considered likely to give rise to significant effects arising from a major accident or disaster. The proposed BESS has also been assessed in respect of the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 and does not meet the applicable qualifying thresholds.

5.0 Conclusion

5.1.1 Having regard to the assessment set out in Tables 1 and 2 above, the Proposed Substation Development and Overall Project do not meet the criteria outlined in Part 1 or Part 2 of Schedule 5 of the Planning and Development Regulations 2001 (as amended) and therefore do not trigger the requirement for a mandatory EIA. In addition, the Proposed Substation Development and Overall Project would not, by reason of its scale and construction and operational impact, constitute a sub-threshold EIA development.

5.1.2 Notwithstanding that position, the characteristics and location of the Proposed Substation Development and the nature of its potential environmental effects have been considered against the criteria set out in Schedule 7, having regard to the information required under Schedule 7A. This assessment has been informed by the technical and environmental reports submitted with the application, including the assessments relating to biodiversity, water and flood risk, noise, archaeology and cultural heritage, traffic and transport, construction environmental management and BESS safety.

5.1.3 Having regard to the nature, scale and location of the Proposed Substation Development, the environmental sensitivities of the receiving environment, the characteristics of the potential effects identified and the measures incorporated into the development, the assessment does not identify likely significant effects on the environment arising from the Proposed Substation Development, either alone or cumulatively with the Proposed Solar Farm Development and other relevant development.

5.1.4 A Natura Impact Statement has separately been prepared because likely significant effects on the Lower River Shannon SAC could not be excluded at Appropriate Assessment screening stage. The requirement for a Natura Impact Statement arises under the separate Appropriate Assessment process and does not, in itself, indicate that the Proposed Substation Development is likely to have significant effects on the environment for the purposes of Environmental Impact Assessment.

5.1.5 On the basis of the information presented in this Report and the supporting documentation, it is considered that the Proposed Substation Development does not require Environmental Impact Assessment. The final EIA Screening determination is a matter for An Coimisiún Pleanála as competent authority.

Appendix A – Planning history

PLANNING HISTORY SEARCH

Search Area and Methodology

A planning history and cumulative development search was carried out throughout the project and completed in September 2026. The review distinguishes between the current red line boundary of the Proposed Substation Development and the substantially wider lands considered as part of the East Limerick Overall Project. The current red line review focused on planning applications and statutory cases falling within or overlapping the Proposed Substation Development boundary. The earlier planning history prepared for the wider East Limerick Solar Farm was also reviewed and is retained below for cumulative context. The Proposed East Limerick Solar Farm application is included expressly as it overlaps the Proposed Substation Development and forms the other component of the Overall Project.

Table A1: Planning Applications within / Overlapping the Current Proposed Substation Development Red Line Boundary

Planning Reference	Relationship to Proposed Development	Description	Decision / Status
LCCC Ref. 2660918	Overlaps the Proposed Substation Development red line boundary	Current application for a 10-year permission for the 210 ha East Limerick Solar Farm, including ground-mounted PV arrays, electrical skids and plant rooms, internal access tracks, underground cabling, access works, landscaping, biodiversity measures, fencing and ancillary development. A Natura Impact Statement accompanies the application.	Application received 10 August 2026; decision due 23 September 2026.

Wider Overall Project Planning History

The records in Tables A2 and A3 are included as they were identified through a planning-history search for the substantially wider East Limerick Solar Farm project and their immediate surroundings. They are not presented as planning history within the current Proposed Substation Development red line boundary.

Table A2: Planning History within the Wider Overall Project Boundary

Planning Reference	Description	Planning Decision
11251	the construction of new single storey extensions to the rear and side elevations of existing dwelling house, alterations and renovations to existing dwelling house and all associated site works including new wastewater treatment system and soil polishing filter	Granted on 20/10/2011
962029	Erection of two-storey dwellinghouse, entrance and installation of septic tank	Refused on 14/02/1997

Table A3: Planning History within the Immediate Surroundings of the Wider Overall Project

Planning Reference	Distance from wider Overall Project boundary (as previously recorded)	Description	Planning Decision / Status
191202	50 Metres	demolition of existing sludge bed. Construction of new inlet works, storm tank, picket fence thickener, pumping stations, control buildings and all ancillary site works	Granted on 05/02/2020
97395	150 Metres	Erection of Spectator Stand and Signage and retention of Scoreboard and Store	Granted on 27/06/1997
91438	200 Metres	Erection of house, entrance and septic tank at	Granted on 25/05/1991
211113	35 Metres	The construction of an 18 metre high free standing communications structure with its associated antennae, communications dishes, ground equipment and all associated site development works	Granted on 10/11/2021
13325	150 Metres	the construction of a bungalow type dwelling house, detached domestic garage, entrance and all associated site works including waste water treatment system and soil polishing filter	Granted on 28/08/2013
99605	100 Metres	Erection of two-storey dwellinghouse, entrance gates, septic tank and ancillary works	Granted on 28/05/1999
99273	160 Metres	Construction of dwellinghouse, entrance, septic tank and associated siteworks	Granted on 06/05/1999
19915	70 Metres	dwelling house with attached domestic garage and roadside entrance	Granted on 18/02/2020
05716	62 Metres	construction of two storey dwellinghouse, garage, front entrance, boundary walls, septic tank, percolation area and associated site works	Granted on 16/06/2005
97999	75 Metres	Construction of bungalow, entrance, garage, septic tank, slatted cattle shed, calving boxes & barn	Granted on 25/09/1997
043484	180 Metres	demolition of an existing dwelling on site, construction of a 1, 2, 3 and 4 storey split level 80 bedroom hotel with spa facilities and conference/function rooms, the construction of a section of the Hospital Relief Road, with access via a new roundabout (1) to the proposed hotel, the construction of a roundabout (2) on the Hospital to Limerick Road, all associated site development works and car parking	Granted on 02/02/2006
021466	30 Metres	Construction of 2 no. dwellings, front boundary walls, entrance, gates, septic tanks and percolation areas	Granted on 05/06/2003
061864	45 Metres	storage yard for E.L.V.S. associated with a crash repair business and the construction of a concrete set down area 218m2 and interceptor tank for the purposes of depolluting vehicles	Granted on 28/09/2006
021179	190 Metres	Construction of a dwelling, front boundary wall, entrance gate, septic tank, percolation area and associated site works	Granted on 27/09/2002
053369	30 Metres	erection of 1 no. wind turbine (6kw) mounted on a pedestal 15 metres high and 350m in from roadside entrance	Granted on 02/03/2006
8829359	20 Metres	Erection of dwellinghouse, entrance, front boundary wall and septic tank	Granted on 16/12/1988
971732	130 Metres	Construction of dwellinghouse, entrance & septic tank	Granted on 18/02/1998
2186	200 Metres	the removal of the existing milking parlour and dairy and the construction of a new milking parlour and dairy with the roof to extend over the existing cow collecting yard and all ancillary site works. The application also seeks retention permission for an agricultural shed with a slatted tank and hay store, retention permission for an agricultural machinery storage shed and all ancillary site works	Granted on 14/01/2022
22318	180 Metres	a 2-storey dwelling house, garage, advanced treatment system, tertiary filter, a new entrance and all associated site works	Granted on 30/08/2022
21667	180 Metres	a 2-storey dwelling house, garage, advanced treatment system, tertiary filter, a new entrance and all associated site works	
22642	28 Metres	A change in house design from that granted under planning register reference number 20/657 and permission for a detached garage and all associated site works all	Granted on 27/07/2022
20657	28 Metres	Construction of a dormer style dwelling house, installation of a waste water treatment system and all associated site works	Granted on 08/09/2020
021559	141 Metres	Construction of a dwelling, bio-cycle unit, improved percolation area, entrance and associated site works and services	Granted on 23/12/2002
021560	160 Metres	Construction of a dwelling, bio-cycle unit, improved percolation area, entrance and associated site works and services	Granted on 23/12/2002
8626462	20 Metres	Erection of dwellinghouse, entrance, front boundary wall and installation of septic tank	Granted on 05/08/1986
09896	30 Metres	the construction of a dwelling house, front entrance, garage and wastewater treatment system	Granted on 21/01/2010

Planning Reference	Distance from wider Overall Project boundary (as previously recorded)	Description	Planning Decision / Status
1325	40 Metres	the construction of a new dwelling, with a foul drainage small treatment plant and percolation area, single access road and new entrance off the public road	Granted on 18/04/2013
14875	120 Metres	to construct a slatted agricultural shed, new entrance and all associated site works	Granted on 15/10/2014
201158	30 Metres	the construction of a shared entrance, dwelling house, garage, domestic wastewater treatment system with polishing filter together with all associated site works	Granted on 19/05/2021
201157	30 Metres	the construction of a shared entrance, dwelling house, garage, domestic wastewater treatment system with polishing filter together with all associated site works	Granted on 19/05/2021
072338	25 Metres	the construction of a single storey dwelling house, garage, entrance and boundary walls, proprietary wastewater treatment system, percolation area and associated site works	Granted on 03/04/2008
13511	50 Metres	factory building, ESB substation, portacabin structure and structure comprising of smoking area as constructed and all ancillary works	Granted on 12/06/2014
21861	75 Metres	construction of a dwelling house, waste water treatment system and percolation area, entrance and all ancillary site works	Granted on 18/11/2021
93779	170 Metres	Erection of extension to existing dwelling, installation of septic tank and construction of entrance	Granted on 15/09/1993
011108	100 Metres	Construction of a two storey dwellinghouse, front boundary wall, entrance, septic tank and percolation area	Granted on 02/08/2001
002399	110 Metres	Construction of two storey dwelling with attached domestic garage, septic tank, percolation area, front boundary wall and entrance	Granted on 31/05/2001
11367	90 Metres	the construction of a dwelling house, proprietary wastewater treatment system and percolation area, entrance walls, garage and all ancillary site works	Granted on 22/12/2011
18743	80 Metres	the construction of a dwelling house, propriety waste water treatment system and percolation area, entrance walls, garage and all ancillary site works	Granted on 11/10/2018
002308	75 Metres	Erection of a dwellinghouse, septic tank, site boundaries and entrance	Granted on 02/01/2001
95492	60 Metres	Erection of slatted unit, slurry tank and silage slab	Granted on 03/07/1995
93140	55 Metres	Erection of house, garage, entrance and septic tank	Granted on 26/02/1993
991736	90 Metres	Construction of two storey dwelling, store, entrance and waste water treatment system	Granted on 01/06/2000
20154	62 Metres	refurbishment of existing bungalow and to erect an extension at rear of same together with all associated site works including provision of new effluent treatment system	Granted on 05/05/2020
18520	25 Metres	the construction of a new storey and a half extension to existing dwelling and all associated site works	Granted on 01/11/2018
2561347	200 metres	The construction of a dwelling house, waste water treatment system and percolation area, entrance and all ancillary site works	Conditional permission; decision 26 March 2026; grant 29 April 2026
2660794	1.08km	A change of use of part of existing convenience shop to include off-licence facilities and associated site works	Application received 12 July 2026; decision due 5 September 2026 (no later decision identified in the refreshed search)
2561229	210 metres	The construction of a single storey extension to the rear of the main dwelling comprising of 2 bedrooms, a bathroom and a kitchen/living area and all other associated site works	Conditional permission; granted 10 June 2026
2660030	330 metres	The construction of a modular dwelling house, vehicular entrance, pedestrian entrance, connection to mains sewer and all associated site works	Conditional permission; granted 17 June 2026