



Screening for Environmental Impact Assessment (EIA) Report

Mill Farm Solar 110kV Substation

Document Reference: 23991-6002-B

Client: Mill Farm Solar Project Ltd.

April 2024

Contents

1. Introduction	3
1.1 Scope	4
2. Description of the Proposed Development	5
2.1 Proposed 110kV Substation Compound	5
2.2 Overhead loop-in Grid Connection	5
2.3 Drainage	6
2.4 Construction Compound	6
2.5 Construction Overview	6
2.6 Construction Duration	7
2.7 Site Location	9
2.8 Environmental Setting	12
3. EIA Screening Legislation and Guidance	17
3.1 Legislation	17
3.1.1 EU EIA Directive	17
3.1.2 Environmental Impact Assessment Regulations 2018	17
3.1.2.1 Mandatory EIA	18
3.1.2.2 Sub-threshold EIA	18
3.2 Relevant Guidance	19
4. EIA Screening Methodology	21
4.1 Mandatory EIA	21
4.2 Sub-threshold EIA	22
5. Conclusion	35
6. References	36

Tables

Table 3-1: Criteria for determining whether a development would or would not be likely to have significant effects on the environment	20
Table 4-1: Schedule 5, Part 1 Checklist	21
Table 4-2: Schedule 5, Part 2 Checklist	22
Table 4-3: Schedule 7 Criteria Assessment	24

Figures

Figure 2-1: Proposed Site Layout	8
Figure 2-2: Proposed Substation Site Location	10
Figure 2-3 Location of Substation relative to the Mill Farm Solar Project	11
Figure 2-4: Habitat map of the proposed development site and study area	13
Figure 2-5: Natura 2000 sites within the potential zone of influence (ZOI) of the proposed works	16

Plates

Plate 2-1: View of the small woodland partially within the proposed development site (left) and a view of the undulating landscape of the adjoining hinterland (right), both as seen from the proposed development site.	9
Plate 2-2: Arable Crops (BC1) habitat (left). Common poppy was abundant throughout the site (right).	12

Project No.	Doc. No.	Rev.	Date	Prepared By	Checked By	Approved By	Status
23991	6002	A	February 2024	RP	CO'C	AR	Issue
23991	6002	B	April 2024	RP	CO'C	OH	Updated Issue

MWP, Engineering and Environmental Consultants
Address: Park House, Bessboro Road, Blackrock, Cork, T12 X251
www.mwp.ie



1. Introduction

Mill Farm Solar Project Ltd. (the “applicant”) is applying to An Bord Pleanála (ABP) for planning permission for the development of 1 No. 110kV onsite Eirgrid substation with associated electrical plant, 2 No. Over Head Line (OHL) End Mast structures, electrical equipment, security palisade fencing, an IPP building and a transformer (the “proposed development”), associated with an approved Solar PV Development (the “permitted development”) at Ricetown Co. Meath (the “proposed development site”).

The proposed development site comprises agricultural land on a site of approximately 3.6 Ha within the townland of Ricetown, approximately 12 km north of Navan, Co. Meath.

The proposed development will comprise:

- A 110 kilovolt (kV) Air Insulated Switchgear (AIS) loop-in substation with associated compound, including control and operational buildings, electrical plant, equipment, cabling, lighting, CCTV, lightening masts, drainage infrastructure, security palisade fencing, and all associated and ancillary works necessary to facilitate the development.
- Erection of 2 no. OHL end masts (c. 20m high) and 2 no. lattice gantries (c. 16m high) and associated overhead cabling to enable a loop-in/loop-out grid connection to National grid via the existing Meath Hill-Gorman 110kV overhead powerlines located above the site.

The works will include site drainage and permanent signage associated with the new construction. The road layout for the proposed project makes use of the existing onsite access road and tracks, associated with the adjacent permitted solar farm development, where possible. The proposed development is compatible and does not in any way impede or alter the permitted Mill Farm Solar Farm.

The Solar PV development was approved by Meath County Council (MCC) under reference number 22/1044 on 14th February 2023. The approved development consists of:

‘Permission for a period of 10 years to construct and complete a Solar PV development with a total site area of circa 97.05 hectares, to include solar panels mounted on steel support structures, associated cabling and ducting, 12 No. Transformers, 1 No. Temporary Construction Compound, 1 No. Storage Container, maintenance tracks, perimeter fencing and gates, 61 No. CCTV, 4 No. Weather Stations, 3 No. Bunds associated landscaping and ancillary works, with an operational life of 40 years.’

The Solar Development will have the energy capacity to power approximately 20,000 homes. The proposed 110kV substation, which is the subject of this report, will be connected to the National Grid by looping into 110kV overhead powerlines above the site.

In support of the planning application for the permitted development the following environmental assessments were undertaken by Neo Environmental Ltd. (Neo):

1. Natura Impact Statement (NIS)
2. Landscape and Visual Assessment
3. Ecological Impact Assessment
4. Archaeological and Architectural Heritage Impact Assessment
5. Flood Risk and Drainage Impact Assessment
6. Construction Traffic Management Plan
7. Noise Impact Assessment
8. Glint and Glare Assessment
9. Outline Construction Environmental Management Plan

The proposed substation is surrounded on three sides by the solar farm and on the south by the existing 110kV powerline and agricultural lands (see **Figure 2-2**).

MWP have been engaged by the applicant to prepare a Screening for Environmental Impact Assessment (EIA) Report of the proposed works to accompany the application. MWP have also prepared a Screening for Appropriate Assessment (AA) report and Natura Impact Statement (NIS) in order to provide a sufficient level of information to the competent authority, on which to base an AA of the proposed development.

1.1 Scope

Under EU and Irish legislation (detailed in Section 3), EIA is required for certain prescribed projects and is required for others which are likely to have significant effects on the environment, by reason of their nature, extent or location.

The purpose of EIA screening is to determine whether EIA is required for the proposed development under the mandatory or sub-threshold categories defined in the legislation, or whether it is likely to have any significant effects on the environment, which would also trigger the requirement to complete EIA. The EPA's Draft 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports' (2017) defines a significant effect as *"An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment"*.

This EIA screening assessment has been completed for the proposed development as detailed in **Section 2** below.

2. Description of the Proposed Development

It is proposed to construct a 110kV loop-in substation and associated works in the townland of Ricetown, County Meath to connect the permitted Mill Farm Solar Project to the National Grid. See **Figure 2-1** for the proposed site layout.

The proposed project will comprise:

- A 110 kilovolt (kV) Air Insulated Switchgear (AIS) loop-in substation with associated compound, including control and operational buildings, electrical plant, equipment, cabling, lighting, CCTV, lightening masts, drainage infrastructure, security palisade fencing, and all associated and ancillary works necessary to facilitate the development.
- Erection of 2 no. overhead line end masts (c. 20m high) and 2 no. lattice gantries (c. 16m high) and associated overhead cabling to enable a loop-in/loop-out grid connection to National grid via the existing the Meath Hill-Gorman 110kV overhead powerlines located above the site.

The works will include site drainage and permanent signage associated with the new construction. The road layout for the proposed project makes use of the existing onsite access road and tracks, associated with the adjacent permitted solar farm development, where possible. The proposed development is compatible and does not in any way impede or alter the permitted Mill Farm Solar Farm.

There will be a requirement to excavate approximately 7,000m³ of clean, natural topsoil and subsoil. This material will be reused, where feasible, to create berms and used for landscaping on the adjacent permitted solar farm site. Excess clean soil material will be deposited permanently in 2 No. soil deposition areas (1,600m²) located adjacent to the western boundary of the site.

Where surplus material is to be reused on the adjacent permitted solar farm site as a by-product (not as a waste), this will be done in accordance with Article 27 of the European Communities (Waste Directive) Regulations 2011 (S.I. No. 126 of 2011) (as amended) and having regard for the Circular Economy and Miscellaneous Provisions Act 2022 and any such legislative requirements that may be required later.

2.1 Proposed 110kV Substation Compound

The overall substation compound will have an area of c.11,572m² divided into two adjoining sections: an EirGrid section (c. 9,262m² in area) and an IPP (Independent Power Producer) section (c.2,310 m² in area), each of which are enclosed within a 2.6m high palisade fence. An additional outer concrete post and rail fence (1.4m in height) will be installed around the perimeter of the EirGrid compound.

Each section will contain a control building and an outdoor electrical yard including electrical equipment such as electrical pylons, over and underground ducting & cables, busbars, disconnects, breakers, sealing ends, lightning and lighting masts. The IPP section will also contain 1 No. banded transformer with a back up emergency diesel generator and associated diesel storage tank also located within the bund. Both buildings will be a block built single story building approximately 6.5m in height, with pitched roof and an external blockwork and plastered finish.

The overall substation compound will consist of a 50mm compound stone finish. The max height of the substation is 8.55m. 10 No. Lightning masts of 18m high will be erected within the compound.

2.2 Overhead loop-in Grid Connection

The electrical connection required from the proposed substation development will be facilitated by Overhead 110kV Loop-in Interface Masts. The erection of 2 No. Over Head Line (OHL) End Mast structures (c. 20m high) are

required under the existing Meath Hill-Gorman 110kV OHL. There is also a requirement for the installation of 2 No. lattice gantries (c. 16m high).

The existing OHL will be terminated and 2 new towers will be erected to create 2 new OHL circuits. The new interface mast structure locations are to be selected based on ground surveys, ground profiles, allowable angles and ruling span checks. A foundation is excavated for each tower location and the placement of excavation material is temporarily stored in designated deposition areas. Any excess excavation material will be utilised as berms, deposited at the permanent deposition area and for landscaping purposes on the adjacent permitted solar farm. Reinforcing bars are placed into each excavation and the body of each tower assembled adjacent to the excavation. Concrete is poured directly into each excavation and allowed to cure until a preformed metal panel is set in place. The foundations are then backfilled individually. At this stage, the existing OHL is de-energized and construction of the 2 towers take place. An earth mat is laid and is a requirement for the electrical connection of the tower. A hardstand area is made available for the use of a crane to guide and position each section of the towers together. Once all sections of the towers are bolted securely the conductor can be centred and installed. All other associated equipment such as down dropper conductors and shackles are positioned before the electrical circuit can be tested in both directions to confirm OHL is re-energised.

2.3 Drainage

Foul sewage from the temporary facilities will be routed to covered precast concrete watertight 5m³ tanks designed for receiving and storing sewage with no outlet. The tanks will be sized to suit the expected use and will be installed in a location remote from water courses. Contents and residues will be regularly emptied by a competent operator for safe disposal to an approved treatment works.

Surface water runoff from the roofs of the substation buildings, and hard-surfaced areas within the electrical yard, including areas where a risk of a contaminant leak or spill may be present (such as the transformer bund), will be collected in a series of filter drains, roof guttering and downpipes and routed to an underground gravity drainage network. All runoff collected in the stormwater sewer network will pass through an oil/petrol Interceptor prior to discharging to an attenuation unit on the north-eastern side of the compound. The attenuation unit will provide attenuation of the increased volumes of surface water runoff generated from the hard surfaces of the development when compared to the current greenfield condition. The attenuated surface water runoff is then proposed to overflow at a controlled rate equal to the greenfield runoff rate to an existing vegetated land drain on the southern side of the compound.

2.4 Construction Compound

A suitably surfaced contractor's temporary construction compound and laydown area will be provided for the duration of the site works on the permitted adjacent Solar Farm. The construction compound will consist of temporary site offices, equipment storage and construction staff welfare facilities, as well as car parking areas for staff and visitors. A potable water supply will be provided by a water tanker.

2.5 Construction Overview

The project involves the following works:

- Pre-commencement activities including site investigation work and pre-construction surveys.
- Site preparation and installation of drainage systems.
- Bulk earthworks for formation of substation compound base.

- Substation compound base and equipment foundations.
- Cable trenching and cable laying.
- Construction of control building and installation of equipment within compound.
- Complete site works: security fencing, gates, signage, lighting.
- Demobilise offices and tidy up site.

2.6 Construction Duration

The construction of the proposed substation is estimated to be completed over a period of 14-18 months in combination with the other permitted elements of the Solar Farm granted under Meath County Council Planning Reference 221044.

Construction working hours will be:

7:00am – 7:00pm (Monday – Friday inclusive)

8:00am – 2:00pm (Saturday)



2.7 Site Location

The proposed development site is approximately 3.6 ha and is situated in a rural area approximately 12 km north of Navan, Co. Meath within the townland of Ricetown.

The proposed development site is agricultural land utilised to grow crops. The site is elevated and the adjoining hinterland is gently undulating farmland (see **Plate 2-1**, below) with a few one-off dwellings nearby. There is a small section of woodland partially within the proposed development site to the southwest (see **Plate 2-1**, below). There is a drainage ditch running along the southwest and south east boundary of the agricultural field the proposed development site is located within. A farm yard with cowsheds sits within 50m north of the proposed development site, and a decommissioned sand and gravel extraction pit exists approximately 650m northeast of the proposed development site.

The proposed substation development is located adjacent to the Mill Farm Solar Project site. The neighbouring townlands include Stokesquarter, Painestown, Killary, Ricetown and the nearest small villages are Lobinstown (2km north-east) and Castletown K.P. (2.6km southwest), Co. Meath (see **Figure 2-2**, below). The nearest large towns are Navan (12 km south), Ardee in Co. Louth (12km north-east), Kells (14.5km southwest), and Drogheda (22.5km south-east) as set out in **Section 2.3**.



Plate 2-1: View of the small woodland partially within the proposed development site (left) and a view of the undulating landscape of the adjoining hinterland (right), both as seen from the proposed development site.

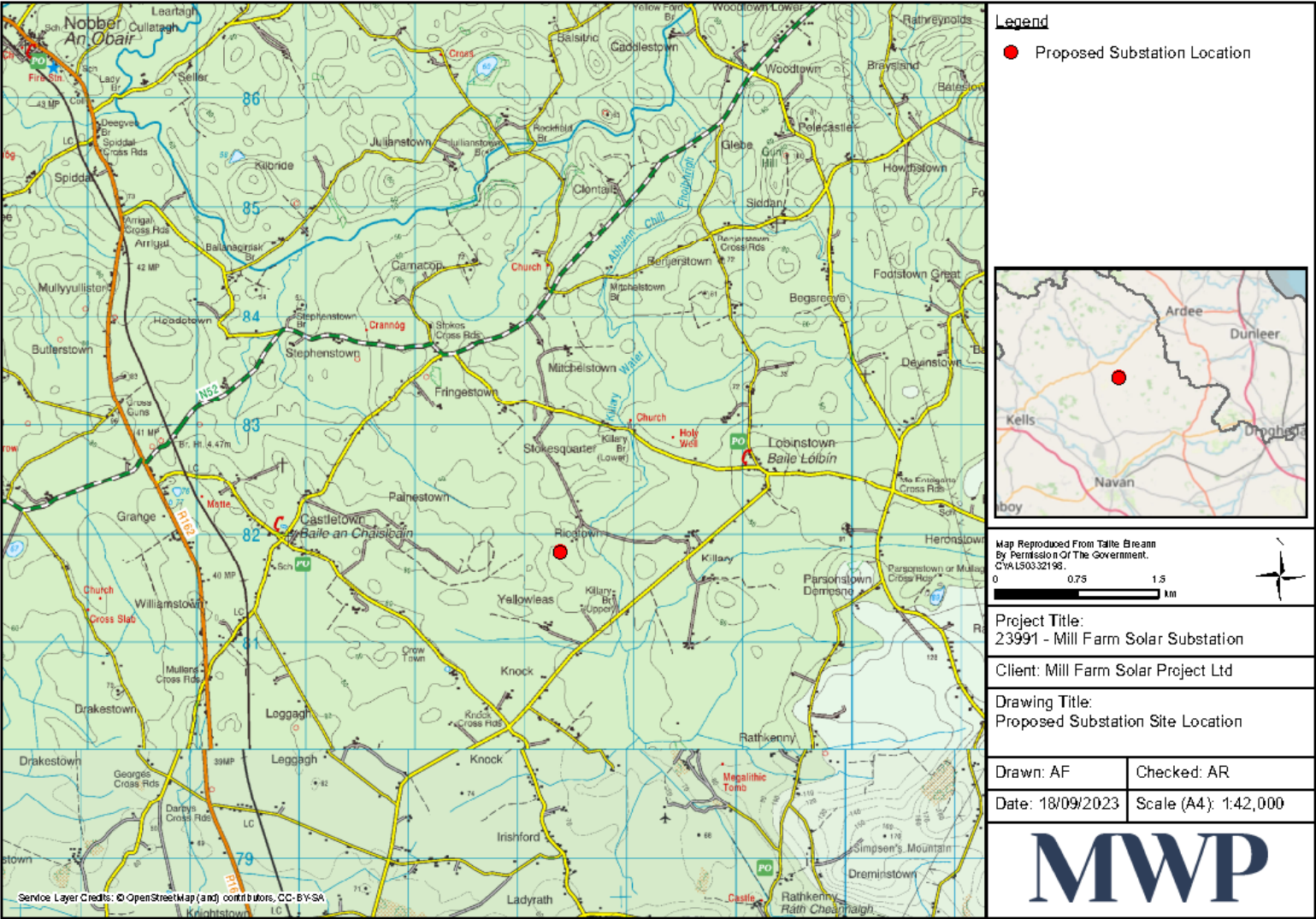


Figure 2-2: Proposed Substation Site Location

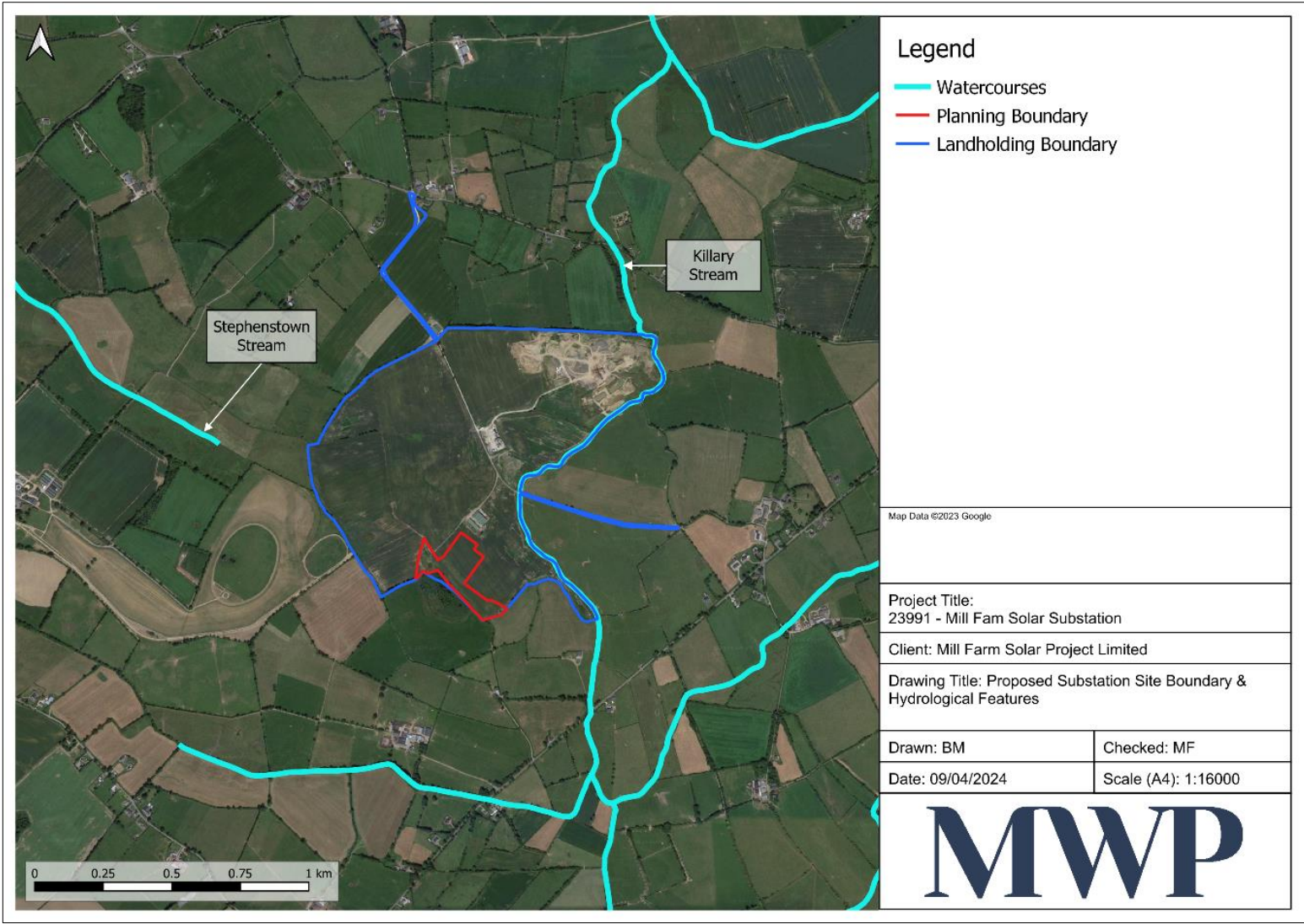


Figure 2-3 Location of Substation relative to the Mill Farm Solar Project

2.8 Environmental Setting

The receiving environment is a rural area consisting of small villages, isolated farmsteads and houses and ribbon residential development along the main roads.

An ecological field survey was undertaken at the proposed development site on the 20th September 2023 by MWP ecologists to establish the site's ecological features and resources, particularly any rare/protected species and habitats occurring within the study area. The survey was carried out to assess the habitat of the study area and identify any ecological features and resources that may potentially be impacted by the proposed development. The study area included all habitats within the site boundary. The habitat surveys had regard to 'Best Practice Guidance for Habitat Survey and Mapping' (Smith et al., 2011) and 'A Guide to Habitats in Ireland' (Fossitt, J. A., 2000). Habitats within the study area were categorised to Level 3 according to Fossitt (2000).

The majority of footprint of the proposed development site consists of a single habitat, **Arable crops (BC1)** and is considered to be of low ecological value. Common poppy (*Papaver rhoeas*), a typical flora species found within **Arable Crops (BC1)** habitat, was abundantly present on site. Horsetail (*Equisetum* spp.) was also present onsite indicating the potential presence of **Wet grassland (GS4)** habitat. See **Plate 2-2**.

No rare or protected flora species were recorded within the proposed construction footprint during the ecological survey of the proposed development site. A **Drainage Ditch (FW4)** and **Wet Willow-Alder-Ash Woodland (WN6)** are partially located within the proposed development site on the southwest, and **Arable crops (BC1)** borders the rest of the site boundary. **Buildings and Artificial Surfaces (BL3)**, in the form of farm shed buildings, are found within 50m to the northeast of the site boundary. **Watercourse (FW2)** habitat in the form of the Killary Water, occurs to the east (see **Figure 2-4** below).



Plate 2-2: Arable Crops (BC1) habitat (left). Common poppy was abundant throughout the site (right).

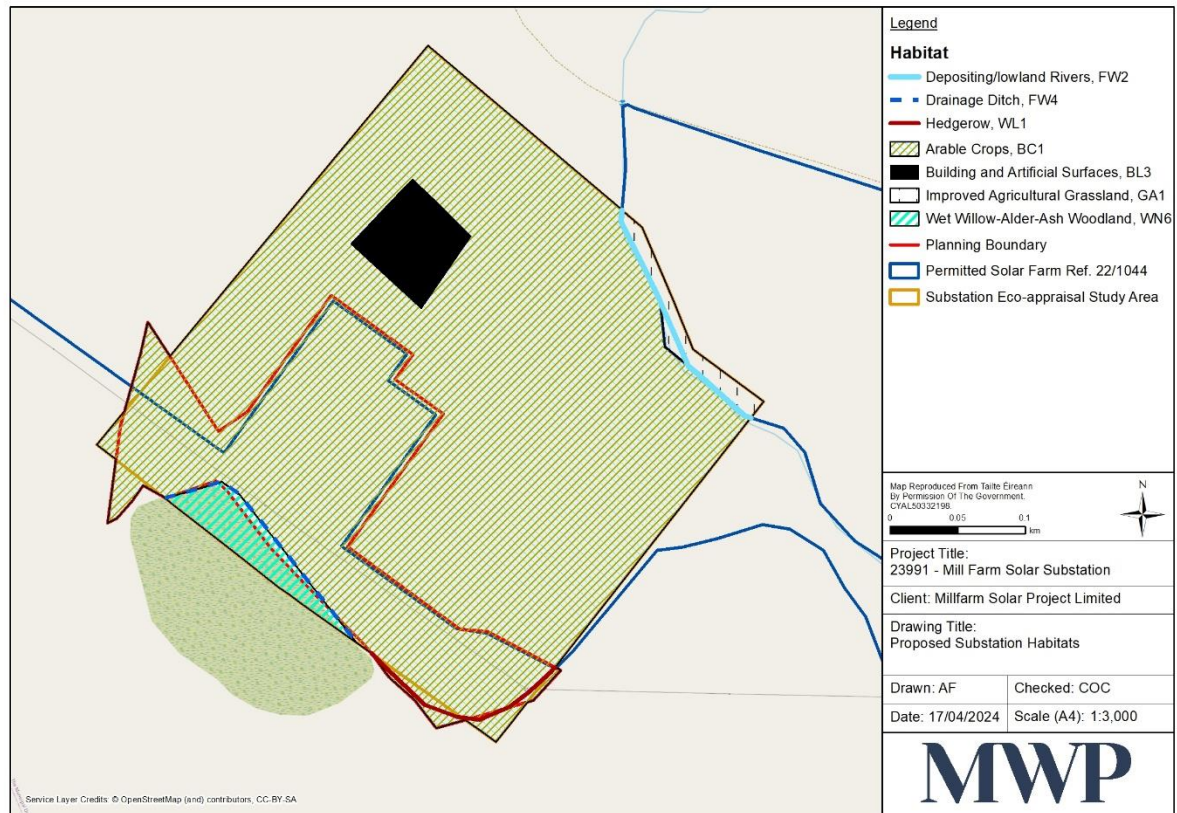


Figure 2-4: Habitat map of the proposed development site and study area

No rare or protected flora species were recorded within the proposed construction footprint during the ecological survey of the proposed development site.

During the MWP ecological field survey carried out on the site, no invasive plant species listed under the Third Schedule of the European Communities Regulations 2011 (S.I. 477 of 2015) were recorded.

The proposed development site is located adjacent to an existing 110KV overhead powerline which runs along the southern boundary and the proposed development will connect directly to this powerline.

The potential human receptors within the environs of the proposed development include residential houses on farms. The nearest dwelling to proposed development site is approximately 0.30 km to the south. The distance of all the immediately neighbouring residential dwellings from the substation site ranges from 0.3 - 1.6km. In terms of other social amenities, there are:

- 1) the Killary Graveyard 1.3km to the north;
- 2) the Bashford Pre-School 1.5km to the northeast;
- 3) the Castletown GAA Club 1.4km to the southwest and;
- 4) the Boynavley to Lakelands County Greenway along the old railway line 3km west of the substation site.

Lobinstown is located 1.7km to the north east, and Killary townland is located 1km to the east.

The proposed development site is located within the Electoral Divisions (ED) of '006 Killary'. Central Statistics Office (CSO) data indicates that in 2016, '006 Killary' had a total population of 1,248 residents.

The CORINE (2018) landcover data series (available on EPA's interactive map viewer) indicates that landcover at the proposed development site is classified as 'Agricultural Areas, Arable Land, and Non-irrigated arable land' (Code: 211).

According to the Geological Survey Ireland (GSI) online map viewer, the proposed development site is underlain predominantly by calcareous red-mica greywacke of the Clontail Formation.

Soils at the proposed development site are categorised predominantly as 'Fine loamy drift with limestones'. Subsoils at the proposed development site are classified as 'Limestone sands and gravels (Carboniferous)'.

The underlying GSI bedrock aquifer at most part of the site is categorized as 'Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones'.

The groundwater vulnerability of the aquifer is recorded as 'High Vulnerability'. The GSI define groundwater vulnerability as "a term used to represent the intrinsic geological and hydrogeological characteristics that determine the ease with which groundwater may be contaminated by human activities".

All data relating to water features was obtained from the EPA interactive map viewer. The site lies within the Dee_SC_030 Water Framework Directive (WFD) Sub-Catchment (ID: 06_4) which is within the Newry, Fane, Glyde and Dee WFD Catchment (ID: 06). The EPA records the presence of three River Waterbodies near the proposed development site; 'Killary_Water_20' (European Code: IE_NB_06K010500), 'Killary_Water_10' (European Code: IE_NB_06K010100), and 'DEE_040' (European Code: IE_NB_06D010360) approximately 190m east, 680m south, and 840m northwest of the proposed site respectively (see **Figure 2-5**, below).

The River Waterbody WFD status of Killary_Water_020 for the 2016-2021 period was classified as 'Moderate' and it's WFD Risk status is categorised as 'At risk'. The River Waterbody WFD status of Killary_Water_010 for the 2016-2021 period was classified as 'Poor' and it's WFD Risk status is categorised as 'At risk'. The River Waterbody WFD status of DEE_040 for the 2016-2021 period was classified as 'Good' and it's WFD Risk status is categorised as 'Not at risk'. The WFD River Waterbodies Risk Status represents the risk for each waterbody of failing to meet their Water Framework Directive (WFD) objectives by 2027.

The nearest EPA river water quality monitoring stations to the proposed development site are the 'Killary Br Upper' and 'Killary Br Lower', both located along the Killary (Water) (segment code: 06_1603). The most recent (2020) evaluation for each station indicates that the watercourse is considered to have biological water quality value, or Q value, of 'Moderate status', indicating that the river condition is unsatisfactory, and slightly polluted. This evaluation is based on the composition and abundance of the invertebrate community in the stream at this location.

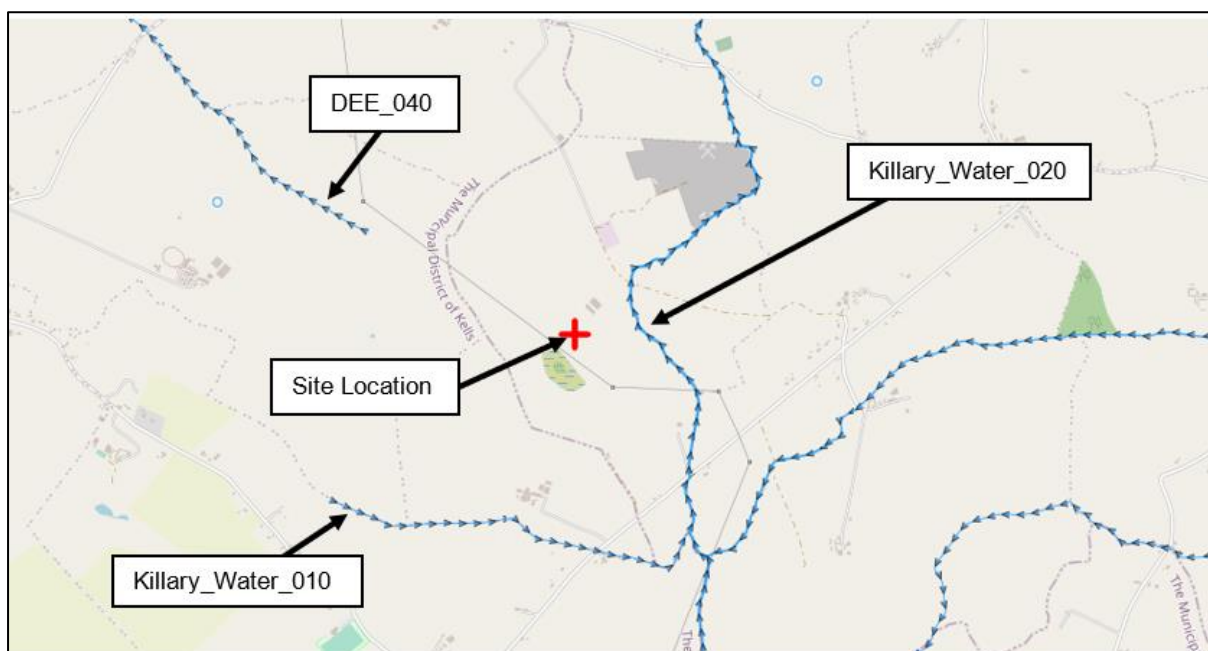


Figure 2-5: Watercourses within the vicinity of the proposed development site (Source: EPA map viewer)

The proposed development site is not located within a Special Area of Conservation (SAC) or Special Protection Area (SPA) collectively known as Natura 2000 sites. SPAs and SACs located within 15 km of the proposed or that are considered to have a connection to the proposed development site were identified in the AA Screening Report and include the River Boyne and River Blackwater SAC (Site code: 002299) located 10.2 km south, River Boyne and River Blackwater SPA (Side code: 004232) located 10.7 km south, Dundalk Bay SAC (Site code: 000455) located 24.5 km northeast and Dundalk Bay SPA (Site code: 004026) located 24.5 km northeast of the proposed development site. See **Figure 2-6** for SACs and SPAs within the potential Zone of Influence (Zoi) of the proposed development site.

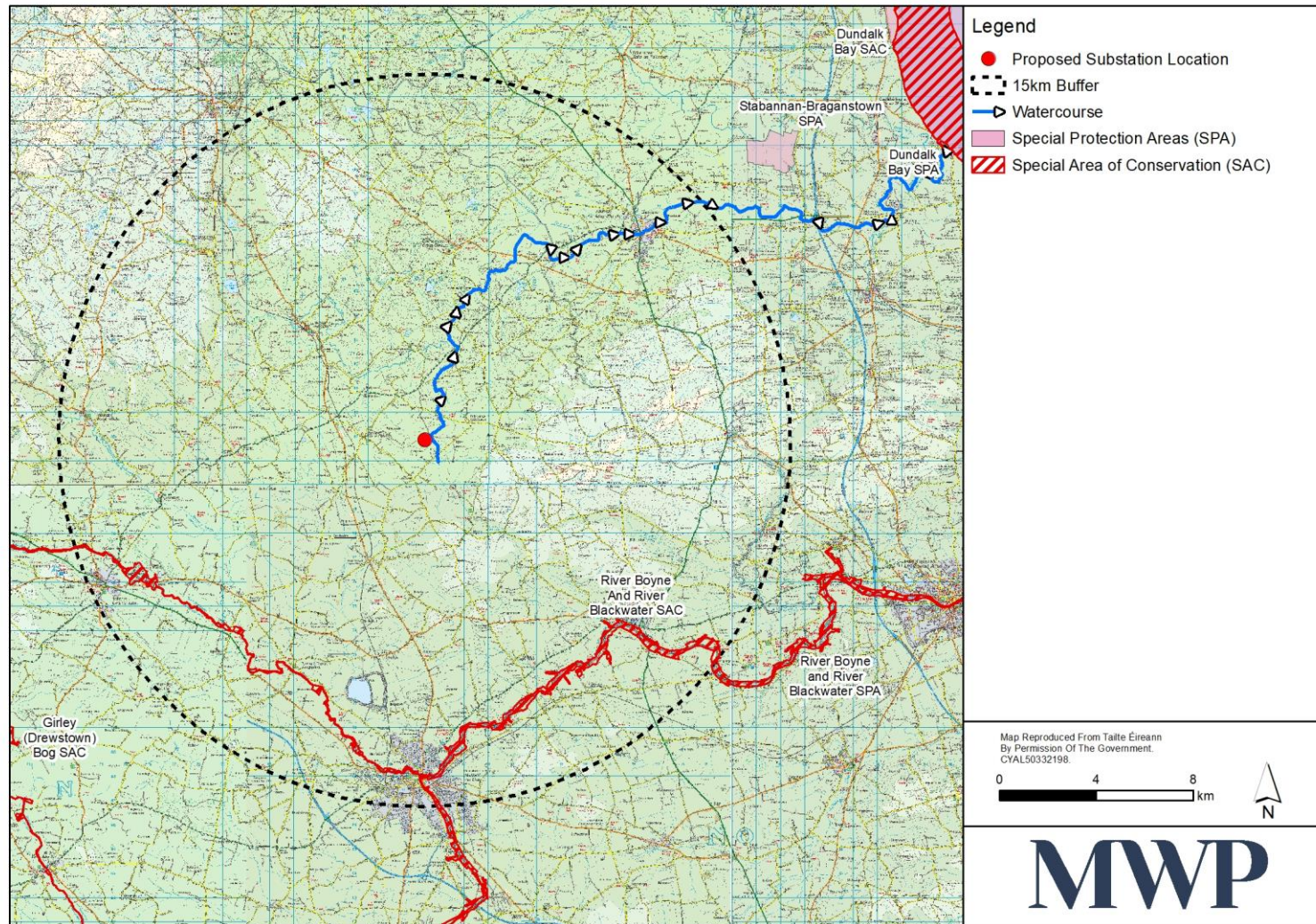


Figure 2-5: Natura 2000 sites within the potential zone of influence (ZOI) of the proposed works

3. EIA Screening Legislation and Guidance

This section of the Report outlines the legislative basis for EIA Screening in order to ascertain whether the proposed development, or any element of it, is likely to require the preparation of an EIA.

3.1 Legislation

3.1.1 EU EIA Directive

EIA requirements derive from Council Directive 85/337/EEC (as amended by Directives 97/11/EC, 2003/35/EC and 2009/31/EC) and as codified and replaced by Directive 2011/92/EU of the European Parliament and the Council on the assessment of the effects of certain public and private projects on the environment. Directive 2014/52/EU, amends Directive 2011/92/EU (hereafter referred to as the 'EIA Directive').

The EIA Directive requires an environmental assessment to be carried out prior to development consent being granted for projects considered likely to have a significant effect on the environment.

The EIA Directive lists those projects that require a mandatory EIA (Annex I), and those projects for which an assessment must be undertaken to determine if they are probable to result in likely significant effects (Annex II). For Annex II projects, individual Member States can choose to institute specific thresholds or project specific considerations, or a combination of both approaches to arrive at a decision regarding the requirement to undertake an EIA.

Annex II developments that do not exceed the thresholds for the mandatory requirement to prepare an EIA are categorised as sub-threshold and must be assessed on a case-by-case basis to determine whether or not they are likely to have significant effects on the existing environment. The likelihood of a significant environmental effect is the principle matter around which consideration of the requirement for an EIA is based. Annex III, of the EIA Directive, sets out the criteria to be examined when carrying out a sub-threshold assessment. These criteria include the characteristics of projects, location of projects, and type and characteristics of the potential impact.

Therefore, in order for a project to be subjected to an assessment of its environmental effects, in accordance with the procedural requirements of the EIA Directive it must be:

1. A project of a type listed in Annex I; or
2. A project of a type listed in Annex II which either meets thresholds or criteria set by the Member State; or
3. A project of a type listed in Annex II which is under the threshold, but following case by case examination, is likely to have significant effects on the environment.

3.1.2 Environmental Impact Assessment Regulations 2018

In Ireland, generally the process of ascertaining whether a development requires an EIA is determined by the Planning and Development Act 2000 (as amended) and the Planning and Development Regulations 2001 (as amended). The 2014 EIA Directive had direct effect in Ireland from 16 May 2017 and was transposed into Irish planning law on 1 September 2018 in the form of the European Union (EU) (Planning and Development) (Environmental Impact Assessment) Regulations 2018.

3.1.2.1 Mandatory EIA

Section 172 of the Planning and Development Act 2000 (as amended) provides the legislative basis for mandatory EIA in Ireland. It states the following:

“An environmental impact assessment shall be carried out by a planning authority or the Board, as the case may be, in respect of an application for consent for proposed development where either:

1. the proposed development would be of a class specified in –

(i) Part 1 of Schedule 5 of the Planning and Development Regulations 2001, and either

I. such development would exceed any relevant quantity, area or other limit specified in that Part, or

II. no quantity, area or other limit is specified in that Part in respect of the development concerned,

or

(ii) Part 2 of Schedule 5 of the Planning and Development Regulations 2001 and either –

I. such development would exceed any relevant quantity, area or other limit specified in that Part, or

II. no quantity, area or other limit is specified in that Part in respect of the development concerned,

or

2. (i) the proposed development would be of a class specified in Part 2 of Schedule 5 of the Planning and Development Regulations 2001 but does not exceed the relevant quantity, area or other limit specified in that Part, and

3. (ii) the planning authority or the Board, as the case may be, determines that the proposed development would be likely to have significant effects on the environment.”

Schedule 5 of the Planning and Development Regulations 2001 (as amended) transposes Annex I and Annex II of the EIA Directive into Irish law under Parts 1 and 2 of the Schedule, respectively. It sets out the classes of development that require EIA. EIA is mandatory for development of a class set out in Schedule 5, which exceeds a limit, quantity or threshold set for that class of development.

3.1.2.2 Sub-threshold EIA

Sub-threshold development is defined in Part 10 of the Planning and Development Regulations 2001 (as amended) as *“development of a type set out in Schedule 5 which does not exceed a quantity, area or other limit specified in that Schedule in respect of the relevant class of development”*.

The Planning and Development Regulations 2001 (as amended) under Schedule 5 Part 2 Category 15 includes a requirement for EIA for: *“Any project listed in this Part which does not exceed a quantity, area or other limit specified in this 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.”*

The planning authority may consider that the development would be likely to have significant effects on the environment and therefore would require EIA. As such, the possibility that the proposed development might fall within the definition of a sub-threshold development is considered.

Annex IIA has been inserted to the 2014 EIA Directive requiring certain additional information be provided by the applicant or developer for the purposes of screening sub-threshold development for environmental impact assessment:

“1. A description of the project, including in particular:

(a) a description of the physical characteristics of the whole project and, where relevant, of demolition works;

(b) a description of the location of the project, with particular regard to the environmental sensitivity of geographical areas likely to be affected.

2. A description of the aspects of the environment likely to be significantly affected by the project.

3. A description of any likely significant effects, to the extent of the information available on such effects, of the project on the environment resulting from:

(a) the expected residues and emissions and the production of waste, where relevant;

(b) the use of natural resources, in particular soil, land, water and biodiversity.

4. The criteria of Annex III shall be taken into account, where relevant, when compiling the information in accordance with points 1 to 3.”

This is transposed into Irish Law as Schedule 7A of the Planning and Development Regulations 2001 (as amended).

Schedule 7 of the Planning and Development Regulations 2001 (as amended), sets out the criteria for assessing whether or not a development would or would not be likely to have ‘significant’ effects on the environment. Schedule 7 transposes Annex III of the EIA Directive.

The criteria are grouped under three headings and are used to help in the screening process to determine whether a development is likely to have a significant effect on the environment. Refer to **Table 3-1** below.

3.2 Relevant Guidance

The following guidance was consulted:

- EPA ‘Guidelines on the Information to be Contained in Environmental Impact Assessment Reports’ (2022) (hereafter referred to as the ‘EPA guidelines’);
- European Commission (EC), ‘Environmental Impact Assessment of Projects, Guidance on the preparation of Environmental Impact Assessment Reports’ (Directive 2011/92/EU as amended by 2014/52/EU) (2017);
- EC ‘Interpretation of definitions of project categories of annex I and II of the EIA Directive’ (2015);
- EC ‘Guidance on EIA Screening’ (2001);
- Government of Ireland ‘Guidelines for Planning Authorities and An Board Pleanála on carrying out Environmental Impact Assessment, (2018);
- Department of Housing Planning and Local Government (DHPLG) ‘Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment’ (2018); and
- Office of the Planning Regulator (OPR) ‘Environmental Impact Assessment Screening Practice Note’ (2021).

Table 3-1: Criteria for determining whether a development would or would not be likely to have significant effects on the environment

Characteristics of the development

The characteristics of the projects must be considered, with particular regard to:

- a) the size and design of the whole project;
- b) the cumulation with other existing and/or approved projects;
- c) the use of natural resources, in particular land, soil, water and biodiversity;
- d) the production of waste;
- e) pollution and nuisances;
- f) 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;
- g) the risks to human health (for example due to water contamination or air pollution).

Location of proposed development

The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to:

- a) the existing and approved land use;
- b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground;
- c) the absorption capacity of the natural environment, paying particular attention to the following areas:
 - i. wetlands, riparian areas, river mouths;
 - ii. coastal zones and the marine environment;
 - iii. mountain and forest areas;
 - iv. nature reserves and parks;
 - v. areas classified or protected under legislation; Natura 2000 areas designated by Member States pursuant to Directive 92/43/EEC and Directive 2009/147/EC;
 - vi. areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;
 - vii. densely populated areas;
 - viii. landscapes and sites of historical, cultural or archaeological significance.

Type and characteristics of potential impacts

The likely significant effects of projects on the environment must be considered in relation to criteria set out in points 1 and 2 of this Annex, with having regard to the impact of the project on the factors specified in Article 3(1), taking into account:

- a) the extent of the impact (geographical area and size of the affected population),
- b) the transfrontier nature of the impact,
- c) the magnitude and complexity of the impact,
- d) the probability of the impact,
- e) the duration, frequency and reversibility of the impact

4. EIA Screening Methodology

Ascertaining whether the proposed development requires an EIA (EIA screening) is determined by reference to mandatory and discretionary provisions set out in Irish legislation.

This report was prepared in accordance with Section 3.2 of the EPA Draft 'Guidelines on the Information to be contained in Environmental Impact Assessment Report' (EPA, 2022). The DHPLG's 'Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment' (DHPLG, 2018) were also consulted.

It is important to note that this report has been prepared in order to provide a sufficient level of information to the competent authority, in this case An Bord Pleanála on which to base the EIA Screening for the proposed development.

4.1 Mandatory EIA

Developments which require an EIA for the purposes of Part 10 of the Planning and Development Regulations 2001 (as amended) are outlined under two separate sections, Part 1 and Part 2. The schedule of projects listed in Part 1 and Part 2 of Schedule 5 was consulted to determine whether the new development required EIA.

Table 4-1 provides a summary of the Part 1 projects and their applicability to this development (relevant sections if applicable have been expanded and shown using *italics*). **Table 4-2** provides a summary of the Part 2 projects and their applicability to this development (relevant sections if applicable have been expanded and shown using *bold italics*).

Table 4-1: Schedule 5, Part 1 Checklist

Part 1 of Schedule 5		Relevant to Project Development Site
1	Crude-oil refineries	No
2	Thermal and Nuclear Power Stations	No
3	Reprocessing of irradiated nuclear fuel	No
4	Integrated works for the initial smelting of cast iron and steel and Installations for the production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes	No
5	Installations for the extraction of asbestos and for the processing and transformation of asbestos and products containing asbestos	No
6	Integrated chemical installations	No
7	A line for long-distance railway traffic	No
8	Inland waterways and ports for inland-waterway traffic and Trading ports, piers for loading and unloading connected to land and outside ports	No
9	Waste disposal installations for the incineration, chemical treatment of hazardous waste	No
10	Waste disposal installations for the incineration, chemical treatment of non-hazardous waste	No
11	Groundwater abstraction or artificial groundwater recharge schemes	No
12	Works for the transfer of water resources between river basins	No
13	Wastewater treatment plants	No
14	Extraction of petroleum and natural gas for commercial purposes	No
15	Dams and other installations designed for the holding back or permanent storage of water	No
16	Pipelines for the transport of gas, oil, chemicals or carbon dioxide streams	No
17	Installations for the intensive rearing of poultry or pigs	No
18	Industrial plants	No
19	Quarries and open-cast mining	No
20	Construction of overhead electrical power lines	No

Part 1 of Schedule 5		Relevant to Project Development Site
21	Installations for storage of petroleum, petrochemical, or chemical products	No
22	Any change to or extension of projects listed in this Annex where such a change or extension in itself meets the thresholds	No
23	Storage sites on the geological storage of carbon dioxide	No
24	Installations for the capture of CO2 streams for the purposes of geological storage	No

Table 4-2: Schedule 5, Part 2 Checklist

Part 2 of Schedule 5		Relevant to Project Development Site
1	Agriculture, silviculture and aquaculture	No
2	Extractive Industry	No
3 (a)	<i>Energy Industry Industrial installations for the production of electricity, steam and hot water (projects not included in Annex I) with a heat output of 300 megawatts or more</i>	No
4	Production and processing of metals	No
5	Mineral Industry	No
6	Chemical Industry	No
7	Food Industry	No
8	Textile, Leather, Wood and Paper Industries	No
9	Rubber Industry	No
10	Infrastructure Projects	No
11	Other Projects	No
12	Tourism and Leisure	No
13	Any change or extension of projects listed in Annex I or this Annex, already authorised	No
14	Works of demolition carried out in order to facilitate a project listed in Part 1 or Part 2 of this Schedule where such works would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7.	No
15	<i>Any project listed in this Part which does not exceed a quantity, area or other limit specified in this Part in respect of the relevant class of development,</i> but which would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7.	See Table 4-3

Table 4-1. It is evident that the proposed development does not fall under any class of development listed in Part 1 or Part 2 of Schedule 5. Consideration was given to Sections 3 and 15 of Part 2 as shown in bold in **Table 4-2**. Based on the size and design, the proposed development does not fall under any of the thresholds specified under Schedule 5 Part 2; therefore, the proposed development is not a mandatory project for EIA under Schedule 5.

It is concluded that the proposed development does not fall under any class of development listed in Part 1 or 2 of Schedule 5.

4.2 Sub-threshold EIA

Where the proposed development does not meet, or exceed, the applicable threshold (referred to in **Section 4.1** above), the likelihood of the proposed development having significant effects on the environment may need to be considered. The discretionary (or sub-threshold) requirements are based on an assessment of the likely significant environmental effects of the proposed development.

To determine whether a development is likely to have a 'significant effect(s)' on the environment, it is necessary to consider the criteria listed in Schedule 7 (refer to **Table 4-3**). The criteria are grouped under three headings:

1. Characteristics of proposed development;
2. Location of proposed development; and
3. Type and characteristics of potential impacts.

Planning authorities must have regard to the criteria under these headings when forming an opinion as to whether or not a sub-threshold development is likely to have significant effects on the environment.

The assessment is completed for the entirety of the proposed development, that is the proposed development based on the information available at the time of writing.

Table 4-3: Schedule 7 Criteria Assessment

1. Characteristics of the Proposed Development	Appraisal
(a) The size and design of the whole project;	The proposed development comprises of a new 110kV Substation and Loop-in connection adjacent to and to serve the permitted solar farm site. The proposed development is on a site of approximately 3.6 ha. The proposed development is unlikely in terms of size, scale and design to give rise to significant effects on the environment.
(b) Cumulation with other existing development 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 EIA Directive by or under any other enactment;	<p>A desktop search of proposed and existing planning applications was undertaken as part of this report and Screening for AA report for the proposed development.</p> <p>A search of Meath County Council's online planning enquiry system for granted or on-going planning applications for the townland the proposed development site lies within, was undertaken on the 16th April 2024.</p> <p>The permitted Mill Farm Solar Farm was the largest project considered in combination with the proposed development. The permitted solar farm and proposed development are linked and will be constructed at the same time. The works for the proposed development will largely overlap with the permitted solar farm. The proposed Killary solar farm (ref: 231082) which is located 1.2 km to the south east of the proposed development site has also been considered in the cumulative assessment. However cumulative impacts between the proposed development and Killary solar farm are not anticipated due to distance between the two sites and the developments will likely not be built concurrently.</p> <p>The other projects in the surrounding areas relate to agricultural sheds and shed extensions, dwelling houses and extensions to dwelling houses, attic conversions, domestic wastewater treatment systems, installation of photovoltaic for domestic purposes, garages, demolitions and retention permission applications. There are no other applications for large-scale commercial or industrial activities. Such minor domestic and agricultural development will not introduce cumulative effects due to the nature and scale of these applications. These applications will not introduce complex or significant issues and are therefore not considered in the cumulative assessment.</p> <p>The cumulative impact of existing and proposed development was concluded to have a not significant impact on the environment.</p>
(c) The nature of any associated demolition works	No demolition works are required as part of the proposed development.
(d) The use of natural resources, in particular land, soil, water and biodiversity;	<p>There will be a requirement to excavate approximately 7,000m³ of clean, natural topsoil and subsoil. This material will be reused, where feasible, to create berms and used for landscaping on the adjacent permitted solar farm site. Excess clean soil material will be deposited permanently in 2 No. soil deposition areas (1,600m²) located adjacent to the western boundary of the site.</p> <p>Where the surplus material is to be reused on the adjacent permitted solar farm site as a by-product (not as a waste), this will be done in accordance with Article 27 of the European Communities (Waste Directive) Regulations 2011 (S.I. No. 126 of 2011) (as amended) and having regard for the Circular Economy and Miscellaneous Provisions Act 2022 and any such legislative requirements that may be required later. Construction materials will be required and will be sourced, where possible, from local quarries and transported to the site.</p> <p>Water will be brought into the site during the construction phase and used as required.</p>

1. Characteristics of the Proposed Development	Appraisal
	<p>The use of resources has been assessed here and it is concluded that the development will not have a significant impact on the environment.</p>
(e) The production of waste;	<p>The proposed development will involve removal off site of soil and subsoil (see (d)). However, it is likely that any effects will not be significant as soil and subsoil generated from excavation works will be reused, where feasible, to create berms and used for landscaping on the adjacent permitted solar farm site. Excess clean soil material will be deposited permanently in 2 No. soil deposition areas (1,600m²) located adjacent to the western boundary of the site.</p> <p>Where surplus material is to be reused on the adjacent permitted solar farm site as a by-product (not as a waste), this will be done in accordance with Article 27 of the European Communities (Waste Directive) Regulations 2011 (S.I. No. 126 of 2011) (as amended) and having regard for the Circular Economy and Miscellaneous Provisions Act 2022 and any such legislative requirements that may be required later.</p> <p>Construction phase waste will be stored in the construction compound on the permitted adjacent Solar Farm and collected at the end of the construction phase and taken off site to be reused, recycled and disposed of in accordance with best practice procedures at an approved facility. Plastic waste will be taken for recycling by an approved contractor and disposed or recycled at an approved facility. Domestic type waste generated by contractors will be collected on site, stored in an enclosed skip at the construction compounds and disposed of at a licensed landfill facility. There are no unusual wastes expected, standard construction waste will be segregated and recycled where possible. See the Resource & Waste Management section of the Construction Environmental Management Plan (CEMP) prepared for the proposed development for further detail.</p>
(f) Pollution and nuisances;	<p>Potential pollution pathways and nuisances for consideration include increases in exhaust emissions to air as a result of construction machinery; noise and vibration from equipment use; leaks and spills of hydrocarbon containing materials used, and runoff of material to nearby watercourses. Construction works may cause a temporary noise, dust and traffic disturbance or nuisance to neighbouring receptors. However, good construction and environmental management practices (e.g. implementation of a CEMP) are likely to minimise the risk of any significant effects.</p> <p>A Noise Impact Assessment (NIA) was prepared by MWP for the proposed development and concluded that: “no significant construction noise impacts are predicted as all construction noise activities are predicted to be below the construction noise limits in relation to a potential significant construction noise impact at residential properties and there are no significant cumulative impacts predicted from the permitted Mill Farm Solar development construction works in combination with the proposed development.” For the operational phase the NIA concluded that: “The predicted noise emissions from the proposed development operational phase are predicted to be below operational noise thresholds and also below baseline noise levels at noise sensitive receptors (NSRs). From a cumulative viewpoint, operational noise emissions at NSRs from both the permitted development and proposed development are predicted to be below operational noise thresholds and therefore there will be no significant cumulative impacts as a result of the proposed development and permitted development in operation together.”</p>

1. Characteristics of the Proposed Development	Appraisal
(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;	<p>The nature of the proposed development (110kV substation and associated works) is not likely to cause a major accident or disaster. The implementation of appropriate control measures during construction will reduce the risk of accidents from polluting substances entering soil and groundwater. In addition, given the temporary nature of construction works, the risk of disasters (typically considered to be natural catastrophes e.g., very severe weather event) or accidents (e.g., fuel spill, traffic accident) is considered low.</p> <p>The proposed development is a substation which will not affect downstream flooding. The compound will consist 1 No. 110kV onsite Eirgrid substation with associated electrical plant, electrical equipment, security palisade fencing, an IPP building and a transformer. A Stage 2 Flood Risk Assessment (FRA) has been prepared by MWP for the proposed development and concluded there are no records of previous flooding occurring at this site.</p> <p>The FRA identified that the site is within Flood Zone C as defined in the Flood Risk Management Guidelines and is appropriate for the proposed development. It was demonstrated that the proposed development will not have an adverse impact on flooding elsewhere and that the risk to occupants of the site would be low.. Surface water runoff from the roofs of the substation buildings, and hard-surfaced areas within the electrical yard, including areas where a risk of a contaminant leak or spill may be present (such as the transformer bund), will be collected in a series of filter drains, roof guttering and downpipes and routed to an underground gravity drainage network. All runoff collected in the stormwater sewer network will pass through an oil/petrol Interceptor prior to discharging to an attenuation unit on the north-eastern side of the compound. The attenuation unit will provide attenuation of the increased volumes of surface water runoff generated from the hard surfaces of the development when compared to the current greenfield condition. The attenuated surface water runoff is then proposed to overflow at a controlled rate equal to the greenfield runoff rate to an existing vegetated land drain on the southern side of the compound.</p> <p>During the operational phase, due to the type of development and design measures which will be put in place, the risk of the proposed development causing a major accident and/or disaster and the vulnerability of the proposed development to potential man-made and natural disasters is considered unlikely.</p>
(h) The risks to human health (for example, due to water contamination or air pollution).	<p>Construction works may cause a temporary noise, dust and traffic disturbance or nuisance to neighbouring receptors. However good construction and environmental management practices (e.g. implementation of a CEMP) are likely to minimise the risk of any significant effects. The operation of the proposed development will not have any significant impact on the environment with regards to noise nuisance as concluded by the NIA prepared for the proposed development.</p> <p>With the implementation of appropriate best practice measures during the construction phase (including an emergency spill response plan), in addition to the scale of the development, the risk to human health is considered low.</p> <p>There will be no emissions to air during the operational phase; therefore, no risks to human health are anticipated.</p> <p>During the construction and operational phases of the proposed development, the site will be secured by fencing, to prevent people accessing the site, therefore significant effects are unlikely.</p>

2. Location of Proposed Development	Appraisal
(a) The existing and approved land use	<p>The land-use will change from agriculture to renewable energy infrastructure. While this is a significant change in land-use, the overall environmental effect of the change is not considered significant in the context of the current land-use. Some loss of farmland will occur due to the proposed development, but this is a minor amount and not considered to be significant. In combination with the permitted development this will result in a positive effect as the developments will contribute to Ireland's renewable energy targets.</p>
(b) The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground;	<p>No water abstraction. All imported materials will be sourced from approved suppliers.</p> <p>The proposed development will require excavation of soil and subsoil. There will be a requirement to excavate approximately 7,000m³ of clean, natural topsoil and subsoil. This material will be reused, where feasible, to create berms and used for landscaping on the adjacent permitted solar farm site. Excess clean soil material will be deposited permanently in 2 No. soil deposition areas (1,600m²) located adjacent to the western boundary of the site.</p> <p>Where surplus material is to be reused on the adjacent permitted solar farm site as a by-product (not as a waste), this will be done in accordance with Article 27 of the European Communities (Waste Directive) Regulations 2011 (S.I. No. 126 of 2011) (as amended) and having regard for the Circular Economy and Miscellaneous Provisions Act 2022 and any such legislative requirements that may be required later.</p>
(c) The absorption capacity of the natural environment, paying particular attention to the following areas:	
(i) wetlands, riparian areas, river mouths;	<p>The proposed development will not impact any wetlands, riparian areas or river mouths. The Killary Stream (EPA River Waterbody Code: IE_NB_06K010500) is located a short distance to the east of the proposed development site. Water runoff from the site most likely drains into the Killary watercourse as the land slopes towards the watercourse. Field drains bound most of the fields within the proposed development site and they vary in depth and width.</p> <p>Potential negative water quality effects arising as a result of the construction of the proposed development could potentially occur as a result of erosion and run-off of fines/nutrient-enriched material from excavation works or temporary storage areas for construction materials. Adverse water quality effects could also potentially arise due to the accidental release of pollutants such as fuels, oils and other such substances to the aquatic environment during the construction phase. Foul sewage from the temporary facilities will be routed to covered precast concrete watertight 5m³ tanks designed for receiving and storing sewage with no outlet. The tanks will be sized to suit the expected use and will be installed in a location remote from water courses. Contents and residues will be regularly emptied by a competent operator for safe disposal to an approved treatment works.</p> <p>Surface water runoff from the roofs of the substation buildings, and hard-surfaced areas within the electrical yard, including areas where a risk of a contaminant leak or spill may be present (such as the transformer bund), will be collected in a series of filter drains, roof guttering and downpipes and routed to an underground gravity drainage network. All runoff collected in the stormwater sewer network will pass through an oil/petrol Interceptor prior to discharging to an attenuation unit on the north-eastern side of the</p>

2. Location of Proposed Development		Appraisal
		compound. The attenuation unit will provide attenuation of the increased volumes of surface water runoff generated from the hard surfaces of the development when compared to the current greenfield condition. The attenuated surface water runoff is then proposed to overflow at a controlled rate equal to the greenfield runoff rate to an existing vegetated land drain on the southern side of the compound. Significant effects are therefore unlikely to occur given the duration of the works. In addition, best practice standards, environmental guidelines and control measures which are defined in the CEMP accompanying this application and will be adhered to in order to reduce the likelihood of potential impacts on the water environment. SuDS will be installed prior to the construction of the proposed developments. This SuDS feature will take the form of soakaways which will treat and attenuate surface water runoff before infiltrating into the soils below, or to discharge into the existing field drainage system.
(ii)	coastal zones and the marine environment;	n/a
(iii)	mountain and forest areas;	n/a
(iv)	nature reserves and parks;	n/a
(v)	areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive;	<p>There are four Natura 2000 sites comprising of two SACs and two SPA occurring within the zone of influence of the site:</p> <ul style="list-style-type: none"> • River Boyne and River Blackwater SAC (Site code: 002299) located 10.2 km south; • River Boyne and River Blackwater SPA (Side code: 004232) located 10.7 km south; • Dundalk Bay SAC (Site code: 000455) located 24.5 km northeast and; • Dundalk Bay SPA (Site code: 004026) located 24.5 km northeast. <p>The Screening for AA Report and NIS completed for the proposed development objectively concluded that with the implementation of the recommended mitigation measures outlined in the NIS the project, alone and in-combination with other plans and projects, will not result in likely significant effects on the integrity of any European sites in view of their conservation objectives.</p>
(vi)	areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;	<p>The site lies within the Dee_SC_030 Water Framework Directive (WFD) Sub-Catchment (ID: 06_4) which is within the Newry, Fane, Glyde and Dee WFD Catchment (ID: 06). The EPA records the presence of three River Waterbodies near the proposed development site; 'Killary_Water_20' (European Code: IE_NB_06K010500), 'Killary_Water_10' (European Code: IE_NB_06K010100), and 'DEE_040' (European Code: IE_NB_06D010360) approximately 190m east, 680m south, and 840m northwest of the proposed site respectively.</p> <p>The River Waterbody WFD status of Killary_Water_020 for the 2016-2021 period was classified as 'Moderate' and it's WFD Risk status is categorised as 'At risk'. The River Waterbody WFD status of Killary_Water_010 for the 2016-2021 period was classified as 'Poor' and it's WFD Risk status is categorised as 'At risk'. The River Waterbody WFD status of DEE_040 for the 2016-2021 period was classified as 'Good' and it's WFD Risk status is categorised as 'Not at risk' The WFD River Waterbodies Risk Status represents the risk for each waterbody of failing to meet their Water Framework Directive (WFD) objectives by 2027.</p>

2. Location of Proposed Development		Appraisal
		<p>The nearest EPA river water quality monitoring stations to the proposed development site are the 'Killary Br Upper' and 'Killary Br Lower', both located along the Killary (Water) (segment code: 06_1603). The most recent (2020) evaluation for each station indicates that the watercourse is considered to have biological water quality value, or Q value, of 'Moderate status', indicating that the river condition is unsatisfactory, and slightly polluted. This evaluation is based on the composition and abundance of the invertebrate community in the stream at this location.</p> <p>Potential negative water quality effects arising as a result of the construction of the proposed development could potentially occur as a result of erosion and run-off of fines/nutrient-enriched material from excavation works or temporary storage areas for construction materials. Foul sewage from the temporary facilities will be routed to covered precast concrete watertight 5m3 tanks designed for receiving and storing sewage with no outlet. The tanks will be sized to suit the expected use and will be installed in a location remote from water courses. Contents and residues will be regularly emptied by a competent operator for safe disposal to an approved treatment works.</p> <p>Surface water runoff from the roofs of the substation buildings, and hard-surfaced areas within the electrical yard, including areas where a risk of a contaminant leak or spill may be present (such as the transformer bund), will be collected in a series of filter drains, roof guttering and downpipes and routed to an underground gravity drainage network. All runoff collected in the stormwater sewer network will pass through an oil/petrol Interceptor prior to discharging to an attenuation unit on the north-eastern side of the compound. The attenuation unit will provide attenuation of the increased volumes of surface water runoff generated from the hard surfaces of the development when compared to the current greenfield condition. The attenuated surface water runoff is then proposed to overflow at a controlled rate equal to the greenfield runoff rate to an existing vegetated land drain on the southern side of the compound. Adverse water quality effects could also potentially arise due to the accidental release of pollutants such as fuels, oils and other such substances to the aquatic environment during the construction phase. However, significant effects are unlikely to occur given the duration of the works. In addition, best practice standards, environmental guidelines and control measures which are defined in the CEMP accompanying this application and will be adhered to in order to reduce the likelihood of potential impacts on the water environment.</p> <p>The Air Quality is reported as 'Good' at the nearest operational EPA air quality monitoring station in Navan, Co. Meath (Station 68) on 15th April 2024 (accessed on airquality.ie).</p>
(vii)	densely populated areas;	The proposed development site is not located in a densely populated area.
(viii)	landscapes and sites of historical, cultural or archaeological significance.	According to the National Monuments Service (NMS) Historic Environment Viewer, there are no 'Site and Monuments Records' or 'National Inventory of Architectural Heritage' records recorded within the proposed development site boundary. There are no recorded monuments within the proposed development sites. There are recorded monuments in the vicinity of the proposed development site, the nearest is a Ring-ditch (Reference: ME012-057) located approximately 0.7km north of the proposed development site. However, due to their distance from the proposed development site, will not be physically impacted by the

2. Location of Proposed Development	Appraisal
	<p>proposed development. As such, no direct impacts upon known archaeological and heritage assets are anticipated as a result of the proposed development.</p>
3. Type and Characteristics of the Potential Impacts	Appraisal
(a) The magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected);	<p>The magnitude and spatial extent of the development will include the site, properties located in close proximity to the site local population and users of the proposed development.</p> <p>During the operational phase, the magnitude and spatial extent will include the local population.</p>
(b) The nature of the impact;	<p>Population and Human Health</p> <p>It is likely that there will be potential negative impacts such as noise and dust arising from construction activities, workers and traffic during construction phase. However, it is not anticipated that there will be any significant, negative effects from the proposed development to human health during the construction phase. The site is in a rural area where there is sparse residential development. Best practice measures, which are outlined in the CEMP accompanying this application, will be implemented during the construction phase.</p> <p>During the operational phase, the proposed development will not give rise to significant effects on sensitive receptors.</p> <p>Biodiversity</p> <p>The construction phase of the proposed development is considered to have t potential for impacts to biodiversity. Construction phase effects, include habitat loss and alteration due to the scale of land take required; Indirect surface or ground water quality effects; Direct and indirect species disturbance/ displacement.</p> <p>Best practice standards, ecological protection and control measures will be defined in the CEMP and adhered to in order to reduce the likelihood of potential impacts on biodiversity; therefore, significant effects are not anticipated. An Ecological Appraisal Report, Screening for AA Report and NIS have also been prepared for the proposed development and outline mitigation measures for the protection of biodiversity on the proposed development site.</p> <p>The Screening for AA Report and NIS completed for the proposed development objectively concluded that that with the implementation of the recommended mitigation measures outlined in the NIS the project, alone and in-combination with other plans and projects, will not result in likely significant effects on the integrity of the any European sites in view of their conservation objectives.</p>

3. Type and Characteristics of the Potential Impacts	Appraisal
	<p>The Ecological Appraisal concluded that there were no significant residual impacts on biodiversity identified during the construction and operational phases of the proposed development. Measures to protect biodiversity, such as standard best-practice pollution prevention and pre-construction wildlife surveys have been incorporated into the design process of the proposed development. With the implementation of the avoidance and mitigation measures outlined herein, the overall ecological impact of the proposed project (relative to the 'do-nothing' scenario) is considered to be a permanent, imperceptible, negative effect at a local level.</p> <p>Water</p> <p>Potential negative water quality effects arising as a result of the construction of the proposed development could potentially occur as a result of erosion and run-off of fines/nutrient-enriched material from excavation works or temporary storage areas for construction materials. Adverse water quality effects could also potentially arise due to the accidental release of pollutants such as fuels, oils and other such substances to the aquatic environment during the construction phase. However, significant effects are unlikely to occur given the duration of the works. In addition, best practice standards, environmental guidelines and control measures which are defined in the CEMP accompanying this application will be adhered to in order to reduce the likelihood of potential impacts on the water environment.</p> <p>The protection of the watercourses within and surrounding the site, and downstream catchments that they feed is of utmost importance in considering the most appropriate drainage proposals for the site of the proposed development. The proposed development's drainage design has therefore been proposed specifically with the intention of having no negative impact on the water quality of the site and its associated rivers and lakes, and consequently no impact on downstream catchments and ecological ecosystems. No routes of any natural drainage features will be altered as part of the proposed development. There will be no direct discharges to any natural watercourses, with all drainage waters being dispersed as overland flows. Foul sewage from the temporary facilities will be routed to covered precast concrete watertight 5m³ tanks designed for receiving and storing sewage with no outlet. The tanks will be sized to suit the expected use and will be installed in a location remote from water courses. Contents and residues will be regularly emptied by a competent operator for safe disposal to an approved treatment works.</p> <p>During the operational phase, there is a potential risk to water quality in receiving watercourses via storm water run-off from artificial surfaces. Surface water runoff from the roofs of the substation buildings, and hard-surfaced areas within the electrical yard, including areas where a risk of a contaminant leak or spill may be present (such as the transformer bund), will be collected in a series of filter drains, roof guttering and downpipes and routed to an underground gravity drainage network. All runoff collected in the stormwater sewer network will pass through an oil/petrol Interceptor prior to discharging to an attenuation unit on the north-eastern side of the compound. The attenuation unit will provide attenuation of the increased volumes of surface water runoff generated from the hard surfaces of the development when compared to the current greenfield condition. The attenuated surface water runoff is then proposed to overflow at a controlled rate equal to the greenfield runoff rate to an existing vegetated land drain on the southern side of the compound.</p>

3. Type and Characteristics of the Potential Impacts	Appraisal
	<p>In addition, failure or accidental spills of fuel which is stored and used on site for the transformers could impact the existing water environment. However, significant effects on the existing water environment are not anticipated given the type of development, and the control and best practice measures that will be in place, including spill control, bunding of hazardous chemicals etc. As standard, the surface water drainage system will be managed and appropriately maintained during operation so as to ensure that the quality of discharge is adequate, and the quantity of run-off is controlled.</p> <p>Land and Soils</p> <p>During the construction phase, activities will include excavation and earthworks. Potential negative effects include (in the absence of adequate management) weathering and erosion of the surface soils, increased silt levels or pollutants from the construction processes, and accidental spills and impacted runoff. Best practice standards, environmental guidelines and control measures are defined in the CEMP and will be adhered to by the appointed contractor in order to reduce the likelihood of potential impacts on soil quality; therefore, significant effects are not anticipated. It is proposed that construction material is sourced locally from licensed suppliers, where possible.</p> <p>During the operational phase of the proposed development, the primary potential impact relates to a failure or accidental spill of fuel which is stored and used on site for the transformers. The transformers will be bunded; therefore, significant effects from accidental spills to the land and soils environmental are unlikely to occur.</p> <p>Air and Climate</p> <p>The main air quality impacts will be associated with dust generation during site preparation and construction works. The implementation of best management practices, however, will minimise the generation of dust during the construction phase. With the adoption of these measures, it is anticipated that the dust produced would not cause a significant effect on the environment.</p> <p>Climatic impacts are expected to be minor emissions of greenhouse gases to the atmosphere from truck movements and the operation of site construction equipment; however, a significant effect is not considered likely given the scale and type of proposed development.</p> <p>During the operational phase, the proposed development will assist in reducing carbon dioxide (CO₂) emissions in Ireland. Ireland aims to increase the proportion of renewable electricity to up to 80% by 2030. The proposed development will contribute to these targets which is a long-term significant positive effect.</p> <p>Noise and Vibration</p> <p>The construction phase of the proposed development has the potential to increase noise levels at noise sensitive locations surrounding the site. Impacts from the construction phase will depend on the number and type of equipment employed during the works. Noise and vibration limits will be outlined within the noise and vibration management section of the CEMP that will be produced by the contractor for the proposed development and agreed with Meath County Council and/or ABP prior to the</p>

3. Type and Characteristics of the Potential Impacts	Appraisal
	<p>commencement of construction. These limits will be adhered to at all times during the construction phase of the proposed development. With these measures in place, no significant effects on sensitive receptors are anticipated during the construction phase. All traffic movements will be carried out between the hours of 7:00am – 7:00pm (Monday – Friday inclusive) and 8:00am – 2:00pm (Saturday). Outside of these times works are limited to:</p> <ul style="list-style-type: none"> • Commissioning and testing; and • Works required in an emergency where there is the potential of harm or damage to personnel, plant, equipment, or the environment, Deliveries will also be scheduled to avoid peak times where relevant, e.g. avoiding rush hours and after school pick up times. <p>During the operational phase the proposed development elements are not known as significant noise sources and are generally quiet; therefore, significant noise effects are unlikely to occur. A Noise Impact Assessment has been prepared for the proposed development and concluded that there will be no negative significant impacts as result of noise emissions from the proposed development site.</p> <p>Landscape and Visual</p> <p>A Landscape and Visual Impact Assessment (LVIA) Report has been prepared by Cunnane Stratton Reynolds (CSR) for the proposed development. The LVIA has assessed the impact and effects of the proposed development at the proposed development site. The LVIA concluded that the proposed development is not likely to give rise to any potential significant landscape or visual effects. Mitigation of the residual landscape and visual effects has been embedded in the site planning of the proposed development, to ensure the scheme is of planning merit, and conducive to the inherent landscape character.</p> <p>Cultural Heritage</p> <p>There are no Recorded Monuments within the boundary of the proposed development site. The proposed development will not have a significant effect on cultural heritage.</p> <p>Material Assets</p> <p>During the construction phase, potential traffic impacts include additional traffic volumes on the local road network; introduction of construction traffic movements on the local and national road network, impacts on residential amenity by both construction traffic vehicles and future residents. A detailed Traffic Management Plan (TMP) will be prepared by the appointed contractor. This plan will be agreed with the planning authority prior to construction commencing. The purpose of developing and implementing an agreed TMP for the construction phase works is to minimise the impact of the works on local residences and users of the public road networks. A careful approach will be taken to planning the works to ensure minimal impacts on road users and the general public.</p>

3. Type and Characteristics of the Potential Impacts	Appraisal
	<p>During the operational phase, the proposed development would generate minimal traffic as access will only be required for maintenance and repair; therefore, significant effects on the existing road network or other road users are not anticipated.</p> <p>The proposed development overall, will likely have a long-term, positive and significant effect on the existing electricity supply network.</p>
(c) The transboundary nature of the impact;	N/A as the proposed development is located fully within the Republic of Ireland.
(d) The intensity and complexity of the impact;	It is not anticipated that proposed development will result in intense or complex impacts during either the construction or operational phase.
(e) The probability of the impact;	The proposed development, considering the static nature of it has a low probability of impact on the environment.
(f) The expected onset, duration, frequency, reversibility of the impact;	<p>With the appropriate control measures, potential impacts from noise, dust, and traffic will be temporary and transient in nature during the construction phase. The loss of land/and low value habitat will be long term and reversible; however, the proposed development land use will have a long-term positive impact on the environment as it will facilitate the provision of renewable electricity to the grid helping Ireland meet its renewable energy targets.</p>
(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 Assessment Directive by or under any other enactment; and	<p>A number of developments have been identified within the planning search and the local area. The main project relevant in terms of cumulative impact is the permitted adjacent Mill Farmsolar farm which this proposed development will serve. The permitted Mill Farm Solar Project and the proposed Mill Farm Substation will be built concurrently in accordance with the CEMP prepared for the permitted developments. The residual cumulative impact will not have a significant negative effect on the environment. The proposed Killary solar farm (ref: 231082) which is located 1.2 km to the south east of the proposed development site has also been considered in the cumulative assessment. However cumulative impacts between the proposed development and Killary solar farm are not anticipated due to distance between the two sites and the developments will likely not be built concurrently.</p>
(h) The possibility of effectively reducing the impact.	<p>The implementation of the appropriate standard measures as outlined in the CEMP will reduce the duration and intensity of any potential impacts. No significant negative residual impacts on the environment will occur as a result of the development.</p>

5. Conclusion

Having considered the proposed development in the context of mandatory EIA under the regulations, it is concluded that there is no requirement for an EIA. The proposed development was also further assessed in accordance with the regulated criteria for determining whether or not a development would or would not be Likely to have Significant Effects on the Environment as specified in Annex III of the EIA Directive 2011/92/EU (as amended by 2014/52/EU).

Having regard to the characteristics of the proposal in consideration of the size, nature, location and characteristic of the potential impacts, it is considered that the proposed development would not introduce any new or additional effects of a significant or adverse nature such as to have a significant effect on the environment or warrant an EIA.

It is noted that this is a recommendation to support the final determination by the competent authority.

6. References

Department of Environment, Heritage and Local Government (2009). *Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities*.

Department of Housing, Planning and Local Government (2018). *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*.

European Commission (2017). *Environmental Impact Assessment of Projects: Guidance on Screening*, European Commission

Environmental Protection Agency (2022). *Guidelines on the Information to be contained in Environmental Impact Assessment Report*.

EPA Maps (2023). (<https://gis.epa.ie/EPAMaps/>).

Office of Public Works Flood Maps. (2023). (<https://www.floodinfo.ie/map/floodmaps/>).

MWP. (2024). *Appropriate Assessment (AA) Screening Report*, Mill Farm Solar 110kV Substation.

MWP. (2024). *Natura Impact Statement (NIS)*, Mill Farm Solar 110kV Substation.

MWP. (2024). *Flood Risk Assessment Report (FRA)*, Mill Farm Solar 110kV Substation.

MWP. (2024). *Construction Environmental Management Plan (CEMP)*, Mill Farm Solar 110kV Substation.

MWP (2024). *Noise Impact Assessment*, Mill Farm Solar 110kV Substation.

MWP (2024). *Ecological Appraisal*, Mill Farm Solar 110kV Substation.

Cunnane Stratton Reynolds (2024). *Landscape and Visual Appraisal*, Mill Farm Solar 110kV Substation.