TOM PHILLIPS + ASSOCIATES
PLANNING FOR THE FUTURE

Suites 437+ 455
No. 1 Horgan's Quay
Waterfront Square
Cork
T23 PPT8
t +353 21 212 9840

Head Office:
80 Harcourt Street
Dublin 2
D02 F449
t +353 1 478 6055

e info@tpa.ie
w www.tpa.ie

An Bord Pleanála,
64 Marlborough Street,
Dublin 1,
D01 V902

09th August 2024
[Hand Delivered]

ENVIRONMENTAL IMPACT ASSESSMENT (EIA) SCREENING ASSESSMENT

IN RESPECT OF PROPOSED DEVELOPMENT OF A 110KV SUBSTATION AND GRID CONNECTION TO THE ADJACENT KNOCKRAHA 220KV SUBSTATION, ON LANDS AT KNOCKRAHA EAST, BALLYNANELAGH, AND KILLEENA, CO. CORK

1.0 INTRODUCTION

This EIA Screening Assessment has been prepared with respect to a request to An Bord Pleanála ('ABP'), pursuant to section 182A of the Planning and Development Act 2000 (as amended) ('the Acts') for the proposed development of a new tail-fed 110 kilovolt (kV) substation ('Proposed Development') at Knockraha, Ballinanleigh, Cork (the Subject Site). The Proposed Development would connect to the national grid via the adjacent Knockraha 220kV substation, approximately 150 metres (m) to the south.

The need for the Proposed Development, is to provide the necessary infrastructure to support the development, as well as secure and transport the supply of electricity from permitted Ballyvatta Solar Farm, approximately 1.7 kilometres (km) to the north-east of the Subject Site, to the grid.

This EIA Screening Assessment has been prepared to assess the potential impacts on the environment of the Proposed Development, as required under Directive 2014/52/EU (the 'EIA Directive') and Schedule 5 of the Planning and Development Regulations 2001 (as amended).

2.0 THE PROPOSED DEVELOPMENT

The following section sets out the description of the Proposed Development in respect of this application to ABP. Further detail is included with the application material submitted to ABP.

The development description as per the statutory notices is as follows:

"The proposed development will consist of a 10 year permission for a 110kV electrical substation and associated 110kV infrastructure required to connect a solar farm (permitted under Cork County Council Reg. Ref: 23/4564; which amended previous permission Reg. Ref: 17/5370 and ABP-300434-17) to the existing Knockraha 220kV substation.

The substation compound will include 2 No. single storey control buildings:

- *An EirGrid control building (comprising relay room, battery room, workshop/store, mess room and W.C, and generator room); and,*
- *An Independent Power Producer control building (comprising control room, switchgear room, office, store and W.C);*

The proposal also includes:

- *110kV grid transformer and two-house transformers within bunded enclosures (height approximately 6m) and associated infrastructure;*
- *MV switchgear containers;*
- *Lightning protection masts;*
- *Perimeter security fencing and entrance gates;*
- *Security lighting;*
- *Telecommunication dishes;*
- *Underground cabling;*
- *Site drainage infrastructure;*
- *Proposed access from the L6989 to the south;*
- *Temporary construction compound; and,*
- *All associated development works above and below ground including landscaping."*

The Proposed Development would be built for the purpose of providing a connection from an associated, but separate, solar array approximately 1.7km to the north-east of the Subject Site and transporting its electricity to the national grid. It will comprise 2 No. separate compounds including an EirGrid compound with substation and electrical infrastructure and an Independent Power Producer (IPP) or customer owned compound including a switchgear building, a 110kV transformer and other electrical infrastructure.

The Proposed Development includes a new access track from the L6989 to the south of the proposed substation compound which will result in the removal of approximately 30m of hedgerow. The creation of the new site entrance will require the translocation of existing hedgerow to facilitate required sightlines. Existing hedgerows will be maintained where possible, and a number of new hedgerows will be introduced along the boundaries of the proposed substation compound to increase screening from external areas.

The proposed grid connection follows the access track, under the L6989 using horizontal directional drilling (HDD) which will exit south of the L6989, before returning to the road, running a length westwards before connecting into the existing Knockraha substation.

A temporary construction compound is proposed at the north-east of the Subject Site. The location of the compound has been selected for ease of access, directly off the entrance track, at a safe clearance distance from the overhead powerlines, to minimise the land take of the site (albeit for a temporary period), and to cause the least disturbance to the receiving environment.

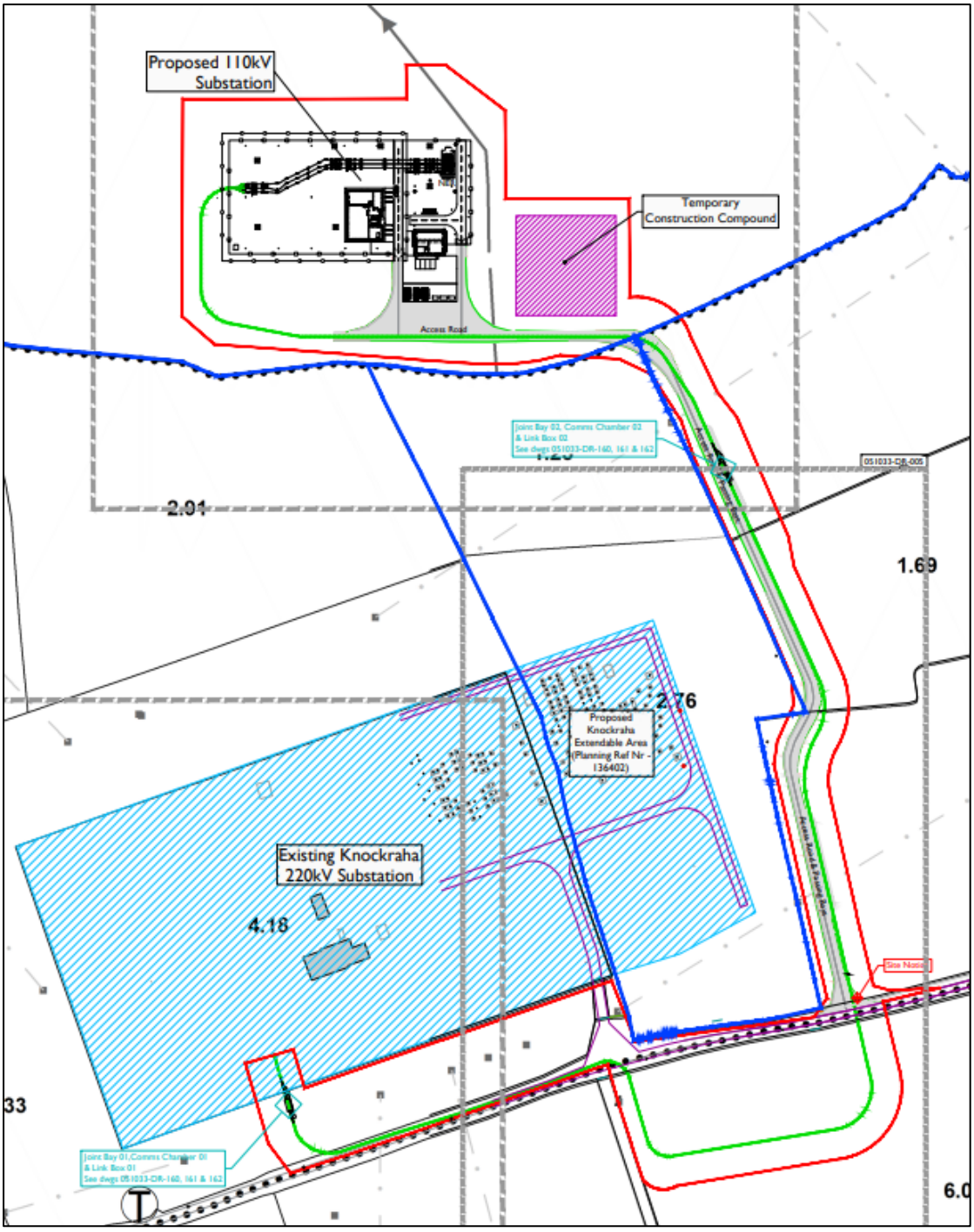

Figure 1: Extract of Layout of the Proposed 110kV Substation Compound and Grid Connection

2.1 Site Location

The Subject Site is located on agricultural land reached via a private access track to the south-west of a farmyard to the rear of a dwelling (Glen View, T56 Y177) at Knockraha East, Co. Cork. An existing 110kV overhead line (OHL) traverses the proposed access track connecting to Knockraha substation. The application site is approximately 5.5 hectares (ha) in area (total red line boundary area).

The surrounding area is characterised by agricultural land and electrical infrastructure associated with Knockraha Substation located circa 150 metres south of proposed substation compound. There are associated farm structures and one-off houses on the approach roads. The nearest residential property is located 350m east of the Subject Site.

Figure 2: Indicative Location of the Proposed 110kV Tail-Fed Substation, marked with Red Star, on Lands North of the Knockraha 220kV substation (Source: Google Earth)

3.0 LEGISLATIVE BASIS FOR EIA

3.1 EIA Directive

EIA requirements are governed by Directive 2014/52/EU (referred to as the 2014 Directive), which amends the previous Directive (Directive 2011/92/EU). The primary objective of the EIA Directive is to ensure that projects that are likely to have significant effects on the environment are subjected to an assessment of their likely impacts.

The requirements of the EIA Directive have been transposed into Irish planning consent procedures in Part X of the Acts and subsequently by the *European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018)*, which came into effect from 1st September 2018. This regulation sets out the amendments made to a number of Irish acts and regulations in line with the EIA Directive (as transposed into Irish legislation). This includes amendments to the Planning and Development Act 2000 (as amended) and the Planning and Development Regulations 2001 (as amended) which provide guidance as to the specific requirements for both public and private projects to assess their potential effects on the environment and the steps to be undertaken in relation to whether an EIA is required.

This EIA Screening Assessment has also been prepared with reference to the Government *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018)*[1], and the guidance document entitled '*Guidance for Consent Authorities regarding Sub-Threshold Development*' in the EPA's *Guidelines on the information to be contained in Environmental Impact Assessment Reports*, May 2022[2].

3.2 The Acts

Section 172(1) of the Acts sets out the following requirement for EIA:

> *"An environmental impact assessment shall be carried out by the planning authority or the Board, as the case may be, in respect of an application for consent for proposed development where either—*
>
> *(a) 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 equal or exceed as the case may be 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*

[1] gov - Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018) (www.gov.ie)
[2] Guidelines on the information to be contained in Environmental Impact Assessment Reports (EIAR) (epa.ie)

or

(ii) Part 2 (other than subparagraph (a) of paragraph 2) of Schedule 5 of the Planning and Development Regulations 2001 and either -

(I) such development would equal or exceed as the case may be 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

(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 equal or exceed as the case may be, the relevant quantity, area or other limit specified in that Part, and

does not equal or exceed as the case may be, the relevant quantity, area or other limit specified in that Part, an(ii) it is concluded, determined or decided, as the case may be,—

(I) by a planning authority, in exercise of the powers conferred on it by this Act or the Planning and Development Regulations 2001 (S.I. No. 600 of 2001),

(II) by the Board, in exercise of the powers conferred on it by this Act or those regulations,

(III) by a local authority in exercise of the powers conferred on it by regulation 120 of those regulations,

(IV) by a State authority, in exercise of the powers conferred on it by regulation 123A of those regulations,

(V) in accordance with section 13A of the Foreshore Act, by the appropriate Minister (within the meaning of that Act), or

(VI) by the Minister for Communications, Climate Action and Environment, in exercise of the powers conferred on him or her by section 8A of the Minerals Development Act 1940, that the proposed development is likely to have a significant effect on the environment.

3.2.1 Schedule 5, Part 1 and Part 2, of the Regulations

Part 1 of Schedule 5 includes a list of 24 classes where a mandatory EIA is required if the applicable development exceeds the identified limits within the class.

The Proposed Development has been considered against the categories of development contained within Part 1 of Schedule 5 and does not fall within any of the defined classes.

The Proposed Development has been considered against the categories of development contained within Part 2 of Schedule 5 of the Planning and Development Regulations 2001.

Section 3 relates to Energy Industry where part (b) includes the transmission of electrical energy by overhead cables not included in Part 1 of the Schedule, where the voltage would be 200 kilovolts or more. The proposed development is a 110kV electrical substation and associated 110kV infrastructure required to connect an associated but separate permitted solar farm to the existing Knockraha substation. It is therefore significantly below the threshold for EIA in this regard.

It has been assessed that the Proposed Development does not trigger the mandatory criteria for a full EIA as set out within Schedule 5 Part 1 and Part 2 of the Planning and Development Regulations. A sub-threshold assessment has been undertaken to determine whether the Proposed Development is likely to have significant effects on the existing environment, requiring a full EIAR.

3.2.2 Class 15 of Schedule 5, Part 2, of the Regulations

Class 15 sets out the following:

> *"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."*

As such, EIA will be required for Projects which are listed in Part 2 of Schedule 5 which do not meet, or exceed, the applicable thresholds defined but which are considered likely to have significant effects on the environment, having regard to the criteria identified in Schedule 7 of the Regulations.

Article 92 of the Regulations defines *"sub-threshold development"* as follows:

> *"sub-threshold development" means development of a type set out in Part 2 of Schedule 5 which does not equal or exceed, as the case may be, a quantity, area or other limit specified in that Schedule in respect of the relevant class of development."*

In this instance, the Proposed Development may be considered a sub-threshold development.

The discretionary (or sub-threshold) requirements are based on an assessment of the likely significant environmental effects of the Proposed Development in accordance with the criteria outlined within Schedule 7 of the Planning and Development Regulations 2001.

3.2.3 Section 182A of the Acts

Section 182A of the Acts sets out the steps an undertaker needs to take to prepare an application to apply to the Board for approval where the Proposed Development is for the purposes of electricity transmission.

Section 182A(2) states that:

> *"In the case of development referred to in subsection (1) which belongs to a class of development identified for the purposes of section 176, the undertaker shall prepare, or cause to be prepared, an environmental impact assessment report or Natura impact*

statement or both that report and that statement, as the case may be, in respect of the development."

Section 176 relates to prescribed classes of development requiring environmental impact assessment. As the Proposed Development may be considered a sub-threshold development, an assessment in accordance with Schedule 7 of the Regulations has been undertaken for the purposes of providing all necessary information to ABP as the competent authority.

Schedule 7A of the Regulations specifies the information to be provided for the purposes of screening sub-threshold development for Environmental Impact Assessment.

This requirement is addressed below and includes relevant information on the characteristics of the proposed development and its likely significant effects on the environment.

This following section details the other preliminary assessments (Non EIA Directive) and EU Directives relevant to the Proposed Development and the findings for the purposes of EIA screening, which have been taken into account.

The application is accompanied by a supporting Screening for Appropriate Assessment (AA) and Natura Impact Statement (NIS), as detailed below.

3.2.4 Directive 92/43/EEC, The Habitats Directive and Birds Directive (Directive 2009/147/EC On the Conservation of Wild Birds)

The European Communities (Birds and Natural Habitats Regulations 2011) (S. I. No. 477 of 2011) transpose the Habitats Directive and the Birds Directive. The 2011 Regulations were amended by:

- S.I. No. 290 of 2013
- S.I. No. 499 of 2013
- S.I. No. 355 of 2015
- Planning, Heritage and Broadcasting (Amendment) Act 2021 (no.11 of 2021), Chapter 4
- S.I. No. 293 of 2021

The NIS has considered the provisions of the above in its assessment.

Natura Impact Statement

The application for the Proposed Development includes a NIS, outlining the information required for the competent authority to screen for AA and to determine whether or not the Proposed Development, either alone or in combination with other plans and projects, in view of best scientific knowledge, is likely to have a significant effect on any European or Natura 2000 site. It concludes that:

"Following an examination, analysis and evaluation of the relevant information, including the nature of the predicted impacts from the Proposed Development and all associated works, it has been objectively concluded that with the implementation of the proposed mitigation measures, the Proposed Development will not, either alone

or in combination with other plans or projects, adversely affect the integrity or conservation status of any of the qualifying interests of the Cork Harbour SPA or any other European site in light of best scientific knowledge. No reasonable scientific doubt exists in relation to this conclusion.

Accordingly, progression to Stage 3 of the Appropriate Assessment process (i.e Assessment of Alternatives Solutions) is not considered necessary."

3.2.5 Directive 2007/60/EC, Floods Directive

A Site-Specific Flood Risk Assessment ('SSFRA'), prepared by Punch Consulting Engineers, is submitted with this application. It has been prepared to identify any potential sources of flooding and to identify the likely routes of flood waters, relating to the site. It is concluded that the Subject Site is in Flood Zone C and is therefore considered to be at low risk of flooding and is deemed an appropriate location for the Proposed Development provided that the residual risk of pluvial flooding is addressed by on site surface water drainage. Proposed mitigation measures to ensure runoff will not impact local flood risk are detailed on the submitted drawings.

3.2.6 Directive 2002/49/EC, Environmental Noise Directive

A Noise Impact Assessment, Prepared by Wave Dynamics Acoustic Consultants, is submitted with this application. It concludes that operational noise (daytime and nighttime) from the Proposed Development would be unlikely to have significant effects at the noise sensitive receptor locations identified in the study. It predicts that the Proposed Development, either alone or in-combination with other plans or projects, would not result in significant noise effects. It concludes that the predicted construction noise and vibration impact from the Proposed Development would comply with recognised best practice standards typically adopted.

An Outline Construction Environmental Management Plan ('OCEMP'), prepared by Punch Consulting Engineers, is submitted with this application. It outlines mitigation measures and monitoring proposals that will safeguard against significant noise effects during the construction phase of the proposed development.

3.2.7 Directive 2001/42/EC, SEA Directive

A Strategic Environment Assessment Statement (SEA) has been prepared for the Cork County Development Plan 2022-2028. It summarises how the SEA, the Environmental Report and consultations have been taken into account in the making of the Plan. It details the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with, and the measures decided concerning monitoring.

The Development Plan was examined throughout the process of the design and preparation of assessment reports for the Proposed Development, and the preparation of the planning application to the Board attached to this EIA Screening. As the development plans has been informed by the SEA, no further assessment in relation to Directive 2001/42/ EC, SEA Directive is required.

3.2.8 Directive 2008/98/EC, Waste Framework Directive and Directive 1999/31/EC Landfill Directive

To comply with the legal framework for the classification of waste, the Waste Producer is required to identify if the waste is either hazardous or non-hazardous in nature. This has been transcribed into Irish law under S.I. No.126/2011 – European Communities (Waste Directive) Regulations 2011.

Furthermore, to comply with the Landfill Directive (Council Decision of 19th December 2002) establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of and Annex II to Directive 1999/31/EC (2003/33/EC) the Waste Producer must determine whether the waste is suitable for either inert, non-hazardous or hazardous landfill facilities.

An OCEMP has been prepared by PUNCH Consulting Engineers. It identifies procedures for the storage, identification and classification, and record keeping measures to be implemented relating to waste during the construction phase of the development.

3.2.9 Seveso III Directive (2012/18/EU)

Section 8.14 of the County Development Plan relates to Seveso sites with objectives to comply with the Seveso III Directive in reducing the risk and limiting the potential consequences of major industrial accidents (Objective EC 8-8); restrict development depending on the type of risk (EC 8-9); and to ensure that land use policies take account of the need to maintain appropriate safety distances between future major accident hazard establishments and residential areas, areas of substantial public use and of particular natural sensitivity or interest (EC 8-12).

There are two tiers of Seveso/ Control of Major Accident Hazards (COMAH) sites, relating to the quantities of dangerous substances. There are 14 Lower Tier Seveso/COMAH sites within County Cork (3 of which are in the Cork City administrative area) and 15 Upper Tier sites within County Cork (3 of which are in the Cork City administrative area), as per Tables 8.8 and 8.9 of the County Development Plan.

There are no Seveso sites (defined within the Control of Major Accident Hazards Regulations as *"locations where significant quantities of dangerous substances are stored"*) proximate to the Subject Site.

3.3 Schedule 7 of the Regulations

Schedule 7A of the Regulations sets out the following information to be provided, for the purposes of screening sub-threshold development for EIA by the planning authority:

> *"1. A description of the proposed development, including in particular—*
>
> *(a) a description of the physical characteristics of the whole proposed development and, where relevant, of demolition works, and*

(b) a description of the location of the proposed development, 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 proposed development.

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

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

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

4. The compilation of the information at paragraphs 1 to 3 shall take into account, where relevant, the criteria set out in Schedule 7."

Competent/Consent authorities must have regard to these criteria in forming an opinion as to whether or not a sub-threshold development is likely to have significant effects on the environment by virtue of, inter alia, of their nature, size or location and should be subject to EIA. The key issue is:

3.3.1 'Are the likely effects significant?'

In order to provide the Board with all requisite information for a screening determination, the information required in Schedule 7A is detailed in the appended EIA Screening Assessment. This is based on the criteria in Schedule 7 as referenced under Part (4) of Schedule 7A.

4.0 CONCLUSION

In making the request under Section 182A of the Planning and Development Act 2000 (as amended) for the Proposed Development of a new tail-fed 110kV substation and grid connection to Knockraha substation, the precautionary principle has been applied to screen out any potential adverse impacts.

It has been assessed that the Proposed Development does not trigger the mandatory criteria for a full EIA as set out within Schedule 5 Part 1 and Part 2 of the Planning and Development Regulations. A sub-threshold assessment of the likely significant environmental effects of the Proposed Development in accordance with the criteria outlined within Schedule 7 of the Planning and Development Regulations 2001 (as amended) was carried out to determine whether the Proposed Development is likely to have significant effects on the existing environment, requiring a full EIAR.

Taking into consideration embedded mitigation and assuming works will be carried out in accordance with an approved Contractor CEMP and CTMP, we submit that an EIA is not required for the Proposed Development. However, it is noted that this is a recommendation only and the final determination will be made by the competent authority.

We trust that the foregoing is acceptable. If you require any other information, please do not hesitate to contact me.

Yours sincerely

Stephen Barrett
Director
Tom Phillips + Associates

Appendix A – EIA Screening Assessment

TOM PHILLIPS + ASSOCIATES
PLANNING FOR THE FUTURE

Suites 437+ 455
No. 1 Horgan's Quay
Waterfront Square
Cork
T23 PPT8
t +353 21 212 9840

Head Office:
80 Harcourt Street
Dublin 2
D02 F449
t +353 1 478 6055

e info@tpa.ie
w www.tpa.ie

Assessment under Schedule 7 of the *Regulations*

	Criteria for Determining whether development listed in Part 2 Schedule 5 should be subject to EIA	**Are the likely effects significant?**	**Yes/No**
1	***Characteristics of proposed development*** *The characteristics of proposed development, in particular—*		
(a)	*the size and design of the whole of the proposed development,*	The Proposed Development has an approximate area of 5.5ha and comprises a substation compound grid connection. The Proposed Development will include: • An Eirgrid control building (comprising relay room, battery room, workshop/store, mess room and W.C, and generator room); and, • An Independent Power Producer control building (comprising control room, switchgear room, office, store and W.C); • 110kV grid transformer and two-house transformers within bunded enclosures (height approximately 6m) and associated infrastructure; • MV switchgear containers; • Lightning protection masts; • Perimeter security fencing and entrance gates; • Security lighting; • Telecommunication dishes; • Underground cabling; • Site drainage infrastructure;	No

	Criteria for Determining whether development listed in Part 2 Schedule 5 should be subject to EIA	**Are the likely effects significant?**	**Yes/No**
		• Proposed access from the L6989 to the south; • Temporary construction compound; and, • All associated development works above and below ground including landscaping. The receiving green field site forms part of a robust landscape context that already comprises electrical infrastructure. The Proposed Development will not appear as an incongruous or inappropriate built feature. The local area avails of a notable degree of existing vegetative screening and the Proposed Development will not be a highly prominent feature in the surrounding landscape context. The construction programme duration will be approximately 18 months. The Proposed Development will be carried out in accordance with the mitigation measures outlined in this report and the OCEMP and OCTMP submitted as part of this planning application. In advance of work starting onsite, the appointed Contractor will expand and develop the OCEMP into a Contractor's CEMP and CTMP.. There are no characteristics of the Proposed Development that are likely to cause 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 Environmental Impact Assessment Directive by or under any other enactment,*	A review was initially carried out to identify other projects (including existing, permitted and live applications currently under consideration), taking into account any existing environmental impacts relating to areas of particular importance likely to be affected. There have been a number of recent applications, including those relating to electricity infrastructure seeking to tie into the Knockraha 220kV substation, in the vicinity of the Subject Site. The Proposed Development is sought to serve the permitted Ballyvatta Solar Farm, approximately 1.7km to the north east.	No

<table>
<tr><td></td><td>Criteria for Determining whether development listed in Part 2 Schedule 5 should be subject to EIA</td><td>Are the likely effects significant?</td><td>Yes/No</td></tr>
<tr><td></td><td></td><td>
Ballyvatta Solar Farm Permissions
<table>
<tr><th>Ref: No.</th><th>Summary of Development Description</th><th>Decision</th><th>Decision Date</th></tr>
<tr><td>17/5370; ABP-300434-17</td><td>Construction, operation and decommissioning of photovoltaic solar farm comprising photovoltaic panels on ground mounted frames within a site of up to 48.4ha, to include inverter stations, 1 no. DNO substation, customer substation, switcher substations, field transformers, auxiliary transformers, GRP cabinets, monitoring house, single storey storage shed, battery containers, transformer containers, WC, fencing, temporary construction compound, access tracks, CCTV cameras, landscaping and all associated ancillary development works.</td><td>ABP Grant permission</td><td>20th July 2018</td></tr>
<tr><td>23/4564</td><td>Amendment of previous permission Reg. Ref: 17/5370 and ABP- 300434-17, which includes a enlarged site boundary, for alterations to an permitted solar farm to provide an additional area of 7.8ha to the south comprising photovoltaic panels on ground mounted frames, MV/inverter stations, fencing, access tracks, CCTV cameras, a weather station, landscaping and all associated ancillary development works. The development also includes a 2.25km cable route to the south to provide a link to a future substation and all associated ancillary development works. The application also seeks to amend Condition 3 of permission granted under Reg. Ref:17/5370 and ABP Ref: ABP-300434-17 to increase the lifespan of the permitted solar farm from 25 to 35 years.</td><td>Cork County Council Grant permission with conditions</td><td>6th March 2024</td></tr>
</table>
</td><td></td></tr>
</table>

Adjacent Electricity Infrastructure Permissions

23/04234	Permission is sought for Island Stability Services Limited are applying for a 10 year planning permission to develop a low carbon inertia services (LCIA) grid support facility, which will connect to the adjoining ESB Knockraha 220kV Electricity Substation. The proposed development will have a projected life span of 50 years. The development is to be located within a site compound c. 2.2 ha and will consist of the following elements: The development and operation of a 150 to 500 MVA (electrical rating) synchronous condenser. Compound building housing synchronous condenser generator and flywheel (c.512m2 c.12m high); Customer substation (c.250m2 c.7m high) and TSO substation (c.375m2 c.9m high), Cooling equipment, 6 No. modular containers to house electrical and control equipment, generator step-up transformer, auxiliary transformer and electrical plant including an external circuit breaker; 1 no. firefighting water tank and pump, boundary fencing (c.3m high) and CCTV, connection to the neighbouring ESB Substation and all other ancillary site works including access roads.	Refused	25th January 2024
23/5992	A ten year planning permission for an energy storage facility comprising; 1) energy storage containers installed on concrete plinths; 2) electrical inverters and transformers; 3) underground electrical and communications cabling; 4) the upgrade of an existing agricultural access point from the L6989; 5) on-site access track; 6) security fencing and security gates; 7) pole-mounted security cameras; 8) all associated and ancillary site development, landscaping and reinstatement works. The operational lifetime of the proposed development is 35-years. This planning application is accompanied by an Appropriate Assessment Screening report.	Cork County Council Grant permission with conditions	10th July 2024

	Criteria for Determining whether development listed in Part 2 Schedule 5 should be subject to EIA	Are the likely effects significant?	Yes/No
		Should the construction of a number of developments occur simultaneously, there is the potential for transient impacts specifically from noise, traffic and dust, however these effects would be temporary in nature and not significant. This application is accompanied by a LVIA and Landscape Mitigation Plan, an Archaeological Impact Assessment, an Operational Noise Impact Assessment, a Site Specific Flood Risk Assessment, an OCEMP and OCTMP, and an AA and NIS which provide a framework to develop and implement the mitigation measures described in those reports which are designed to avoid, minimise or mitigate adverse construction and operational effects on the environment. The overarching policies and objectives of the Cork County Development Plan 2022-2028 would ensure that local planning applications and subsequent grants of planning permission comply with the proper planning and sustainable development of the area. As the development plan has been informed by the SEA, no further assessment in relation to Directive 2001/42/ EC, SEA Directive is required, and it is reasonable to assume that all development consents would incorporate conditions requiring protection of the environment during the construction phase of development.	
(c)	*the nature of any associated demolition works,*	There is no demolition works proposed.	No
(d)	*the use of natural resources, in particular land, soil, water and biodiversity,*	**Land** The Proposed Development has an associated land take of approximately 5.5ha. The Subject Site is currently greenfield land, currently in agricultural use. **Soil & Aggregate** Material excavated during construction, if deemed suitable, will be reused onsite. Natural aggregate materials required for construction of the proposed development will mainly consist of higher-grade materials not available	No

	Criteria for Determining whether development listed in Part 2 Schedule 5 should be subject to EIA	Are the likely effects significant?	Yes/No
		to be won on site, e.g., stone material for roads and foundations, and concrete for the construction of the hard standing areas. Concrete and additional aggregate material required for construction will be sourced from authorised facilities. **Water** During both the construction and operational phases, water demand for the Proposed Development will be minimal. A rainwater harvesting system is proposed to provide the water required at the substation compound. This system will allow for rainwater to be re-used in toilets/sinks. Potable water demand will be minimal and will be satisfied by imported bottled water. . **Biodiversity** The proposed development will require the removal of approximately 4ha of vegetation, the vast majority of this relates to lower ecological value improved agricultural grassland and hedgerows. Vegetation at the proposed site entrance will be translocated to achieve the required sightlines. The proposed access track will result in the removal of approximately 30m of hedgerow, however a number of new hedgerows will be introduced along the boundaries of the proposed substation compound to increase screening from external areas. The removal of these habitats is considered to be a permanent impact at the site level only, and given the lower ecological value of the habitats, is not considered to be significant. Furthermore, with the implementation of the mitigation measures outlined in the accompanying NIS, in view of best scientific knowledge and on the basis of objective information, it is concluded that likely significant effects from the Proposed Development on any European site, whether individually or in combination with other plans or projects, beyond reasonable scientific doubt, can be excluded.	

	Criteria for Determining whether development listed in Part 2 Schedule 5 should be subject to EIA	Are the likely effects significant?	Yes/No
(e)	*the production of waste,*	The OCEMP submitted with this application accounts for the waste management strategy and procedures during the construction of the development. It identifies procedures for the storage, identification and classification, of waste, and the record keeping measures to be implemented relating to waste during the construction phase of the development. This will ensure compliance with regulations and guidelines. The appointed Contractor will expand and develop the oCEMP into a Contractor's CEMP which will include a Construction Waste Management Plan (CWMP). All waste products (general waste, plastic, timber, etc.) arising during the construction phase will be managed and disposed of in accordance with the provisions of the Waste Management Act 1996 and associated amendments and regulations, and a Waste Management Plan (WMP) will be prepared by the appointed Contractor prior to the commencement of construction. All waste material will be disposed of at a fully licensed facility. Given the scale of the waste production, in conjunction with the use of licensed waste disposal facilities and contractors, it is anticipated that the Proposed Development would not cause a significant effect on the environment.	No
(f)	*pollution and nuisances,*	During the construction and operational phases the Proposed Development will have the potential to generate pollution or potential nuisance associated with Air, Noise and Traffic. During the construction phase, potential pollution sources, pathways and nuisances during the consideration phase include but are not limited to: • 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 or other chemicals used. • Dust generation from construction activities. • Runoff of material to and sedimentation of nearby watercourses. An OCTMP and an OCEMP accompany the application. Mitigation measures and monitoring commitments are identified for implementation, relating to noise, vibration, air quality, soil, water and the management of waste. The Outline CEMP will ensure also that all measures are in place so that relevant limits set down in legislation to govern noise and other emissions are not breached.	No

	Criteria for Determining whether development listed in Part 2 Schedule 5 should be subject to EIA	Are the likely effects significant?	Yes/No
		The accompanying AA and NIS also concludes that with the implementation of the proposed mitigation measures, the Proposed Development will not, either alone or in combination with other plans or projects, adversely affect the integrity or conservation status of any of the qualifying interests of the Cork Harbour SPA or any other European site in light of best scientific knowledge. A Noise Impact Assessment, Prepared by Wave Dynamics Acoustic Consultants, is submitted in support of this application. It predicts that the Proposed Development, either alone or in-combination with other plans or projects, would not result in significant noise effects. Predicted construction noise and vibration impact from the Proposed Development would comply with recognised best practice standards.).	
(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, and*	The size of the Proposed Development is not of a sufficient size or scale to cause a major accident or disaster during the construction phase as normal construction mitigation measures (such as the contractors Health and Safety plan, an approved Contractor's CEMP and approved methods of work) will be adhered to. The implementation of appropriate control measures (including an emergency spill response plan) and best management practices will reduce the risk of accidents from polluting substances entering soil and groundwater. There have been no recorded landslide events at the Subject Site. Due to the local topography and the underlying strata, there is a negligible risk of a landslide event occurring at the Site. There is a very low risk of seismic activity to the Proposed Development. There are no active volcanoes in Ireland so there is no risk from volcanic activity. A Site Specific Flood Risk Assessment ('SSFRA'), prepared by Punch Consulting Engineers, is submitted with this application. It concluded that the Subject Site is in Flood Zone C and is therefore considered to be at low risk of flooding provided that the residual risk of pluvial flooding is addressed by on site surface water drainage. It is considered the Proposed Development is not likely to result in a major accident or disaster given its type, size and scale and the inherent measures that would be included in its design and implementation.	No

	Criteria for Determining whether development listed in Part 2 Schedule 5 should be subject to EIA	Are the likely effects significant?	Yes/No
(h)	*the risks to human health (for example, due to water contamination or air pollution).*	A Project Supervisor Construction Stage (PSCS) will be appointed for the construction phase of the Proposed Development who will be responsible for managing and co-ordinating the safety and health issues onsite in accordance with best practice and current legislation. The OCEMP will be further developed into a Contractor's CEMP and be adhered to during the construction phase to manage potential risks of pollution and nuisances and to ensure the implementation of best practice construction methodologies. During its operational phase the Proposed Development no emissions to air or water are proposed. . No significant effects arising from the Proposed Development are likely to occur.	No

2	***Location of proposed development*** *The environmental sensitivity of geographical areas likely to be affected by the proposed development, with particular regard to—*		
(a)	*the existing and approved land use,*	The Subject Site comprises agricultural land and is outside of any settlement boundaries. The lands are not zoned. The green field site forms part of a robust landscape context that already comprises electrical infrastructure, and there is planning consent for other electrical infrastructure in the site vicinity which has been considered in the cumulative assessment. No significant effects arising from the Proposed Development are likely to occur.	No
(b)	*the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground,*	It is assumed all construction materials will be sourced locally where possible. It has been assumed all materials will be sourced from licensed suppliers and materials will be reused onsite where reasonably practicable. The Proposed Development has been design to minimise land take and retain existing hedgerows where possible. The water demand for the Proposed Development will be minimal. With the implementation of the mitigation measures outlined in the accompanying NIS, in view of best scientific knowledge and on the basis of objective information, it is concluded that likely significant effects from the	No

		Proposed Development on any European site, whether individually or in combination with other plans or projects, beyond reasonable scientific doubt, can be excluded. No significant effects arising from the proposed development are likely to occur.	
(c)	*the absorption capacity of the natural environment, paying particular attention to the following areas:* *(ii) wetlands, riparian areas, river mouths;* *(iii) coastal zones and the marine environment;* *(iv) mountain and forest areas;* *(v) nature reserves and parks* *(vi) areas classified or protected legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive and;* *(vii) 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;* *(vii) densely populated areas;*	**Wetlands, riparian areas, river mouths;** The accompanying AA and NIS, prepared by Malone O'Regan Environmental, identifies a hydrological connection between Cork Harbour Special Protection Area (SPA) and the Subject Site via the drainage network and the wider watercourse network. The E.U Birds Directive is relevant in this instance, and there is special conservation interest for a number of species identified at Table 4-3 of the AA/NIS with particular attention to wetlands and, as these form part of this SPA, the SPA and its associated waterbirds are of special conservation interest for wetland and waterbirds. The precautionary principle has been applied and the assessment progressed to Stage 2 NIS. The assessment concluded that avoidance, design requirements and mitigation measures will ensure that any impacts on the Cork Harbour SPA or any other European site, having regard to their conservation objectives, will be avoided during all phases of the Proposed Development, such that there will be no adverse effects on the integrity of any European sites. No significant effects arising from the Proposed Development are likely to occur. **Coastal zones and the marine environment;** Species found in marine and coastal waters were screened into the AA but the Subject Site is not considered suitable or a site of importance for those species due to onsite habitats and the agricultural practices/management of the site. Potential indirect impacts during the construction phase were identified (impairment of water quality through pollution). It is highly unlikely that any potential pollutants could reach the SPA given the distance to the Subject Site due to dilution or sediment settlement, and the fact there would be no direct discharges to any watercourse during construction. Nonetheless, mitigation measures will be incorporated into the works to protect the water quality. No significant effects arising from the Proposed Development are likely to occur. **Mountain and forest areas;** There are no mountain or forest parks within 1km of the Subject Site. No significant effects arising from the proposed development are likely to occur. **Nature reserves and parks** There are no nature reserves or parks within 1km of the Site. No significant effects arising from the Proposed	No

	landscapes and sites of historical, cultural or archaeological significance.	Development are likely to occur. **Areas classified or protected legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive** There are no recorded Special Areas of Conservation (SACs), SPAs or Natural Heritage Areas (NHAs) within a 2km radius of the Proposed Development, however, a hydrological connection between Cork Harbour and the Subject Site via the drainage network and the wider watercourse network was identified. This forms part of the Cork Harbour SPA. The Stage 2 NIS concluded: *"Following an examination, analysis and evaluation of the relevant information, including the nature of the predicted impacts from the Proposed Development and all associated works, it has been objectively concluded that with the implementation of the proposed mitigation measures, the Proposed Development will not, either alone or in combination with other plans or projects, adversely affect the integrity or conservation status of any of the qualifying interests of the Cork Harbour SPA or any other European site in light of best scientific knowledge. No reasonable scientific doubt exists in relation to this conclusion. Accordingly, progression to Stage 3 of the Appropriate Assessment process (i.e Assessment of Alternatives Solutions) is not considered necessary."* **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 Development is situated with the Lee, Cork Harbour and Youghal Bay Water Framework Directive (WFD) Catchment and Glashaboy subcatchment. The Subject Site is located in close proximity to Lisheenroe Stream, Killena_19 Stream, Gogganstown Stream and Ballingohig Stream. Lisheenroe Stream, Killena_19 Stream and Gogganstown Stream, uder the most recent WFD data (2016-2021) are classified as having 'Moderate' status and 'Not at Risk' of not achieving Good status. Ballingohig Stream is classified as having 'Good' status which is currently 'Under review'. The Proposed Development is not located in a groundwater source protection area. Groundwater beneath the Proposed Development forms part of the Ballinhassig East groundwater body (groundwater body code IE_SW_G_004), classified as a 'Moderately Productive only in Local Zones'. Under the most recent WFD data (2016-2021) groundwater beneath the Site is classified as having 'Good' status and 'Not at Risk' of not achieving Good status.	

There are no areas in which there has been a failure to meet environmental quality standards and there are no significant effects arising from the Proposed Development.

Densely populated areas
The Subject Site is not located within a densely populated area and is situated outside of any settlement boundary. The largest nearby settlement is that of Knockraha which is located approximately 1.4km west of the Proposed Development. The nearest residential development is located 350m east of the Subject Site.

Landscapes
The accompanying Landscape and Visual Impact Assessment (LVIA) has been prepared by Macroworks. It concludes that the landscape within the study area is robust and already influenced by existing large-scale electrical infrastructure. The landscape sensitivity is deemed to be 'Medium-low'. The impact on landscape character (post-construction) will be of 'Moderate-slight' significance and a 'Negative quality'.

Photomontages are provided in support of the assessment of visual impacts from 5 No. selected viewpoints. The overall significance of visual impacts ranged between 'Slight-imperceptible' (VP5) and 'Imperceptible' (VP1 to VP4). This is principally a consequence of the high degree of existing screening located within the intervening low-rolling landscape, which heavily reduces the visual exposure of the Proposed Development.

In terms of cumulative impacts with other existing and proposed developments, the LVIA concludes that there will be very limited potential for clear views of more than one development at a time following the establishment of mitigation planting. Cumulative visual effects are deemed to be no greater than Slight-imperceptible/Negative/Long Term, and it is not considered that any significant cumulative impacts will arise from the Proposed Development in conjunction with other existing or cumulative developments. A Landscape Mitigation Plan accompanies the LVIA for completeness.

Sites of historical, cultural or archaeological significance
There are two archaeological sites within c. 500 m radius of the proposed development.

TABLE 1: Recorded archaeological sites in proximity to the study area

RMP NO.	LOCATION	CLASSIFICATION	DISTANCE *
CO064-074	Killeena	Enclosure	c. 188m southwest
CO064-075	Killeena	Ringfort-Rath	c. 419m south

*Note: distance is to the nearest boundary of the proposed development area

		There are no national monuments within the study area of the submitted Archaeology Assessment prepared by IAC Archaeology. The submitted Archaeology Assessment provides details of previous archaeological fieldwork within 500 m of the Subject Site, including geophysical survey work carried out to the west; the monitoring of topsoil monitoring to an area 70 m to the south. Both returned no archaeological finds. A geoghysical survey of an area 300 m to the west, and test trenching, eight areas of archaeological interest. The submitted Archaeology Assessment describes how archaeological test trenching was conducted, under licence from the National Monuments Service (NMS), and that one area of archaeological potential (AA1, an area of small localised burnt mound deposits) was identified within the site. It explains that groundworks (ground disturbances such as topsoil stripping and excavation to formation depth) associated with the Proposed Development will adversely impact AA1. The Assessment recommends that prior to the commencement of construction, that AA1 is subject to topsoil stripping and preservation by record (through archaeological excavation) of any identified archaeological features and deposits. This would be carried out by a suitably qualified archaeologist under licence from the NMS. It is also recommended that all topsoil stripping associated with the development be monitored by a suitably qualified archaeologist to prevent potential impacts (by ground disturbances) on small-scale or isolated archaeological features or deposits that have the potential to survive beneath the current ground level, outside of the footprint of the excavated trenches. No significant effects arising from the Proposed Development are likely to occur.	

3	***Types and characteristics of potential impacts*** *The likely significant effects on the environment of proposed development in relation to criteria set out under paragraphs 1 and 2, with regard to the impact of the project on the factors specified in paragraph (b)(i)(I) to (V) of the definition of 'environmental impact assessment report' in section 171A of the Act, taking into account—*		
(a)	*the magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected),*	Any potential impacts are likely to be limited to the Subject Site of the Proposed Development (5.5ha) and sensitive receptors, including watercourses surrounding the Subject Site. The Subject Site comprises agricultural land and is outside of any settlement boundaries and away from population centres. The lands are not zoned. The green field site forms part of a robust landscape context that already comprises electrical infrastructure, and there is planning consent for other infrastructure in the vicinity which has been considered for cumulative assessment.	No

		For the construction phase, the OCEMP outlines mitigation measures and monitoring proposals that will safeguard against negative environmental effects during the construction phase of the proposed development. An OCTMP details construction traffic controls and management proposals that will safeguard against negative environmental effects and ensure the safe and efficient operation of the local road network during the construction phase of the proposed development.	
(b)	*the nature of the impact,*	**<u>Population and Human Health</u>** There is an element of risk to human health related to all construction projects as during the construction phase there is potential for impacts relating to dust generation, and noise and vibration from construction activities, however, due to the type and size of the Proposed Development and with the implementation of an approved Contractor's CEMP and CTMP, which will include inherent environmental controls, regulatory controls and best practice measures, no likely significant effects are anticipated to human health during the construction or operational phase of the Proposed Development. **<u>Biodiversity</u>** The Subject Site is not located within or directly adjacent to any European sites, however three European sites are located within 15km of the Subject Site; Great Island Channel SAC, Blackwater River SAC and Cork Harbour SPA. Given the localised nature and short duration of the construction works, the separation distance between the Subject Site and Great Island Channel Sac and Blackwater River SAC, it is considered the that Proposed Development will not result in adverse effects to these European sites. A potential hydrological connection was identified between the Subject Site and the Cork Harbour SPA which was assessed in the accompanying AA/NIS which concludes '*Following an examination, analysis and evaluation of the relevant information, including the nature of the predicted impacts from the Proposed Development and all associated works, it has been objectively concluded that with the implementation of the proposed mitigation measures, the Proposed Development will not, either alone or in combination with other plans or projects, adversely affect the integrity or conservation status of any of the qualifying interests of the Cork Harbour SPA or any other European site in light of best scientific knowledge. No reasonable scientific doubt exists in relation to this conclusion*'. **<u>Land & Soils</u>** The Proposed Development and surrounding land are currently in agricultural use. The potential impacts on land and soils from these construction activities include: • Excavation and stockpiling of soils, which could lead to soil erosion. • Potential accidental spills/release of fuels, chemicals, concrete, drilling fluids and lime to ground.	No

		• Soil compaction due to traffic and storage or excessively high stockpiles of soil, and silt laden run off in heavy rain or wheel-washing activities. • Depletion of natural resources, through use of quarried material as fill. • Potential for overburden collapse at the proposed HDD crossing. However, with the implementation of an approved Contractor's CEMP, it is considered that residual negative effects of the Proposed Development on land, soils and groundwater will overall be imperceptible. **Water and Hydrology** A Site-Specific Flood Risk Assessment ('SSFRA') has been prepared to accompany this application which concluded that the Subject Site is in Flood Zone C and considered to be at low risk of flooding. The Subject Site is considered to be an appropriate location for the Proposed Development provided the residual risk of pluvial flooding is addressed by on site surface water drainage. Proposed mitigation measures to ensure runoff will not impact local flood risk are detailed on the submitted drawings. Development works by their nature have the potential for impact of watercourses and groundwater by way of pollution. The risk of potential effects occurring during both the construction and operational phases of the Proposed Development (in the absence of adequate management and mitigation measures) can arise from several activities including: • Vegetation removal, site stripping and bulk earthworks as part of the construction would leave deposits exposed to erosion by wind or rain and this could potentially lead to increases in sediment loading of the surface water network. • Contamination of surface water from suspended sediments may also be caused by runoff from material stockpiles, excavation dewatering and dirt from vehicles. • Potential accidental spills/release of fuels, chemicals, concrete, drilling fluids and lime to ground. • Excavation and removal of contaminated made ground has the potential to release contaminants via runoff to surface water bodies. • Migration of pollutants associated with the HDD to enter the surface water environment as a result of a frack out. • Uncontained spillage of polluting materials stored onsite, e.g., oil and lubricants for maintenance. • Fuel/oil leaks from parked vehicles. • Potential changes to groundwater recharge rates due to the introduction of hardstanding cover over previously unsealed ground. However, with the implementation of an approved Contractor's CEMP, it is considered there are no likely significant impacts on the water environment associated with the Proposed Development. **Air Quality** The main air quality impacts will be associated with dust generation and emissions of airborne particulate matter	

		during site preparation and construction works. A wide range of site preparation and construction activities have the potential to generate this type of emission, including: • Land clearing. • Earthwork operations. • Equipment movements. • Vehicular transport. • Construction activities (i.e., concrete, mortar and plaster mixing, drilling, milling, cutting, grinding activities). • Windblown dust from temporary unpaved roads and bare construction sites. However, with the implementation of an approved Contractor's CEMP and CTMP, it is considered that residual negative effects of the Proposed Development on air quality will overall be not significant. **Noise & Vibration** The construction phase of the Proposed Development has the potential to increase noise levels at noise sensitive locations surrounding the Proposed Development. Impact from the construction phase will depend on the number and type of equipment employed during the works. There is potential for ground vibration due to the construction phase works which will mainly be derived from groundworks associated with proposed HDD crossings. A Noise Impact Assessment, Prepared by Wave Dynamics Acoustic Consultants, is submitted with this application. It concludes that the construction noise impact is predicted to achieve the industry standard criteria without mitigation therefore no significant noise impact is anticipated from the construction phase of the development. It also concludes that operational noise (daytime and nighttime) from the Proposed Development would be unlikely to have a significant effect at the noise sensitive receptor locations identified in the study. The assessment concludes that the Proposed Development, either alone or in-combination with other plans or projects, would not result in significant noise effects. **Material Assets** Prior to construction works, the appointed Contractor will be supplied with accurate service drawings and site investigations will be carried out, if necessary, to ensure services are not damaged during construction works. It is anticipated that affected services will be protected in-situ, where possible. When service suspensions are required during the construction phase, reasonable prior notice will be given to the residencies and commercial premises in the area. The disruption to services or outages will be carefully planned so the duration is minimised. During the construction phase of the Proposed Development, some realignment or replacement of services and utilities may be required in conjunction with or to accommodate the proposed works. These works could potentially result in suspension of services during the construction phase, which could likely result in a temporary and negative effect on existing utilities networks.	

		Given the scale and nature of the Proposed Development, no likely significant effects are anticipated to utilities as a result of the Proposed Development. **Waste** The key phase regarding resource and waste management is the construction phase. Waste generated from the construction works onsite should be controlled, transferred and disposed of in accordance with the relevant waste management acts and associated regulations. Proposed Development will temporarily store foul waste on the site during both the construction and operational phases which will be removed by tanker to a licensed disposal facility at regular intervals. The appointed contractor will be responsible for implementing the WMP. The WMP is a live document and will be updated by the appointed contractor prior to construction and regularly throughout the construction phase. The WMP shall apply to all works carried out by the appointed contractor and any subcontractors under its control. Any waste produced as part of the Proposed Development will be dealt with in a sustainable manner and in accordance with the Waste Management Act 1996 (S.I. No. 10 of 1996) and the Waste Management (Amendment) Act 2001. Where waste materials would be taken offsite for segregation or disposal, it has been assumed the contractor would ensure this is undertaken by a licensed haulier under chain of custody procedures to an appropriately licensed waste facility. The appointed contractor will consider the EPA guidance (2021) 'Best Practice Guidelines for the Preparation of Resource Management Plans for Construction & Demolition Projects'. In line with the above the production of any waste associated with the Proposed Development is not anticipated to cause significant, or adverse effects. **Cultural Heritage** There are two archaeological sites within c. 500 m radius of the proposed development.	

TABLE 1: Recorded archaeological sites in proximity to the study area

RMP NO.	LOCATION	CLASSIFICATION	DISTANCE *
CO064-074	Killeena	Enclosure	c. 188m southwest
CO064-075	Killeena	Ringfort-Rath	c. 419m south

*Note: distance is to the nearest boundary of the proposed development area

There are no national monuments within the study area of the submitted Archaeology Assessment prepared by IAC Archaeology.

The submitted Archaeology Assessment provides details of previous archaeological fieldwork within 500 m of the Subject Site, including geophysical survey work carried out to the west; the monitoring of topsoil monitoring to an area 70 m to the south. Both returned no archaeological finds. A geoghysical survey of an area 300 m to the west, and test trenching, eight areas of archaeological interest.

The submitted Archaeology Assessment describes how archaeological test trenching was conducted, under licence from the National Monuments Service (NMS), and that one area of archaeological potential (AA1, an area of small localised burnt mound deposits) was identified within the site. It explains that groundworks (ground disturbances such as topsoil stripping and excavation to formation depth) associated with the Proposed Development will adversely impact AA1. The Assessment recommends that prior to the commencement of construction, that AA1 is subject to topsoil stripping and preservation by record (through archaeological excavation) of any identified archaeological features and deposits. This would be carried out by a suitably qualified archaeologist under licence from the NMS. It is also recommended that all topsoil stripping associated with the development be monitored by a suitably qualified archaeologist to prevent potential impacts (by ground disturbances) on small-scale or isolated archaeological features or deposits that have the potential to survive beneath the current ground level, outside of the footprint of the excavated trenches.

No significant effects arising from the Proposed Development are likely to occur.

Landscape & Visual

In terms of visual impact, the accompanying LVIA with montages/verified views demonstrate the permanent impact of the development on the landscape. The Landscape Mitigation Plan will ensure that the visual effects of the Proposed Development will appear to be no greater than Slight-imperceptible/Negative/Long Term, in a robust landscape already influenced by existing large-scale electrical infrastructure.

		Traffic & Transport It is assumed all construction materials, will be sourced locally where possible and brought to site by road. Construction materials will be transported in clean vehicles and lorries/trucks will be properly enclosed or covered during transportation of friable construction materials and spoil to prevent escape of material along the public roadway. Construction of the Proposed Development is anticipated to take 18 months and during that time, additional traffic movements are expected to peak at 80 vehicles per day, with 30 of those movements being HGV. The OCTMP that has been submitted with this application will be further developed and implemented by the appointed Contractor, prior to the commencement of construction to manage the potential for traffic and transport effects during construction activities, consequently, it is not anticipated to cause significant environmental effects. Traffic volumes associated with the Proposed Development are relatively low in number and relate primarily to the delivery of construction equipment, materials and operations. The implementation of an approved CTMP put in place by the appointed Contractor prior to construction will minimise the potential for traffic and transport impacts during construction activities, consequently, it is not anticipated to cause significant environmental effects. For the operational phase, the proposal Proposed Development will not result in emissions to air and/or water. Operational phase traffic will be negligible and limited to routine maintenance. Operational lighting will be directed onto required areas and light spill minimised to mitigate light spill to surrounding habitats. The noise impact assessment that is included in this application notes the Proposed Development, either alone or in-combination with other plans or projects, would not result in significant noise effects.	
(c)	*the transboundary nature of the impact,*	Given the nature and geographical extent of the potential impacts of the Project there is no scope for any cumulative trans-frontier impacts to occur.	No
(d)	*the intensity and complexity of the impact,*	The majority of the potential impacts are associated with the construction phase of the Proposed Development. However, with the implementation of appropriate mitigation measures, such as the implementation of a CEMP, it is not anticipated that Proposed Development will result in significant effects to the existing environment. During operation, there will be no emissions to air and/or water and operational noise effect will not be significant. Therefore, intense, and complex impacts are not anticipated.	No
(e)	*the probability of the impact,*	With the implementation of an approved Contractor's CEMP and associated inherent controls, regulatory controls and best practice measures as well as those mitigation measure outlined within accompanying documents to the planning application the potential impacts are anticipated to be not significant. It is considered the likelihood of significant impacts on the receiving environment is low and no long-term impacts	No

		are anticipated as a result of the Proposed Development.	
(f)	*the expected onset, duration, frequency and reversibility of the impact,*	The potential impacts identified are associated with the construction phase (18 months) of the Proposed Development. With the appropriate mitigation measures, including the implementation of an approved Contractor's CEMP and associated inherent controls, regulatory controls and best practice measures potential impacts resulting from the construction phase, including noise and dust impacts, will be temporary and transient in nature, and reversible over time. Potential operational phase impacts, while permanent, are anticipated to be not significant.	No
(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*	There is potential for cumulative impacts such as temporary and transient impacts from noise, road traffic and dust to occur. However, with the implementation of an approved Contractor CEMP and associated inherent controls, regulatory controls and best practice measures cumulative impacts are considered unlikely to be significant. Once operational, cumulative visual effects are deemed to be no greater than Slight-imperceptible/Negative/Long Term. The noise impact assessment concludes that the Proposed Development, either alone or in-combination with other plans or projects, would not result in significant noise effects.	No
(h)	*the possibility of effectively reducing the impact.*	The principal potential impacts arising relate to visual impacts. A Landscape Mitigation Plan accompanies the LVIA to effectively screen the Proposed Development into the durable landscape. The Proposed Development will be carried out in accordance with the mitigation measures outlined in this report and the OCEMP and OCTMP submitted as part of this planning application. In advance of work starting onsite, the appointed Contractor will expand and develop the oCEMP into a Contractor's CEMP. With the adoption of these measures, it is anticipated that the Proposed Development would not cause a significant effect on the environment.	No

TOM PHILLIPS + ASSOCIATES
PLANNING FOR THE FUTURE

Suites 437+ 455
No. 1 Horgan's Quay
Waterfront Square
Cork
T23 PPT8
t +353 21 212 9840

Head Office:
80 Harcourt Street
Dublin 2
D02 F449
t +353 1 478 6055

e info@tpa.ie
w www.tpa.ie

Appendix B – European Commission's (2017) 'Environmental Impact Assessment of Projects: Guidance on Screening

	Questions to be Considered	Yes/No/? – Briefly Describe	Is it Likely to Result in a Significant Effect? Yes/No/? – Why?
1	Will construction, operation, decommissioning or demolition works associated with the Project involve actions that will cause physical changes in the locality (topography, land use, changes in waterbodies, etc.)?	Yes - the Proposed Development includes a substation110kV tail-fed substation compound located in an area of agricultural grassland	The Proposed Substation Development will result in minor land-take within the context of the surrounding area. Physical change is not considered to be significant given the industrial nature of the immediate site surrounds. The removal of hedgerow as a result of the Proposed Development will be offset with additional planting around the proposed substation compound. The grid connection cable will be below ground and will not result in permanent physical changes
2	Will construction or the operation of the Project use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or are in short supply?	Yes – The project will use natural resources such as land, water, materials or energy. Due to the specific nature of the Proposed Development, there will be a very small water requirement for occasional toilet flushing and hand washing and therefore the water requirement of the Proposed Development will be limited. Land take of agricultural land is required to facilitate the Proposed Development	No - The materials will be non-renewable, but are not in short supply, and will be relatively small quantities given the scale of the Proposed Development. Where possible, materials will be sourced from the local area to minimise transportation distances. Once operational, the Proposed Development will support the development of nearby solar energy projects, supplying renewable energy to the electricity network. The Proposed Development will result in minor land-take within the context of the surrounding area an is not considered to be significant.
3	Will the Project involve the use, storage, transport, handling or production of substances or materials which could be harmful to human health, to the environment or raise concerns about actual or perceived risks to human health?	No - It is not envisioned hazardous waste will occur within the Subject Site of the Proposed Development, however fuels, chemicals, concrete, drilling fluids and lime will be used during the construction phase	No – The Proposed Development will be carried out in accordance with the mitigation measures outlined the OCEMP submitted as part of this planning application. In advance of work starting onsite, the appointed Contractor will expand and develop the OCEMP into a Contractor's CEMP.
4	Will the Project produce solid wastes during construction or operation or decommissioning?	Yes – solid waste will be produced during the construction phase.	No – The Proposed Development will be carried out in accordance with the OCEMP submitted as part of this planning application. In advance of work starting onsite, the appointed Contractor will expand and develop the OCEMP into a Contractor's CEMP. Any waste produced as part of the Proposed Development will be dealt with in sustainable manner and in accordance with the Waste Management Act 1996 (S.I. No. 10 of 1996) and the Waste Management (Amendment) Act 2001. Where waste materials would be taken offsite for segregation or disposal, the Contractor will ensure this is undertaken by a licensed haulier under chain of custody procedures to an appropriately licensed waste facility. The appointed contractor will consider the EPA guidance (2021) 'Best Practice Guidelines for the Preparation of Resource Management Plans for Construction & Demolition Projects'.
5	Will the Project release pollutants or any hazardous, toxic or noxious substances to air or lead to exceeding Ambient Air Quality standards in Directives 2008/50/EC and 2004/107/EC)?	Yes - The construction phases will produce limited emissions to air.	No – The main air quality impacts will be associated with dust generation and emissions of airborne particulate matter during site preparation and construction works. The Proposed Development will be carried out in accordance with the mitigation measures outlined in the OCEMP submitted as part of this planning application. In advance of work starting onsite, the appointed Contractor will expand and develop the OCEMP into a Contractor's CEMP. With the adoption of these measures, it is anticipated that the dust produced would not cause a significant effect on the environment.
6	Will the Project cause noise and vibration or the releasing of light, heat energy or electromagnetic radiation?	Yes - The construction phase of the Proposed Development has the potential to increase noise levels at noise sensitive locations surrounding the Proposed Development. Impact from the construction phase will depend on the number and type of equipment employed during the works. There is potential or ground vibration due to the construction phase works which will mainly be derived from groundworks associated with proposed HDD crossings. Noise will also be generated in the immediate vicinity of the Proposed Development during the operational phase.	No - Noise limits for construction activities are generally controlled by local authorities and commonly refer to limiting working hours to prevent a noise nuisance. With the enforcement of relevant best practice guidance documents, including the National Roads Authority's (NRAs) 'Guidelines for the treatment of Noise and Vibration in National Road Schemes' (NRA, 2004) and the World Health Organisation's (WHOs) 'Community Noise Guidelines' (Berglund et al., 2003), construction phase impacts are predicted to be not significant. The potential increase in noise levels resulting from changes to road traffic flows during the construction period have also been considered. Due to the very small number of construction vehicles required on a daily basis, it is determined that a change in noise levels due to an increase in traffic flows on public roads during construction will not result in significant effects. HDD works are considered vibration intensive, however, Given the distance to the closest sensitive location (>300m), the machinery involved in the construction works it is unlikely that significant vibration effects will be experienced by the sensitive locations. The Proposed Development will be carried out in accordance with the mitigation measures outlined in the OCEMP submitted as part of this planning application. In advance of work starting onsite, the appointed Contractor will expand and develop the OCEMP into a Contractor's CEMP. With the adoption f these measures, it is anticipated that the Proposed Development would not cause a significant effect on the environment.
7	Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal wasters or the sea?	Yes - During the construction phase, potential impacts include accidental spills and leaks of fuels and chemicals, mobilisation of contaminants during excavation and infilling, the depletion of natural resources and potential for pH changes to water receptors due to use of concrete and lime.	No – The Proposed Development will be carried out in accordance with the mitigation measures outlined in the OCEMP submitted as part of this planning application. In advance of work starting onsite, the appointed Contractor will expand and develop the OCEMP into a Contractor's CEMP. With the adoption of these measures, it is anticipated that the Proposed Development would not cause a significant effect on the environment.
8	Will there be any risk of accidents during construction or operation of the Project that could affect human health or the environment?	Yes – Damage or injury through the use of heavy machinery as well as the through chemical & fuels during the construction period.	No – A Health and Safety Plan will be in place during the construction phase. It is anticipated this will be communicated to all site staff through communication pathways such as site inductions and toolbox talks.
9	Will the Project result in environmentally related social changes, for example, in demography, traditional lifestyles, employment?	Yes – the Proposed Development will result in increased employment during the construction phase.	No - The Proposed Development will have a positive effect on employment during the construction phase.

10	Are there any other factors that should be considered such as consequential development which could lead to environmental impacts or the potential for cumulative impacts with other existing or planned activities in the locality?	Yes – Potential for cumulative impacts associated with other consented developments within the surrounding areas.	No - there is potential for cumulative impacts such as temporary and transient impacts from noise, road traffic and dust to occur. However, with the implementation of an approved Contractor CEMP and associated inherent controls, regulatory controls and best practice measures cumulative impacts are considered unlikely to be significant.
11	Is the project located within or close to any areas which are protected under international, EU, or national or local legislation for their ecological, landscape, cultural or other value, which could be affected by the Project?	Yes – There are a number of heritage assets recorded within the study area of the Proposed Development. A hydrological connection was identified between the Subject Site and Cork Harbour SPA via the drainage network and the wider watercourse network.	No – The AA Screening Report accompanying this application concluded that there are no European sites which will be subject to likely significant effects from the Proposed Development, either alone or in-combination with other plans or projects. No heritage assets have been identified within the boundary of the Proposed Development, furthermore, the Proposed Development will be carried out in accordance with the mitigation measures outlined in his report and the OCEMP submitted as part of this planning application and with the adoption of these measures, it is anticipated that the Proposed Development would not cause a significant effect on cultural heritage.
12	Are there any other areas on or around the location that are important or sensitive for reasons of their ecology e.g., wetlands, watercourses or other waterbodies, the coastal zone, mountains, forests or woodlands, that could be affected by the Project?	Yes – The Subject Site is located in close proximity to Lisheenroe Stream, Killena_19 Stream, Gogganstown Stream and Ballingohig Stream. Lisheenroe Stream, Killena_19 Stream and Gogganstown Stream, under the most recent WFD data (2016-2021) are classified as having 'Moderate' status and 'Not at Risk' of not achieving Good status. Ballingohig Stream is classified as having 'Good' status which is currently 'Under review'. A hydrological connection was identified between the Subject Site and Cork Harbour SPA via the drainage network and the wider watercourse network	No - The Proposed Development will be carried out in accordance with the mitigation measures outlined in the OCEMP submitted as part of this planning application. In advance of work starting onsite, the appointed Contractor will expand and develop the OCEMP into a Contractor's CEMP. With the adoption of these measures, it is anticipated that the Proposed Development would not cause a significant effect on the environment. The AA Screening Report accompanying this application concluded that there are no European sites which will be subject to likely significant effects from the Proposed Development, either alone or in-combination with other plans or projects.
13	Are there any areas on or around the location that are used by protected, important or sensitive species of fauna or flora e.g., for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the Project?	Yes – a hydrological connection was identified between the Subject Site and Cork Harbour SPA via the drainage network and the wider watercourse network	No – The AA Screening Report accompanying this application concluded that there are no European sites which will be subject to likely significant effects from the Proposed Development, either alone or in-combination with other plans or projects.
14	Are there any inland, coastal, marine or underground waters (or features of the marine environment) on or around the location that could be affected by the Project?	Yes – See Question 12.	No - The Proposed Development will be carried out in accordance with the mitigation measures outlined in the OCEMP submitted as part of this planning application. In advance of work starting onsite, the appointed Contractor will expand and develop the OCEMP into a Contractor's CEMP. With the adoption of these measures, it is anticipated that the Proposed Development would not cause a significant effect on the environment.
15	Are there any areas or features of high landscape or scenic value on or around the location which could be affected by the Project?	No - The area surrounding the Subject Site is already influenced by existing large-scale electrical infrastructure development. It is not considered that the landscape of the study area is highly rare or distinctive on a local, regional or national level, and therefore, on the balance of these factors the landscape sensitivity is deemed to be Medium-low. Proposed Development is located in the landscape character type 'LCT 10b – Fissured Fertile Middle ground', which is classified with a 'Medium' landscape value. No designated scenic route and/or protected views were identified within the study of the Proposed Development.	No
16	Are there any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the Project?	No - the Proposed Development will utilise the existing local and national road network to access the site. The Subject Site is located in a rural setting removed from public and recreational facilities.	No – Works will be carried out in accordance with an approved CTMP, which will include controls and best practice measures to mitigate any potential disruption, therefore, no likely significant impacts effects are anticipated.
17	Are there any transport routes on or around the location that are susceptible to congestion, or which cause environmental problems, which could be affected by the Project?	Yes - Construction materials will be brought to site by road using the L3011, L1540, L3602, L7609, L3604 and L6989 local roads to reach the site. from the wider environs which may be susceptible to congestion.	No - Due to the type and size of the Proposed Development and with the implementation of an approved Contractor's CTMP, which will include inherent controls and best practice measures, no likely significant impacts effects are anticipated during the construction or operational phase of the Proposed Development.
18	Is the Project in a location in which it is likely to be highly visible to many people?	No - The embedded landscape mitigation measures will maximise the retention of existing vegetation, where possible, particularly around the proposed substation compound. Photomontages are provided in support of the assessment of visual impacts from 5 No. selected viewpoints. The overall significance of visual impacts ranged between 'Slight-imperceptible' (VP5) and 'Imperceptible' (VP1 to VP4). No significant effects to landscape and visual are predicted as a result of the Proposed Development.	No
19	Are there any areas or features of historic or cultural importance on or around the location that could be affected by the Project?	Yes - An area of archaeological potential was identified within the boundary of the Proposed Development, and a number of heritage assets were identified within the wider study area.	No - The Proposed Development will be carried out in accordance with the mitigation measures outlined in the Archaeology Assessment, to include topsoil stripping and preservation by record, and monitoring of areas outside the test trenched areas at the topsoil stripping stage. With the adoption of these measures, it is anticipated that the Proposed Development would not cause a significant effect on heritage assets.
20	Is the Project located in a previously undeveloped area where there will be loss of greenfield land?	Yes - the Proposed Development includes a substation110kV tail-fed substation compound located in an area of agricultural grassland.	No - The Proposed Development will result in minor land-take within the context of the surrounding area.

21	Are there existing land uses within or around the location e.g., homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying that could be affected by the Project?	Yes - The Proposed Development is located in agricultural lands, the closes residential property is >300m from the Subject Site. The Proposed Development is located 150m from the existing Knockraha Substation.	No - The Proposed Development will be carried out in accordance with the mitigation measures outlined in the OCEMP submitted as part of this planning application. In advance of work starting onsite, the appointed Contractor will expand and develop the OCEMP into a Contractor's CEMP. With the adoption of these measures, it is anticipated that the Proposed Development would not cause a significant effects during construction. Given the similar nature of both the Proposed Development and Knockraha Substation, no significant operational effects are predicted.
22	Are there any plans for future land uses within or around the location that could be affected by the Project?	No – There are no consented plans within the footprint of the site.	No
23	Are there areas within or around the location which are densely populated or built-up, that could be affected by the Project?	No - The Proposed Development is located within an area of agricultural grassland on lands. The largest nearby settlement is Knockraha Village which is located approximately 1.2km west of the Subject Site. There are dispersed one-off houses located in the vicinity of the Proposed Development, with the nearest property is located approximately 350m east.	No
24	Are there any areas within or around the location which are occupied by sensitive land uses e.g., hospitals, schools, places of worship, community facilities, that could be affected by the Project?	No - there are no areas occupied with sensitive land uses that could be affected by the Proposed Development. During the construction phase, it is anticipated that there may be potential noise, vibration and traffic impacts to sensitive receptors in the area; however, these impacts will be temporary and of short duration.	No
25	Are there any areas within or around the location which contain important, high quality or scarce resources e.g., groundwater, surface waters, forestry, agriculture, fisheries, tourism, minerals, that could be affected by the Project?	Yes – The Proposed Development is not located in a groundwater source protection area, it is situated within a rural area with agricultural lands with existing field drains and nearby watercourse. There are quarries or mineral extractive industries within 2km of the Proposed Development.	No - The Proposed Development will be carried out in accordance with the mitigation measures outlined in the OCEMP submitted as part of this planning application. In advance of work starting onsite, the appointed Contractor will expand and develop the OCEMP into a Contractor's CEMP. With the adoption of these measures, it is anticipated that the Proposed Development would not cause a significant effect on the environment.
26	Are there any areas within or around the location which are already subject to pollution or environmental damage e.g., where existing legal environmental standards are exceeded, that could be affected by the Project?	Yes – The Subject Site is located in close proximity to Lisheenroe Stream, Killena_19 Stream, Gogganstown Stream and Ballingohig Stream. Lisheenroe Stream, Killena_19 Stream and Gogganstown Stream, under the most recent WFD data (2016-2021) are classified as having 'Moderate' status and 'Not at Risk' of not achieving Good status. Ballingohig Stream is classified as having 'Good' status which is currently 'Under review'. Potential emissions to soil and groundwater associated with the construction phase of the Proposed Development can be mitigated to the extent that the impact will not be significant.	No - The Proposed Development will be carried out in accordance with the mitigation measures outlined in the OCEMP submitted as part of this planning application. In advance of work starting onsite, the appointed Contractor will expand and develop the OCEMP into a Contractor's CEMP. With the adoption of these measures, it is anticipated that the Proposed Development would not cause a significant effect on the environment.
27	Is the Project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g., temperature inversions, fogs, severe winds, which could cause the Project to present environmental problems?	No – The size of the Proposed Development is not of a sufficient size or scale to cause a major accident or disaster during the construction phase as normal construction mitigation measures (such as the contractors Health and Safety plan, an approved Contractor's CEMP and approved methods of work) will be adhered to. The implementation of appropriate control measures (including an emergency spill response plan) and best management practices will reduce the risk of accidents from polluting substances entering soil and groundwater. During the construction stage there is a potential for accidents that could affect human health or the environment. Specific controls have been put in place to manage risks in line with HSA requirements. There have been no recorded landslide events at the Subject Site. Due to the local topography and the underlying strata, there is a negligible risk of a landslide event occurring at the Site. There is a very low risk of seismic activity to the Proposed Development. There are no active volcanoes in Ireland so there is no risk from volcanic activity. A Site Specific Flood Risk Assessment is submitted with this application which concludes the Subject Site is in Flood Zone C and is therefore considered to be at low risk of flooding and is deemed an appropriate location for the proposed development provided that the residual risk of pluvial flooding is addressed by on site surface water drainage.	No

28	Summary of features of Project and of its location indicating the need for EIA	This EIA Screening Assessment has been prepared for the Proposed Development which comprises a tail-fed 110kV substation and associated grid connection to Knockraha Substation with a total area of approximately 5.5ha. It will comprise a substation compound, bunded transformers, MV switchgear, lightning protection masts, security lighting, telecommunication dishes, security and perimeter fencing, site drainage infrastructure, internal access tracks, a new site entrance from the L6989 and an underground grid connection. The grid connection will include two joint bays and trenchless installation in the form of HDD will be used to cross the L6989 under existing utilities prior to returning the road and connecting to Knockraha Substation. It has been assessed that the Proposed Development does not trigger the mandatory criteria for a full EIA as set out within Schedule 5 Part 1 and Part 2 of the Planning and Development Regulations. A sub- threshold assessment of the likely significant environmental effects of the Proposed Development in accordance with the criteria outlined within Schedule 7 of the Planning and Development Regulations 2001 (as amended) was carried out to determine whether the Proposed Development is likely to have significant effects on the existing environment, requiring a full EIAR. Taking into consideration embedded mitigation and assuming works will be carried out in accordance with an approved Contractor CEMP and CTMP, it is the view of TPA that an EIA is not required for the Proposed Development. However, it is noted that this is a recommendation only and the final determination will be made by the competent authority.

Source: European Commission's (2017) '*Environmental Impact Assessment of Projects: Guidance on Screening*'