Comhairle Cathrach Chorcai
Cork City Council

Halla na Cathrach, Corcaigh - City Hall, Cork - T12 T997

The Secretary
An Bord Pleanala
64 Marlborough Street
Dublin 1
D01 V902

16/10/2020

Re: Section 5 – R606/20 - renewing and altering of existing Kilbarry- Knockraha No. 2 110 KV Overhead Transmittion line, in Townlands of Ballycolly, Ballyvolane, Arderrow, Ballyharoon, Banduff, Poulacurry North, Poulacurry South and Ballinglanna, Co. Cork

Dear Sir/ Madam,

Please find enclosed a referral under Section 5(4) of the Planning & Development Act 2000 with a cheque for €110.00
The reference number is R606/20

Question Referred

Whether the proposed renewing and altering of existing Kilbarry- Knockraha No. 2 110 Kv Overhead Transmittion line, in Townlands of Ballycolly, Ballyvolane, Arderrow, Ballyharoon, Banduff, Poulacurry North, Poulacurry South and Ballinglanna, Co. Cork is or is not development, and if development, is or is not exempt development

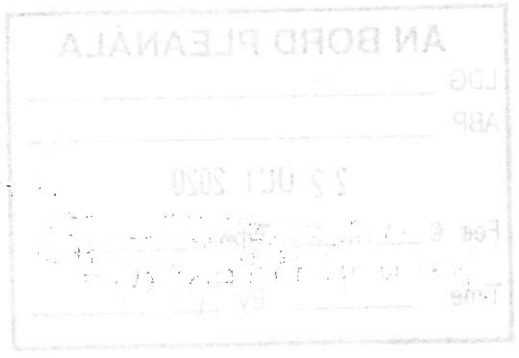
Applicant Details
EirGrid plc
c/o Tomas Bradley
The Oval
160 Shelbourne Road
Dublin 4
D04 FW28

AN BORD PLEANÁLA
LDG- 057788-20
ABP
22 OCT 2020
Fee € 110 Type:
Time: By: Post

Person/Agent Acting on behalf of Applicant
Jordan Baxter
MKO
Tuam Road
Galway
H91 VW84

Yours faithfully,

Development Management
Cork City Hall


AN BORD PLEANÁLA
LDG
ABP
2 2 OCT 2020
Fee €
Time
By

The Secretary
An Bord Pleanála
64 Marlborough Street
DUBLIN 1
D01 V902

12/10/2020

REFERRAL UNDER SECTION 5(4) OF THE PLANNING AND DEVELOPMENT ACT 2000

WHETHER THE PROPOSED RENEWING AND ALTERING OF EXISTING KILBARRY- KNOCKRAHA NLO. 2 110 KV OVERHEAD TRANSMISISON LINE, IN TOWNLADNS OF BALLINCOLLY, BALLTVOLANE, ARDERROW, BALLYHAROON, BANDIUFF, OULCURRY BIRTHM OULCAURRY SOUTH AND BALLINGLANNA, IS OR IS NOT DEVELOPMENT, AND IS OR IS NOT EXMEPTED DEVELOPMNET.

This referral is made under section 5(4) of the *Planning and Development Act 2000* (as amended).

This referral is structured as follows:
1. Introduction
2. Background
3. Grounds of Referral
4. Screening for Appropriate Assessment
5. Conclusion

Appendices– Documentation (All drawings and reports from Submission from Mccarthy keville O Sullivan)(

1. INTRODUCTION

1.1 RELEVANT LEGISLATIVE PROVISION

All relevant legislative provisions of the Planning and Development Act, 2000 (as amended) and the Planning and Development Regulations, 2001 (as amended) are referenced. In this referral, 'the Act' means the Planning and Development Act 2000, as amended, and 'the Regulations' means the Planning and Development Regulations 2001, as amended.

1.2 PARTICULARS OF REFERRAL

Various particulars required under section 127 of the Act are provided with this referral. The subject matter and grounds of the referral and the reasons, considerations and arguments on which they are based are included below in the body of this referral. Also enclosed is the fee of €110.

The referral is made by:

Development Management
Community, Culture and Placemaking
Cork City Council
City Hall
Cork
Telephone (021) 492-4762 Email michelle_broderick@corkcity.ie

1.3 THE QUESTION REFERRED

As per the referral documentation received from Mccarthy keville O Sullivan, on behalf of Eirgrid the question referred here is:

WHETHER THE PROPOSED RENEWING AND ALTERING OF EXISTING KILBARRY- KNOCKRAHA NO. 2 110 KV OVERHEAD TRANSMISISON LINE, IN TOWNLANDS OF BALLINCOLLY, BALLYVOLANE, ARDERROW, BALLYHAROON, BANDUFF, POULCURRY NORTH POULACURRY SOUTH AND BALLINGLANNA, IS OR IS NOT DEVELOPMENT, AND IS OR IS NOT EXMEPTED DEVELOPMENT.

1.4 THE REFERRAL SITE

For ease of reference, the lands which are the subject of this referral are referred to as 'the referral site' in this referral.

The referral site comprises 7.2 km in length between end mast 01 (Kilbarry 100kV Substation) and Angle Mast 45 (Ballinglanna townland)

A site location map is attached as submitted by MKO (McCarthy Keville O Sullivan) in their submission to the Planning Authority. (Ref Cover letter submitted, on 06/10/2020, Section 5 declaration report submitted , Appendix 4 various drawings and maps with Site Location Maps)

2. BACKGROUND

2.1 GENERAL BACKGROUND AND DESCRIPTION OF WORKS

The subject referral is subsequent to a request for a declaration recorded under Cork City Council Ref: R 606/20.

The application and cover letter, submitted to Cork City Council on 7/09/2020 by MKO on behalf of Eirgrid .

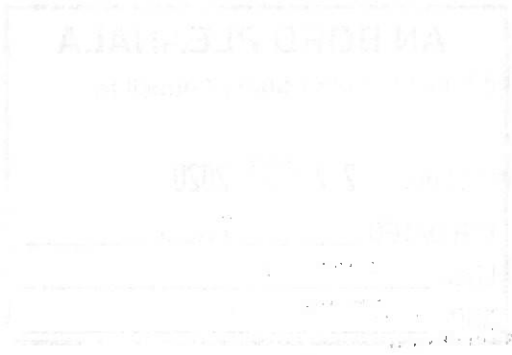
The overall Kilbarry – knockraha no. 2 110 k v transmission line comprises 12.5km in length of overhead transmission line traversing the townlands of Kilbarry, ballincolly, Ballyvolamne, Arderrow, Ballyharroon, Banduff, Poacurry north, Poukacurry south, Ballinglanna, Corbally North, Corbally South, Ballynagarbragh, Lackenfoe, Ballyvcurreen, Kileena, Ballynanelagh, Co. Cork. It consists of 75 no. structure

It is noted that a concurrent and contiguous declaration is being made to Cork County Council for the remainder of the line in that planning authority area.

The works are as a result of a condition assessment of the existing line.

The works consists of

- Paint/corrosion treatment of steel towers
- Replacement of wooden polesets
- Replacement of existing steel intermediate towers with wooden intermediate polesets



- Replacement of insulators and hardware
- Civil works on Tower Shear Blocks
- Ancillary works

2.3 DEVELOPMENT PLAN OBJECTIVES

The site of the existing line is located in Kilbarry, and traverses across to Knockraha in the county area.

Part of the subject area where the line traverses transferred to Cork City administrative area on 31 May 2019.
It is noted that a concurrent and contiguous declaration is being made to Cork County Council for the remainder of the line in that planning authority area.

Cork County development Plan 2014 and Cork City Development Plan 2015-2021 is in effect

3. GROUNDS OF REFERRAL

The applicants contend the subject works fall under section 4 (1) (g) of the Planning and Development Act 2000 as amended which state

"Development consisting of the carrying out by any local authority or statutory undertaker of any works for the purpose of inspecting, repairing, renewing, altering or removing any sewers, mains, pipes, cables, overhead wires, or other apparatus, including the excavation of any street or other land for that purpose. "

"Development consisting of the carrying out of works for the maintenance, improvement or other alteration of any structure, being works which affect only the interior of the structure or which do not materially affect the external appearance of the structure so as to render the appearance inconsistent with the character of the structure."

Under s 2(1) Works are defined as *"any act or operation of construction, excavation, demolition, extension, alterations, repair or renewal....."*

Section (3) 1 of the Planning and Development Act 2000 as amended , The definition of ' development' means, *except where the context otherwise requires, the carrying out of works on, in over or under land or the making of any material change in the use of any structures or other land.."*

It is considered that the works fall within the meaning of *development* as per the Planning and Development Acts as amended.

The planning authority contends that the proposal amount to works/development, but works that fall under section 4 (1)(g)- of eth planning and Development Act as amended - repairing, renewing and altering of existing transmission line.

The works or replacement of pole sets and panting of towers, , are stated to not be materially different and are maintenance.

being works undertaken by or on behalf of a statutory undertaker (ESB).
The replacement of steel intermediate towers with wooden pole sets is considered to fall within this scope,..,

Screening reports for Appropriate assessment and for Environmental Impact Assessment has been submitted.

It is not considered that the works would be de-exempted due to the need for EIA or AA.

4. SCREENING FOR APPROPRIATE ASSESSMENT

Section 177U (9) of the Act requires planning authorities and the Board to screen declarations or referrals under section 5 of the Act for appropriate assessment. The provisions of the Habitats Directive, the Appropriate Assessment Guidelines for Planning Authorities 2009 (revised 2010) and the Act are noted. The relevant European sites are the Cork Harbour SPA (site code 004030) and the Great Island Channel SAC (site code 001058).

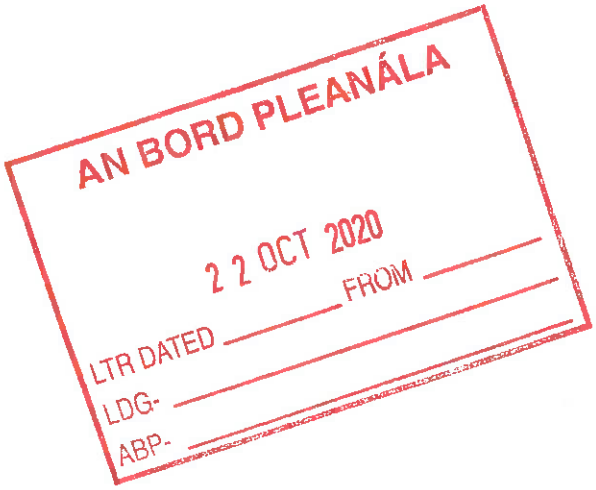
The subject site is located close to the north of these sites.

5. CONCLUSION

The planning authority wish for the board to confirm the view as to whether the matter to which this referral relates, is or is not development, and is or is not exempted development.

The planning authority looks forward to the Board's consideration and determination of this referral. Please do not hesitate to contact this office should any further information be required.

Fee € 110



The Development Management Section,
Community, Culture and Placemaking
Directorate,
Cork City Council,
City Hall,
Anglesea Street, Co. Cork

Our Ref: 200532

5 October 2020

Re: Section 5 Declaration on the question of whether the proposed renewing and altering of the existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line, in the townlands of Ballincolly, Ballyvolane, Arderrow, Ballyharoon, Banduff, Poulacurry North, Poulacurry South and Ballinglanna, Co. Cork, is or is not development, and if development, is or is not exempted development

Dear Sir/Madam,

The Applicant, **EirGrid plc, The Oval, 160 Shelbourne Road, Dublin 4**, has commissioned MKO to prepare this Section 5 Declaration of Exempted Development submission, under the provisions of Section 5 of the Planning and Development Act 2000 (as amended), for the consideration of Cork City Council ("the Planning Authority").

This Section 5 Declaration of Exempted Developments seeks a declaration from the Planning Authority on the following:

Whether the proposed renewing and altering of the existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line, in the townlands of Ballincolly, Ballyvolane, Arderrow, Ballyharoon, Banduff, Poulacurry North, Poulacurry South and Ballinglanna, Co. Cork, is or is not development, and if development, is or is not exempted development:

- *Paint / Corrosion Treatment of Steel Towers;*
- *Replacement of Wooden Polesets;*
- *Replacement of Existing Steel Intermediate Towers with Wooden Intermediate Polesets;*
- *Replacement of Insulators and Hardware;*
- *Civil Works on Tower Shear Blocks; and*
- *Ancillary Works*

EirGrid is the state-owned independent Transmission System Operator (TSO) and has the exclusive statutory function to, inter alia, operate and ensure the maintenance of and if necessary, develop a safe, secure, reliable, economical and efficient electricity transmission system. The proposed works are intended to maintain, and ultimately safeguard, the operational functionality of the existing Kilbarry – Knockraha No. 2 110 kV line. The renewal and alteration of the 110 kV OHL will not result in any material changes to the appearance or functionality of the line; specifically, the proposed works do not include for the extension of the line nor is it proposed to alter the overall functionality of the line in the context of the wider transmission system (e.g. no increase in the voltage of the line from the existing 110 kV).

It is both EirGrid and MKO's opinion that the proposed works subject to this Section 5 Declaration represent development, and furthermore, constitute exempted development under the provisions of Section 4(1)(g) and Section 4(1)(h) of the Planning and Development Act 2000 (as amended). However, EirGrid acknowledges that the Planning Authority in this instance will be the final arbitrator on this matter.

The type and scale of work proposed as part of this project has been the subject of several precedent cases form various planning authorities. Most notably, Section 4 (1) (g) of the Act was tested in a Section 5 Application to Kildare County Council (Ref: ED00441) that was subsequently referred to An Bord Pleanála (Ref: RL3080). The declaration of An Bord Pleanála was judicially reviewed in the High Court in the case of *Rossmore Properties Ltd & Anor -V- An Bord Pleanála & Ors [2014] IEHC 557.* The Board considered that the lines and towers can be addressed as a single renewal project taking place as part of the statutory undertaker's routine function associated with transmission infrastructure maintenance. The Board also considered that Section 4 (1) (g) of the Planning and Development Act 2000 (as amended) was introduced specifically to facilitate this type of renewal project where, in planning terms, no material change is taking place.

In order to assist the Planning Authority in its assessment, the following documentation is included with this application:

- 2 no. copies of the Application for Section 5 Declaration of Exemption;
- 2 no. copies of the Section 5 Declaration Report;
- 2 no. copies of the Appropriate Assessment Screening Report (Appendix 1 of the Declaration Report);
- 2 no. copies of the Environmental Impact Assessment Screening Report (Appendix 2 of the Declaration Report);
- 2 no. copies of the Planning Drawing Package (Appendix 4 of the Declaration Report);
- 1 no. electronic copy of the application package (digital); and
- Cheque for the statutory application fee (€80.00)

It should be noted that a concurrent and contiguous Section 5 Declaration is being made to Cork County Council for the remainder of the line in that planning authority area. The application documents are generally common to both Cork City and Cork County.

We trust that the information provided should prove sufficient to inform the Planning Authority's determination on this matter and look forward to hearing from the Authority further in due course.

Yours faithfully,

Jordan Baxter B.A., MSc
Planner
JBaxter@mkoireland.ie

COMHAIRLE CATHRACH CHORCAÍ
CORK CITY COUNCIL

Community, Culture & Placemaking Directorate
Cork City Council, City Hall, Anglesea Street, Cork.

R-Phost/E-Mail planning@corkcity.ie
Fón/Tel: 021-4924762
Líonra/Web: www.corkcity.ie

SECTION 5 DECLARATION APPLICATION FORM

under Section 5 of the Planning & Development Acts 2000 (as amended)

1. POSTAL ADDRESS OF LAND OR STRUCTURE FOR WHICH DECLARATION IS SOUGHT

Kilbarry-Knockraha No. 2 110 kV overhead transmission line between End Mast 01 (Kilbarry 110 kV Substation located at the northern extent of Cork City) and Angle Mast 45 (Ballinglanna townland, Co. Cork), including the townlands of Ballincolly, Ballyvolane, Arderrow, Ballyharoon, Banduff, Poulacurry North, Poulacurry South and Ballinglanna, Co. Cork

2. QUESTION/ DECLARATION DETAILS

PLEASE STATE THE SPECIFIC QUESTION FOR WHICH A DECLARATION IS SOUGHT:

Sample Question: *Is the construction of a shed at No 1 Wall St, Cork development and if so, is it exempted development?*

Note: only works listed and described under this section will be assessed under the section 5 declaration.

Whether the proposed renewing and altering of the existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line, in the townlands of Ballincolly, Ballyvolane, Arderrow, Ballyharoon, Banduff, Poulacurry North, Poulacurry South and Ballinglanna, Co. Cork, is or is not development, and if development, is or is not exempted development. The subject works constitute:

- *Paint / Corrosion Treatment of Steel Towers;*
- *Replacement of Wooden Polesets;*
- *Replacement of Existing Steel Intermediate Towers with Wooden Intermediate Polesets*
- *Replacement of Insulators and Hardware*
- *Civil Works on Tower Shear Blocks*
- *Ancillary Works*

The subject works are considered to fall under Section 4(1)(g) and (h) of the Planning and Development Act 2000 (as amended) which states that the following is exempted development, respectively:

"Development consisting of the carrying out by any local authority or statutory undertaker of any works for the purpose of inspecting, repairing, renewing, altering or removing any sewers, mains, pipes, cables, overhead wires, or other apparatus, including the excavation of any street or other land for that purpose".

"Development consisting of the carrying out of works for the maintenance, improvement or other alteration of any structure, being works which affect only the interior of the structure or which do not materially affect the external appearance of the structure so as to render the appearance inconsistent with the character of the structure or of neighboring structures".

ADDITIONAL DETAILS REGARDING QUESTION/ WORKS/ DEVELOPMENT:
(Use additional sheets if required).

N/A

3. **Are you aware of any enforcement proceedings connected to this site?**
   If so please supply details:

   N/A

4. **Is this a Protected Structure or within the curtilage of a Protected Structure?** N/A

   If yes, has a Declaration under Section 57 of the Planning & Development Act 2000 been requested or issued for the property by the Planning Authority? ☐

5. **Was there previous relevant planning application/s on this site?** N/A
   If so please supply details:

6. **APPLICATION DETAILS**

Answer the following if applicable. Note: Floor areas are measured from the inside of the external walls and should be indicated in square meters (sq. M)

(a) Floor area of existing/proposed structure/s	N/A
(b) If a domestic extension, have any previous extensions/structures been erected at this location after 1st October, 1964, (including those for which planning permission has been obtained)?	Yes ☐ No ☐ If yes, please provide floor areas. (sq m) N/A
(c) If concerning a change of use of land and / or building(s), please state the following: **N/A**	
Existing/ previous use (please circle) --- --- ---	Proposed/existing use (please circle) --- --- ---

8. LEGAL INTEREST

Please tick appropriate box to show applicant's legal interest in the land or structure	**A.** Owner	**B.** Other ✓
Where legal interest is **'Other'**, please state your interest in the land/structure in question	EirGrid plc is the licensed Transmission System Operator for Ireland pursuant to the provisions of the Electricity Regulation Act, 1999. Pursuant to the provisions of S.I. No. 445 of 2000, EirGrid plc has the exclusive function to operate and ensure the maintenance of and, if necessary, develop a safe secure, reliable electricity transmission system. The Electricity Supply Board (ESB) is the licensed Transmission Asset Owner for Ireland pursuant to Section 14 of the Electricity Regulation Act, 1999.	

	The proposed works will be constructed by the owner, ESB
If you are not the legal owner, please state the name and address of the owner if available	Electricity Supply Board (ESB), Two Gateway, East Wall Road, Dublin 3, D03 A995

9. I confirm that the information contained in the application is true and accurate:

Signature:

(Jordan Baxter, MKO, Agent)

Date: 5th October 2020

CONTACT DETAILS

10. Applicant:

Name(s)	EirGrid plc
Address	EirGrid plc c/o Tomás Bradley The Oval, 160 Shelbourne Road Dublin 4 D04 FW28

11. Person/Agent acting on behalf of the Applicant (if any):

Name(s):	Jordan Baxter	
Address:	MKO, Tuam Road, Galway, H91 VW84	
Telephone:	091 735611	
E-mail address:	JBaxter@mkoireland.ie	
Should all correspondence be sent to the above address? (Please note that if the answer is 'No', all correspondence will be sent to the Applicant's address)	Yes ☑	No ☐

12. ADDITIONAL CONTACT DETAILS

The provision of additional contact information such as email addresses or phone numbers is voluntary and will only be used by the Planning Authority to contact you should it be deemed necessary for the purposes of administering the application.

ADVISORY NOTES:

The application must be accompanied by the required fee of €80

The application should be accompanied by a site location map which is based on the Ordnance Survey map for the area, is a scale not less than 1:1000 and it shall clearly identify the site in question.

Sufficient information should be submitted to enable the Planning Authority to make a decision. If applicable, any plans submitted should be to scale and based on an accurate survey of the lands/structure in question.

The application should be sent to the following address:

The Development Management Section, Community, Culture & Placemaking Directorate, Cork City Council, City Hall, Anglesea Street, Cork.

- The Planning Authority may require further information to be submitted to enable the authority to issue the declaration.

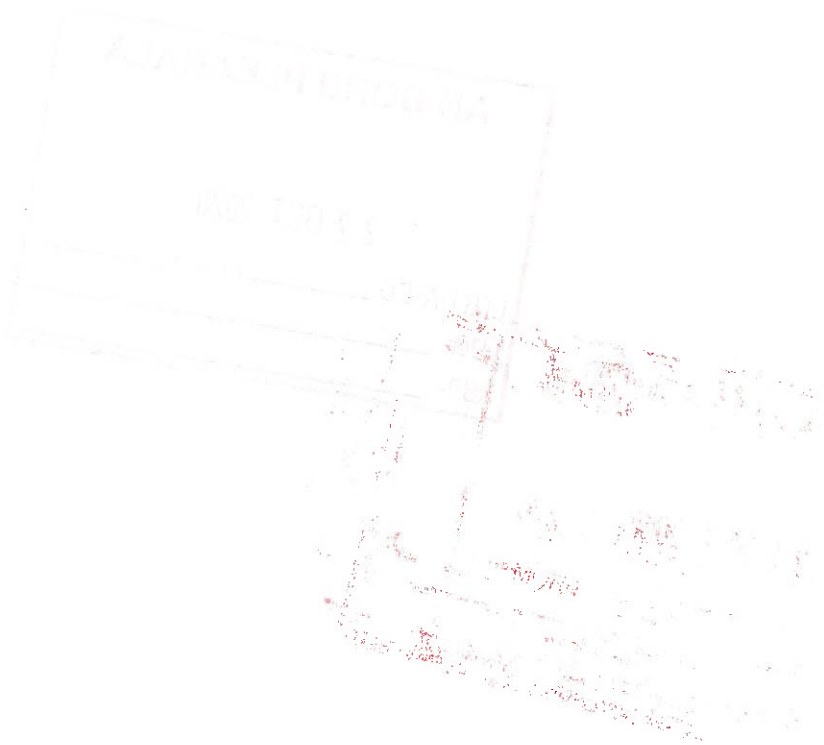
- The Planning Authority may request other person(s) other than the applicant to submit information on the question which has arisen and on which the declaration is sought.

- Any person issued with a declaration may on payment to An Bord Pleanála refer a declaration for review by the Board within 4 weeks of the date of the issuing of the declaration.

- In the event that no declaration is issued by the Planning Authority, any person who made a request may on payment to the Board of such a fee as may be prescribed, refer the question for decision to the Board within 4 weeks of the date that a declaration was due to be issued by the Planning Authority.

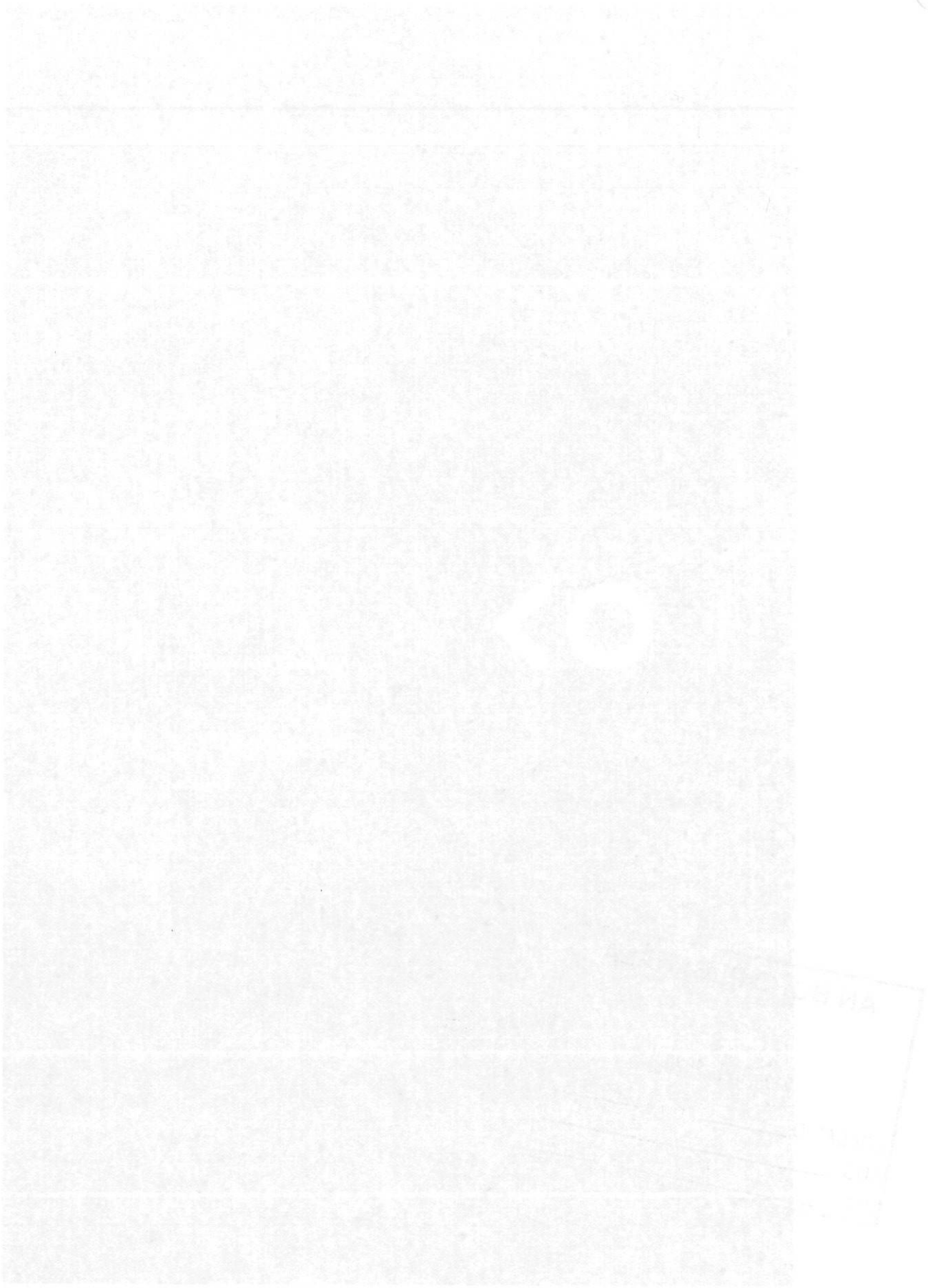
The application form and advisory notes are non-statutory documents prepared by Cork City Council for the purpose of advising as to the type information is normally required to enable the Planning Authority to issue a declaration under Section 5. This document does not purport to be a legal interpretation of the statutory legislation nor does it state to be a legal requirement under the Planning and Development Act 2000 as amended, or Planning and Development Regulations 2001 as amended.

DATA PROTECTION: The use of the personal details of planning applicants, including for marketing purposes, may be unlawful under the Data Protection Act 1988-2003 and may result in action by the Data Protection Commissioner against the sender, including prosecution.

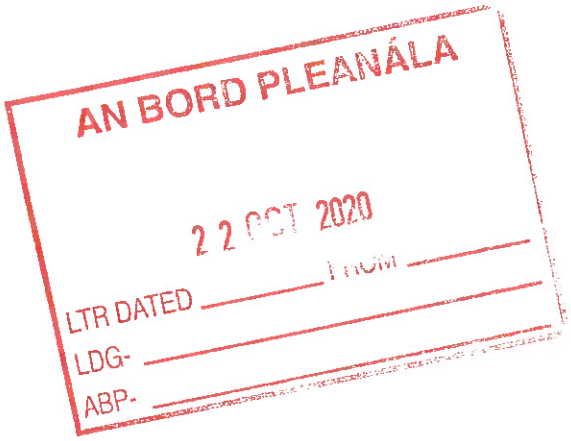


APPENDIX 4

PLANNING DRAWING SET



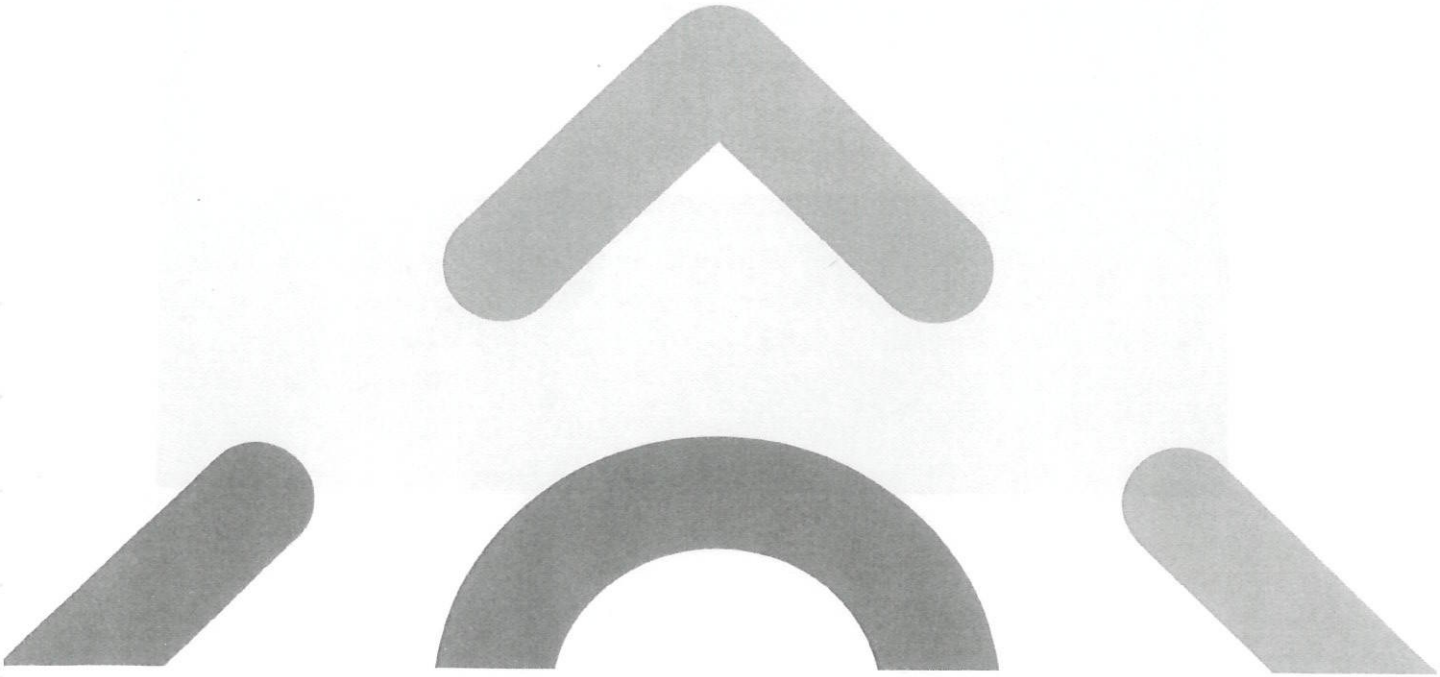
CP0901 Kilbarry-Knockraha No. 2 110 kV Line Refurbishment Section 5 Declaration Drawing Schedule	
Drawing Title	**Scale**
Site Location in Geographical Context	1:20000
Key Infrastructure Site Plan	1:10000
Infrastructure Site Plans (Sheet 1 of 10)	1:1000
Infrastructure Site Plans (Sheet 2 of 10)	1:1000
Infrastructure Site Plans (Sheet 3 of 10)	1:1000
Infrastructure Site Plans (Sheet 4 of 10)	1:1000
Infrastructure Site Plans (Sheet 5 of 10)	1:1000
Infrastructure Site Plans (Sheet 6 of 10)	1:1000
Infrastructure Site Plans (Sheet 7 of 10)	1:1000
Infrastructure Site Plans (Sheet 8 of 10)	1:1000
Infrastructure Site Plans (Sheet 9 of 10)	1:1000
Infrastructure Site Plans (Sheet 10 of 10)	1:1000



MKO Planning and Environmental Consultants

EirGrid CP0901 - Kilbarry-Knockraha No. 2 110 kV Line Renewal and Alteration

Section 5 Declaration Report



DOCUMENT DETAILS

Client:	EirGrid Plc.
Project Title:	CP0901 Kilbarry-Knockraha No. 2 110 kV Line Section 5 Declaration
Project Number:	200532
Document Title:	Section 5 Declaration Report
Document File Name:	200532 EirGrid CP0901 S5 Cork City PR 30.09.20 F
Prepared By:	MKO Tuam Road Galway Ireland H91 VW84

Planning and Environmental Consultants

Rev	Status	Date	Author(s)	Approved By
03	Final	30/09/2020	JB	JG

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TABLE OF FIGURES

APPENDIX

1 INTRODUCTION

MKO has been commissioned by EirGrid Plc., hereafter referred to EirGrid, to prepare this application for a Section 5 Declaration of Exempted Development, under the provisions of Section 5 of the Planning and Development Act, 2000 (as amended) ("the Act"), in relation to the renewal and altering of the Kilbarry-Knockraha No. 2 110 kV transmission line for the consideration of Cork City Council ("the Planning Authority"). It should be noted that the line to be renewed is located within the administrative boundaries of both Cork County Council and Cork City Council and works are proposed within both functional areas. As such, Section 5 Declarations will be submitted to both Planning Authorities for consideration in relation to the works within each of their functional areas.

EirGrid is requesting that the Planning Authority confirms **whether the proposed renewing and altering of the existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line, in the townlands of Ballincolly, Ballyvolane, Arderrow, Ballyharoon, Banduff, Poulacurry North, Poulacurry South and Ballinglanna, Co. Cork, is or is not development, and if development, is or is not exempted development** as provided for by Section 5(1) of the Act:

> "*If any question arises as to what, in any particular case, is or is not development or is or is not exempted development within the meaning of this Act, any person may, on payment of the prescribed fee, request in writing from the relevant planning authority a declaration on that question, and that person shall provide to the planning authority any information necessary to enable the authority to make its decision on the matter.*"

This Section 5 Declaration concerns the renewal and altering of the existing overhead line (OHL), c. 7.1km in length, between End Mast 01 (Kilbarry 110 kV Substation located at the northern extent of Cork City) and Angle Mast 45 (Ballinglanna townland, Co. Cork) within the Cork City Council functional area.

EirGrid is the state-owned independent Transmission System Operator (TSO) and is responsible for ensuring that Ireland has a safe, secure and reliable supply of electricity now and in the future. EirGrid is constantly reviewing, monitoring and operating Ireland's national high voltage electricity grid ("Transmission System"). Specifically, the European Communities (Internal Market in Electricity) Regulations 2000 (SI 445 of 2000) sets out the role and responsibilities of the TSO; in particular, Article 8(1) (a) gives EirGrid, as TSO, the exclusive function:

> "*To operate and ensure the maintenance of and, if necessary, develop a safe, secure, reliable, economical, and efficient electricity transmission system, and to explore and develop opportunities for interconnection of its system with other systems, in all cases with a view to ensuring that all reasonable demands for electricity are met having due regard for the development.*"

In 2015, the Transmission Asset Owner (TAO), ESB Networks, carried out a condition assessment of the Kilbarry – Knockraha No. 2 110 kV Transmission line in order to identify any potential safety and operational issues relating to the potential for mechanical failure of existing equipment, and subsequently, determine an overall programme of works. The proposed scope of work for the renewal and altering of the Kilbarry – Knockraha No. 2 110 kV line broadly comprises the following:

1. *Paint / Corrosion Treatment of Steel Towers;*
2. *Replacement of Wooden Polesets;*
3. *Replacement of Existing Steel Intermediate Towers with Wooden Intermediate Polesets*
4. *Replacement of Insulators and Hardware;*
5. *Civil Works on Tower Shear Blocks; and*
6. *Ancillary Works*

This Section 5 Declaration Report will provide an overview of the legislative provisions, in respect of the proposed works, in order to demonstrate that the subject works do not necessitate further permission/consent as the works, in the professional opinion of EirGrid and MKO, constitute exempted development under the provisions (Section 4(1)(g) and (h)) of the Act. However, EirGrid acknowledges that the Planning Authority in this instance will be the final arbitrators on this matter. As such, an Appropriate Assessment Screening Report (AASR) (**Appendix 1**) and Environmental Impact Assessment

(EIA) Screening Report (**Appendix 2**), having regard to the provisions of Section 4(4) of the Act and Schedule 5 of the Planning and Development Regulations 2001 (as amended), have been prepared and appended to this report to ensure that the Planning Authority has comprehensive details to inform its consideration of this matter in full.

The overall Kilbarry-Knockraha No. 2 110 kV transmission line is c. 12.5km in length and comprises 75 no. structures: 2 no. End Masts (EM), 11 no. Angle Mast (AM), 3 no. DC Angle Mast (AM), 2 no. DC Intermediate Mast (IM), 1 no. Intermediate Mast, 55 no. Intermediate Polesets (IMP) and 1 no. Strain INT Mast. The 110 kV OHL runs c. 7.1km from End Mast 01 (Kilbarry 110 kV Substation) to Angle Mast 45 (Ballinglanna townland, Co. Cork) within the functional area of Cork City Council before entering the Cork County Council functional area between Angle Mast 46 (Ballinglanna townland, Co. Cork) and End Mast 75 at Knockraha 110 kV Substation in the townland of Ballynanelagh, Co. Cork for 5.4km.

2. BACKGROUND TO APPLICATION

The overall Kilbarry – Knockraha No. 2 110 kV transmission line comprises c. 12.5km of overhead electricity transmission line traversing the townlands of Kilbarry, Ballincolly, Ballyvolane, Arderrow, Ballyharoon, Banduff, Poulacurry North, Poulacurry South, Ballinglanna, Corbally North, Corbally South, Ballynagarbragh, Lackenroe, Ballycurreen, Killeena, Ballynanelagh, Co. Cork. The geographical context of the existing 110 kV line is illustrated below in Figure 1.

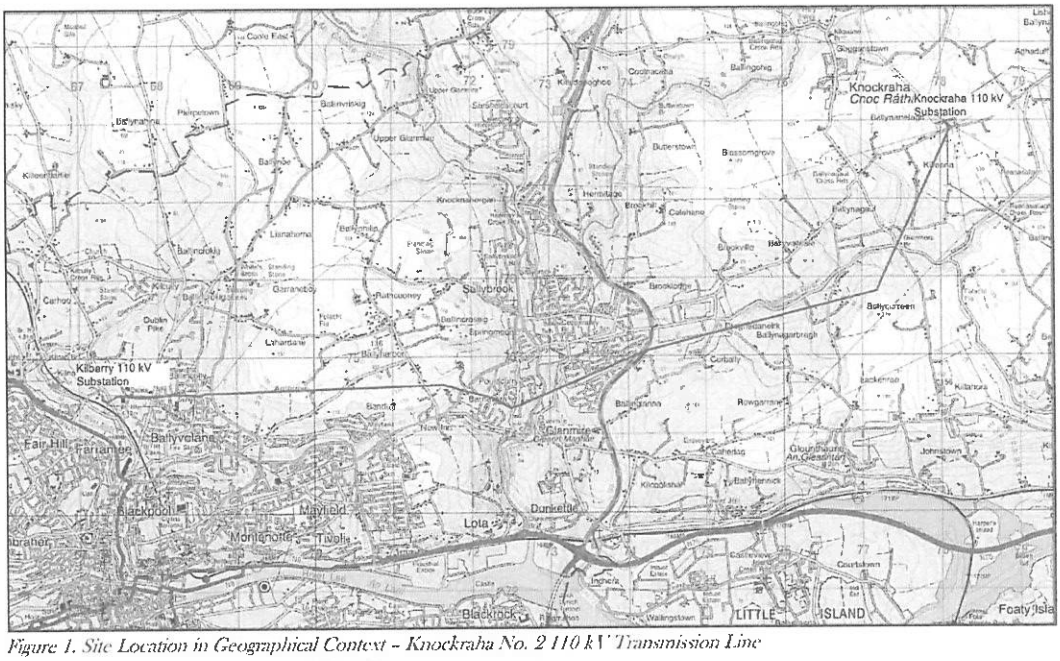

Figure 1. Site Location in Geographical Context - Knockraha No. 2 110 kV Transmission Line

The existing Kilbarry – Knockraha No. 2 110 kV overhead line (OHL) comprises 75 no. individual structures along its length; specifically, the 110 kV OHL is constructed of double wood polesets (55 no.) at intermediate locations, galvanised steel angle masts (18 no.) where the direction of the OHL changes and galvanised steel end masts (2 no.), as described below in Table 1 (overleaf), where the line terminates at Kilbarry and Knockraha 110 kV Substations.

The intermediate wooden polesets are embedded in the soil typically to a depth of 2.3m whereas the steel angle masts have concrete foundations under each leg extending c. 2.5 x 2.5m and to a depth of 3m (please refer to **Appendix 3** for further information on the typical dimensions of these transmission structures).

Table 1. Transmission Infrastructure - Kilbarry - Knockraha No. 2 110 kV

Infrastructural Type	Physical Description	Height	Kilbarry – Knockraha No. 2 110 kV Structure No.
End Mast Tower	End masts are steel lattice towers. They are designed to take the tension of the line in only one direction and are therefore generally shorter and heavier in construction.	12.5m-14m	1, 75
Double Current (DC) Intermediate Mast Tower	Double circuit intermediate towers are steel lattice suspension towers which are designed to ensure clearances are maintained on two circuits.	22.1m-32.1m	4, 6
DC Angle Mast Tower	Double circuit angle masts are steel lattice tower constructions. They are designed to support directional change and also maintain the required clearances for two circuits. They are heavier duty than suspension towers.	22m-27m	3, 5, 7
Angle Mast Tower	Single circuit angle masts are steel lattice tower constructions. They are designed to support directional change and are therefore heavier duty than suspension towers or intermediate polesets.	12.5m-14m	2, 9, 10, 20, 28, 32, 34, 35, 45, 46, 63
Strain Intermediate (INT) Tower	A strain intermediate tower is a steel lattice tower. They are designed to take the tension of the line in only one direction and are therefore shorter and heavier in construction than suspension towers.	11m-24m	37, 52
Portal Intermediate Poleset (IMP) (Wooden)	At 110 kV, these consist of two wooden poles (portal), treated with creosote, with a steel cross arm. The insulators and conductors are supported via this cross arm.	11m - 22m	8, 11-19, 21-27, 29-31, 33, 36, 38-44, 47-51, 53-62, 64-74

2.1 Site Location and Context

The existing Kilbarry – Knockraha No. 2 110 kV line, as shown in Figure 1, is located on the northern outskirts of Cork City. The transmission line traverses a range of semi-rural and rural agricultural greenfield and high density urban environments along its route between Kilbarry and Knockraha 110 kV substations. Table 2 below provides a high level contextual analysis of the 110 kV OHL within the Cork City Council functional area.

Table 2. Site Context - Kilbarry – Knockraha No. 2 110 kV

Structures	Local Authority	Townland(s)	Plan Sheet Number(s)'	Site Context
1-4	Cork City Council	Cork City and suburbs	1	› Outer compound of Kilbarry 110 kV Substation › 110 kV OHL crosses public greenfield space within and adjacent to the Kilbarry Enterprise Centre
5-12		Ballincolly	1, 2, 3	› DC Angle Mast 05 is located immediately adjacent to residential dwelling within the Thorndale Estate › Crosses through greenfield spaces within high density residential estates: Thorndale, Kinvara and Mervue › 110 kV OHL route is immediately adjacent to St. Aidan's Community College and runs above Kilmorna Heights

Structures	Local Authority	Townland(s)	Plan Sheet Number(s)	Site Context
				› Starting at Portal IMP 11, 110 kV OHL crosses semi-rural undulating agricultural greenfield
13-18		Ballyvolane Arderrow	3, 4, 5	110 kV OHL crosses semi-rural undulating agricultural greenfield
19-26		Ballyharoon Banduff	5, 6	› 110 kV OHL crosses semi-rural agricultural greenfield up to Portal IMP 19 › Angle Mast 20 is situated within the immediate vicinity of a cluster of 7 no. residential dwellings on Banduff Road › Crosses semi-rural agricultural greenfield with low density residential housing in the vicinity of Portal IMP 26
27-29		Poulacurry North	7	110 kV OHL crosses primarily semi-rural agricultural greenfield with low density residential housing / agricultural infrastructure
30-37		Poulacurry South	7, 8	110 kV OHL crosses through greenfield spaces within high density residential estates: Crawford, Castlejane and Glanmire Court
38-45		Ballinglanna	9, 10	› 110 kV OHL crosses over football pitch on E Cliff Road › 110 kV OHL crosses through greenfield spaces and private back gardens within high density Glyntown residential estate

*Note: Please refer to **Appendix 4** for Infrastructure Site Plans*

Knockraha No. 2 OHL was constructed over three phases with structures 1-7 built in 1954, structures 62-75 built in 1964 and structures 7-62 built in 1974. In this regard, it is important to highlight that the 110 kV OHL predates the urban residential environment of north Cork City which has developed along the periphery of the transmission line over the last 50 no. years.

2.2 Description of Proposed Works

In 2015, the Transmission Asset Owner (TAO), ESB Networks, carried out a Line Condition Assessment (LCA) of the Kilbarry - Knockraha No. 2 110 kV Transmission line in order to identify any potential operational and maintenance issues for existing equipment, and subsequently, determine an overall programme of works. A ground level condition survey was completed in addition to a thorough review of maintenance records compiled for the line. A full model of the Kilbarry - Knockraha No. 2 110 kV Transmission line in its current condition was created using:

- Light Detection & Ranging (LiDAR) information collected from site;
- Information gathered from Kardex records;
- Site investigations & Site Surveys; and
- Standard established ESBI criteria for 110 kV overhead line design.

Corrective maintenance / renewal requirements identified in the above LiDAR data, maintenance record review and on-the-ground evaluation and site investigation can be broadly grouped under the following headings:

1. ***Paint / Corrosion Treatment of Steel Towers***: Painting and corrosion treatment of existing steel structures;

2. ***Replacement of Wooden Polesets***: Removal of all hardware (including crossarm and insulators), installation of new poles and fittings / hardware, new or existing crossarm and new or existing insulators followed by the cutting and removal of old polesets;
3. ***Replacement of Existing Steel Intermediate Towers with Wooden Intermediate Polesets***: Removal of existing structure, fittings and foundations, followed by installation of new intermediate polesets and installation of fittings/hardware;
4. ***Replacement of Insulators and Hardware:*** Removal of existing hardware and insulators followed by the installation of new hardware and insulators;
5. ***Civil Works on Tower Shear Blocks:*** Reinforcement of shear blocks; and
6. ***Ancillary Works*** including the replacement and/or repair Anti-Climbing Guards

It is important to emphasise that the proposed works are intended to maintain, and ultimately safeguard, the operational functionality of the existing Kilbarry – Knockraha No. 2 110 kV line. The renewal and alteration of the 110 kV OHL will not result in any material changes to the appearance or functionality of the line which could be construed as '*inconsistent with the character of the structure or of neighbouring structures*' (Section 4(1)(h) of the Act refers). Specifically, all works are within the development envelope of the existing equipment and the proposed works do not include for the extension of the line nor is it proposed to alter the overall functionality of the line in the context of the wider transmission system (e.g. no increase in the voltage of the line from the existing 110 kV). The replacement of wooden polesets will be located immediately adjacent to the locations of the in-situ structures on the same alignment and will not be materially different in the context of the overall alignment of the 110 kV OHL.

The proposed works to the 110 kV OHL will require access for equipment such as tracked excavators, concrete delivery vehicles, mobile cranes, mobile elevated work platforms etc. As a number of structures are located on agricultural lands and in close proximity to residential dwellings, gaining access to these lands to carry out the proposed works will be coordinated with relevant stakeholders in accordance with the relevant ESB/IFA Code of Practice and relevant statutory provisions. It should also be noted that the undertaking of the proposed works is dependent on outage availability. Cork County Council and Cork City Council would be notified in advance of any work commencing on the line.

Overviews of the proposed renewal and alteration works, subject to this Section 5 Declaration of Exempted Development, are outlined below in the following sections.

2.2.1 Paint / Corrosion Treatment of Steel Towers

The site investigations and surveys undertaken as part of the LCA inspected all steel towers comprising the Kilbarry – Knockraha No. 2 110 kV line to assess existing conditions of galvanising/paint and to identify any damage to the structures. Paint damage and corrosion were recorded at several towers during the assessment.

Corrosion is treated by specialist contractors who climb the tower using safe tower climbing methods, treat the corrosion and paint the tower. The painting and corrosion treatment of the identified steel towers (01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 28, 45) will be undertaken in line with ESB's work practice as outlined below, to comply with technical requirements:

- An impervious sheet will be laid on the existing ground under the mast base to prevent paint from dripping to the soil;
- A cleaning agent will first be applied to the towers and then cleaned by means of wire brushing or sanding. When dry, a primer and top coat of paint will be applied; and
- The paint specification will provide protection to the steel for a minimum of 15 no. years. The top coat of matt grey will remain the same and there will be no deviation to the visual appearance of these structures.

2.2.2 Replacement of Wooden Polesets

All wood polesets comprising the Kilbarry - Knockraha No. 2 110 kV line were inspected during the LCA to check for pole rot or significant structural damage. The assessment identified 14 no. wooden pole-sets within the Cork City functional area which will need to be replaced as part of the proposed renewal and alteration works.

The replacement of the identified wooden polesets may result in an increase in height of up to 2m at certain points along the 110 kV OHL dependent on local topographical variation. However, any minor height increase of a wooden poleset as a consequence of the proposed works will still be in proportion relative to other structures along the alignment. A typical wooden poleset (Portal IMP) for a 110 kV line is shown in Figure 2 below. Typical 110 kV wooden polesets range in height from 16m to 22m as described above in Table 1.

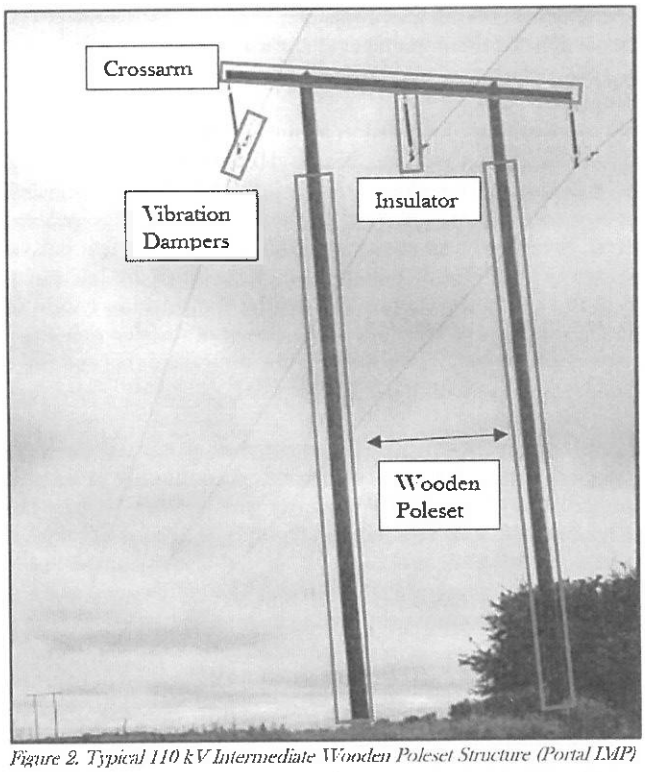

Figure 2. Typical 110 kV Intermediate Wooden Poleset Structure (Portal IMP)

Where a wooden poleset is being replaced, the crossarm, insulators and hardware will either be reused, or alternatively, new crossarms and equipment will be installed. The final appearance of the newly installed wooden polesets will be consistent with the existing structures. Please refer to **Appendix 3** for typical plans of the proposed 110 kV 'Lines Suspension Portal Wood Pole Set' transmission structures.

The installation of replacement polesets will be undertaken in line with established best practice as outlined below:

- Transportation of two wooden poles, crossarm (where required) and insulators and hardware (where required) to the area immediately adjacent to the poleset due to be replaced;
- The replacement poles will be installed to a minimum depth below ground of 2.3m. The estimated working area for construction of a wooden poleset is 10m^2 around the base of the poleset. The excavation for each hole will be carried out using a wheeled or tracked excavator;
- Each of the two poles are lined up with the excavated holes and the machine operator will then drive forward pushing the pole up until the pole is in an almost vertical position. If the crossarm is to be replaced as part of the identified works, the new crossarm is attached to one pole;
- The pole is supported at all times and the holes manually backfilled initially to a minimum depth of 1.0m to ensure temporary stability prior to installing the sleepers. Should the ground conditions be poor, additional stability will be provided by installing stay wires. Following the initial backfilling, a strip approximately 2.7m long is excavated to a depth of 0.8m parallel to the line. This is necessary to install the rectangular wooden sleepers which add additional stability to the poleset and are attached to the poles using U-bolts; and

- The two installed poles are connected near the top by a steel crossarm from which insulators are attached. The existing conductor is then attached to these insulators. Where the existing crossarm is to be retained, the crossarm is detached from the decommissioned poles and lifted into place and attached to the newly installed poles

Once the new wooden poleset is installed, the decommissioned poleset will be cut at the base 1m below ground level and removed from the site for recycling by licensed waste contractors and hauliers.

2.2.3 Replacement of Existing Steel Intermediate Towers with Wooden Intermediate Polesets

Following the completion of the LCA, it was recommended that Intermediate Mast 08 and Strain INT Mast 33 be replaced with wooden polesets due to their age and/or condition. Prior to commencing any works to the structures, it will be necessary to detach the conductor and fibre wrap from the towers. The detached conductor and fibre wrap will be disconnected from the mast and connected to temporary poles erected adjacent to the location. The temporary poles will be erected in the same manner as the replacement of wooden polesets, as discussed below. Once the conductors have been diverted to the temporary poleset, the body of the tower will be dismantled. Sections of the tower will be unbolted and lifted down to ground level. The final section, which includes the tower legs will be cut at ground level and removed. All steelwork will be removed from site for recycling by licensed waste carriers. An excavator will be used to excavate around the existing foundations to facilitate their removal. New wooden polesets will then be installed, subject to the requirements of the detailed design.

The installation of the replacement wooden polesets will follow the same methodology as set out above under Section 2.2.

2.2.4 Replacement of Insulators and Hardware

All insulators and hardware apparatus were inspected for damage, corrosion, wear and fatigue. Conductors were also visually inspected along the entire length of the 110 kV OHL to check for any signs of damaged/broken conductor strands. The majority of insulators were found to be in good condition with associated hardware also in good condition at these sites. There were a number of glass anti-fog type insulators exhibiting corrosion in addition to several cases of corrosion and wear to associated hardware. Vibration dampers were also found to be fatigued or missing at a number of sites. One poleset requires the replacement of insulators and hardware only (18).

The insulators and hardware holding the conductor are attached to steel crossarms linking the wooden poles. The replacement of the insulators and hardware will require the disconnection of the conductor from existing insulators and hardware. The weight of the conductors can be supported by a strap attached to the crossarm. The insulators and hardware are then accessed by a Mobile Elevated Work Platforms (MEWP) where the insulator is supported by straps as it is unbolted and removed. New insulators and hardware are fitted, conductors are re-attached and decommissioned insulators and hardware / equipment are removed. Replacement crossarms, if required, will be lifted into position with a lifting device such as a pulley system or telescopic handler. A typical Transmission Tower Structure for a 110 kV line is shown in Figure 3 (overleaf) and included within **Appendix 3** of this report.

The decommissioned equipment will be stored under appropriate conditions until it can be recycled or disposed of through licensed waste contractors and hauliers.

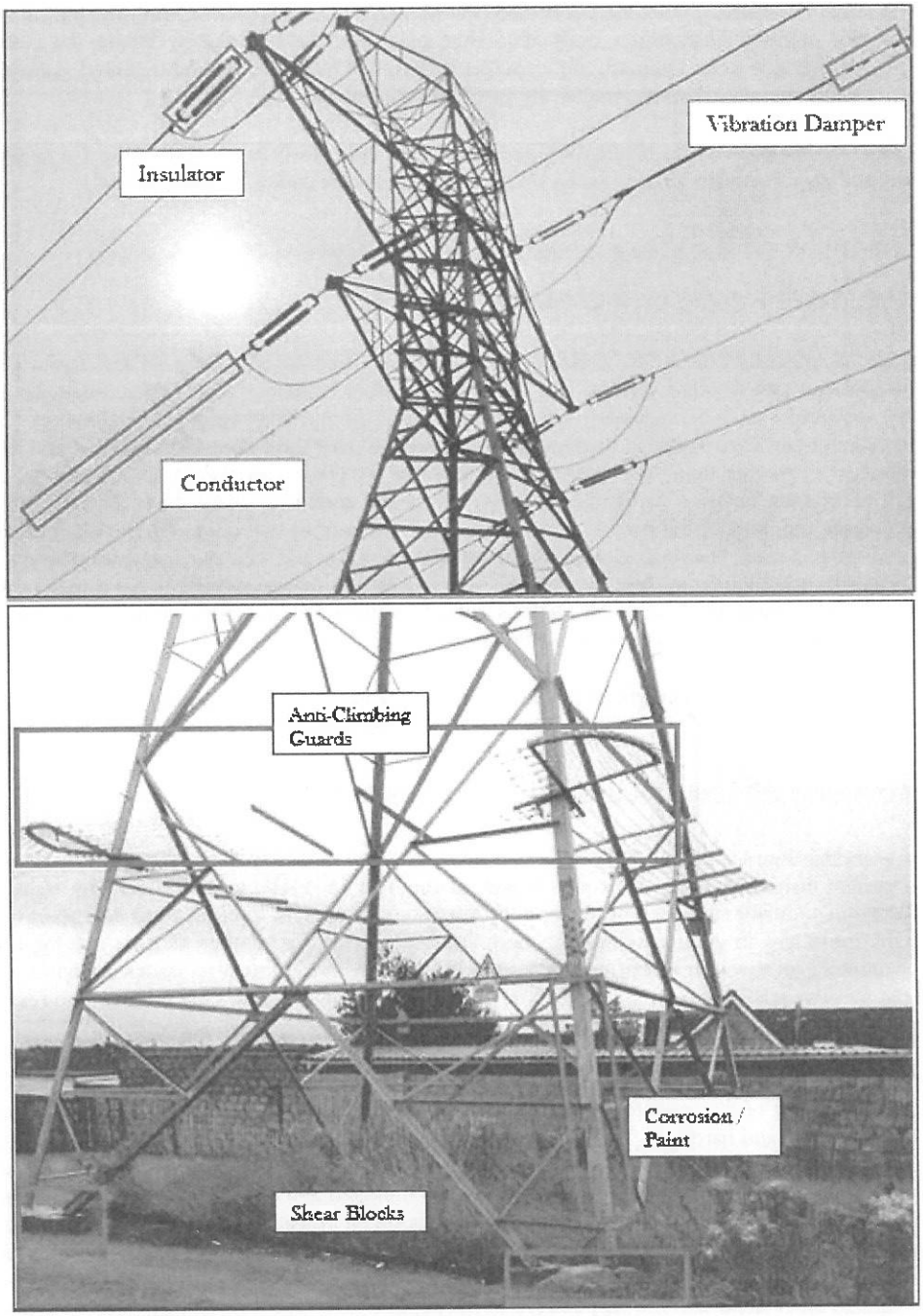

Figure 3. Typical 110 kV Transmission Tower Structure

2.2.5 Civil Works on Tower Shear Blocks

Site investigation works of the existing tower foundations were undertaken as part of the LCA to determine the foundation dimensions and conditions along with the ground conditions of the tower sites. In line with ESB specification, the tower foundations were assessed to determine whether they were of sufficient size to cater for the overall weight of the OHL. Concrete cores were also retrieved to determine the compressive strength of the concrete within the existing foundations. The following information was gathered from the site investigations:

- Foundation size;
- Foundation concrete strength and condition; and

- Soil Characteristics and bearing capacity

Typical steel angle masts have four legs each with their own individual and independent foundation block; specifically, 2 no. of the legs will be in compression with the remaining 2 no. legs being in tension. In order to assess the stability of the steel angle mast, one compression leg foundation was exposed at each tower for investigation. The investigation methodology was as follows:

- Concrete cores were extracted and in-situ measurements recorded;
- Dynamic probing was carried out on all sites to establish the soil bearing capacity at the site; and
- Concrete cores were tested and the compression strength recorded.

The concrete shear blocks of all tower foundations were also visually examined during this survey. The shear blocks are used to form a watershed between the tower foundation and the tower legs. Part of the shear block will be visible above ground and work to it is considered maintenance to the tower. The following civil works were identified and are included as part of the subject programme of works as set out below in Table 3.

Table 3. Proposed Civil Works to Kilbarry – Knockraha No. 2 110 kV Line Tower Structures

Kilbarry – Knockraha No. 2 110 kV Structure No.	Physical Description
03	Raise shear blocks
04	Raise shear blocks
05	Raise shear blocks
06	Raise shear block
07	Clear base & raise shear blocks
09	Raise shear blocks
10	Raise shear blocks
20	Clear tower base & raise shear blocks
28	Clear base & raise shear blocks
32	Clear shear blocks
34	Clear shear blocks
35	Clear base & raise shear blocks
45	Clear tower base & raise shear blocks

Raising shear blocks consists of pouring concrete around the bottom of the tower leg. Concrete trucks are brought as close as possible to the exposed shear blocks to pour directly around the bottom of the tower leg. In the event of this not being possible, concrete is transported in dumpers.

2.2.6 Ancillary Works

Anti-Climbing Guards (ACGs) installed on the steel tower structures comprising the 110 kV OHL were inspected to determine whether or not they complied with existing TAO standards and to note any repair/renewal works necessary. A number of existing anti-climbing guards were recorded as requiring replacement or repair and addition of locks in some cases as identified below in Table 4.

Table 4. Proposed Anti-Climbing Guards (ACGs) Refurbishment Works

Kilbarry – Knockraha No. 2 110 kV Structure No.	Anti-Climbing Guards (ACGs) Refurbishment Works
01	Replace ACG
02	Re-wire ACG
03	Replace ACG
04	Replace ACG
05	Replace ACG
06	Replace ACG
07	Replace ACG
09	Rewire ACG & fit locks
10	Rewire ACG & fit locks

Kilbarry – Knockraha No. 2 110 kV Structure No.	Anti-Climbing Guards (ACGs) Refurbishment Works
20	Replace barb wire ACG
32	Re-wire ACG & fit lock
33	Re-tension barb wire ACG
34	Re-tension barb wire ACG
35	Re-tension barb wire ACG
45	Re-wire ACG

2.2.7 Summary of Proposed Works

Table 5 (overleaf) provides an itemised overview of the proposed works subject to this Section Declaration for each transmission structure comprising the Kilbarry – Knockraha No. 2 110 kV line within the Cork City Council functional area.

Table 5. Itemised Overview of Proposed Works to Kilbarry - Knockraha No. 2 110 kV

Structure	Local Authority	Townland	Plan Sheet Number(s)[1]	Proposed Works
01	Cork City Council	Cork City and suburbs	1	> Treat corrosion & paint > Replace Anti-Climbing Guards
02	Cork City Council	Cork City and suburbs	1	> Treat corrosion & paint > Replace single circuit insulators and hardware > Replace vibration dampers > Replace Anti-Climbing Guards
03	Cork City Council	Cork City and suburbs	1	> Treat corrosion & paint > Replace double circuit insulators and hardware > Replace vibration dampers > Civil works (reinforcement / reparation) to foundations > Replace Anti-Climbing Guards
04	Cork City Council	Cork City and suburbs	1	> Paint > Replace double circuit insulators and hardware > Replace U bolts > Replace vibration dampers > Civil works (reinforcement / reparation) to foundations > Replace Anti-Climbing Guards
05	Cork City Council	Ballincolly	1	> Paint > Replace double circuit insulators and hardware > Civil works (reinforcement / reparation) to foundations > Replace Anti-Climbing Guards
06	Cork City Council	Ballincolly	2	> Paint > Replace double circuit insulators and hardware > Replace U bolts > Replace vibration dampers > Civil works (reinforcement / reparation) to foundations > Replace Anti-Climbing Guards
07	Cork City Council	Ballincolly	2	> Paint > Replace double circuit insulators and hardware > Civil works (reinforcement / reparation) to foundations > Replace Anti-Climbing Guards
08	Cork City Council	Ballincolly	2	> Replace tower with 110 kV wooden poleset

Structure	Local Authority	Townland	Plan Sheet Number(s)[1]	Proposed Works
09	Cork City Council	Ballincolly	2	Paint Replace single circuit hardware Civil works (reinforcement / reparation) to foundations Rewire Anti-Climbing Guards and fit locks
10	Cork City Council	Ballincolly	2	Paint Replace single circuit insulators and hardware Rewire Anti-Climbing Guards and fit locks
12	Cork City Council	Ballincolly	3	Replace wooden poleset
13	Cork City Council	Ballyvolane	3	Replace wooden poleset Replace hardware
14	Cork City Council	Arderrow	4	Replace wooden poleset Replace hardware
15	Cork City Council	Arderrow	4	Replace wooden poleset Replace hardware
16	Cork City Council	Arderrow	4	Replace wooden poleset Replace hardware
17	Cork City Council	Arderrow	4	Replace wooden poleset Replace hardware
18	Cork City Council	Arderrow	5	Replace hardware
20	Cork City Council	Banduff	5	Replace J bolts Civil works (reinforcement / reparation) to foundations Replace barbwire Anti-Climbing Guards
21	Cork City Council	Banduff	5	Replace wooden poleset
22	Cork City Council	Banduff	5	Replace wooden poleset
24	Cork City Council	Banduff	6	Replace wooden poleset Replace hardware
25	Cork City Council	Banduff	6	Replace wooden poleset
26	Cork City Council	Banduff	6	Replace wooden poleset Replace hardware
28	Cork City Council	Poulacurry North	7	Paint Civil works (reinforcement / reparation) to foundations
29	Cork City Council	Poulacurry North	7	Replace wooden poleset
30	Cork City Council	Poulacurry South	7	Replace wooden poleset
31	Cork City Council	Poulacurry South	7	Replace wooden poleset

Structure	Local Authority	Townland	Plan Sheet Number(s)[1]	Proposed Works
32	Cork City Council	Poulacurry South	8	> Civil works (reinforcement / reparation) to foundations > Rewire Anti-Climbing Guards and fit locks
33	Cork City Council	Poulacurry South	8	> Replace tower with 110 kV wooden poleset
34	Cork City Council	Poulacurry South	8	> Replace vibration dampers > Civil works (reinforcement / reparation) to foundations > Re-tension barbwire Anti-Climbing Guards
35	Cork City Council	Poulacurry South	8	> Replace vibration dampers > Civil works (reinforcement / reparation) to foundations > Re-tension barbwire Anti-Climbing Guards
45	Cork City Council	Ballinglanna	10	> Paint > Replace single circuit insulators and hardware > Civil works (reinforcement / reparation) to foundations > Re-wire Anti-Climbing Guards

Note: Please refer to ***Appendix 4*** *for Infrastructure Site Plans*

3. LEGISLATIVE CONTEXT: EXEMPTED DEVELOPMENT

3.1 Defining Development

As noted in Section 1, the first aim of this Section 5 Declaration Report is to determine whether the proposed renewing and altering of existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line constitutes work / development. The Act defines the differences between 'development', 'works' and 'use' as set out below:

- **Development**: "development" means, except where the context otherwise requires, the carrying out of any works on, in, over or under land or the making of any material change in the use of any structures or other land.
- **Works**: includes any act or operation of construction, excavation, demolition, extension, alteration, repair or renewal and, in relation to a protected structure or proposed protected structure, includes any act or operation involving the application or removal of plaster, paint, wallpaper, tiles or other material to or from the surfaces of the interior or exterior of a structure
- **Use**: In relation to land, does not include the use of the land by the carrying out of any works thereon

In the context of the above statutory definitions, the renewal and altering of the Kilbarry – Knockraha No. 2 110 kV line would, in MKO's opinion, amount to works, and furthermore, be regarded as development as part of the overall maintenance and operation of the line. "Works" differ from a "use" in that they result in a level of physical alteration to the land whereas a use in itself may not necessarily interact with the existing physical characteristics of the land. The proposed renewal and altering of the 110 kV OHL will not intensify the use of the 110 kV OHL nor will it materially change the functionality of the transmission asset (e.g. no increase in the voltage of the line from the existing 110 kV); therefore, the works do not constitute a 'material change of use', i.e. a change in the definable character of the use.

3.2 Exempted Development Provisions

As the proposed renewal and alteration of the Kilbarry – Knockraha No. 2 110 kV line is considered to constitute development / works, the second aim of this report is to determine whether the proposal qualifies as exempted development as provided for by the Act.

The planning and development of the electricity transmission system includes the up-rating and maintenance of existing transmission line infrastructure, as well as what may be considered to comprise "minor works". The current planning legislation makes provision for certain works of this kind to be exempted / permitted development (i.e. development which does not require a prior grant of development consent). As such, there is a statutory onus on the Applicant to demonstrate to the relevant Authority that the proposed transmission line works meet certain site-specific tests (restrictions, exceptions, conditions and limits as set out in relevant legislation).

3.2.1 Section 4 (1)(g) and (h) of the Act

The Act sets out several broad exemption classes under Section 4, which are considered relevant to the subject works to the Kilbarry – Knockraha No. 2 110 kV line. Section 4(1)(g) states the following shall be exempted developments for the purposes of the Act:

> *"Development consisting of the carrying out by any local authority or statutory undertaker of any works for the purpose of inspecting, repairing, renewing, altering or removing any sewers, mains, pipes, cables, overhead wires, or other apparatus, including the excavation of any street or other land for that purpose".*

As stated in Section 1, EirGrid is a statutory undertaker as per Section 2 of the Act, which defines a statutory undertaker as "*a person, for the time being, authorised by or under any enactment or instrument under an enactment to (b) provide, or carry out works for the provision of, gas, electricity or telecommunications services*". Accordingly, the requirement that the subject works must be carried out by a statutory undertaker to qualify as exempted development is satisfied in this instance.

The proposed works comprise the 'repairing', 'renewing' and 'altering' of transmission structures and associated apparatus in order to maintain the operational functionality of the existing line, including the necessary construction works (e.g. excavation and all associated works set out previously above) to facilitate same. As described in Section 2, the proposed works do not extend to the provision of new infrastructure as the works consist of the renewing of tower structures and intermediate wooden polesets. Where wooden polesets are identified to be replaced, new wooden polesets of similar design will be sited at an immediately adjacent location on the same alignment (e.g. paint / corrosion treatment, raising of shear blocks and replacement of wooden polesets, apparatuses and hardware).

In addition, Section 4(1)(h) of the Act, states the following shall be exempted development for the purposes of the Act:

> *"Development consisting of the carrying out of works for the maintenance, improvement or other alteration of any structure, being works which affect only the interior of the structure or which do not materially affect the external appearance of the structure so as to render the appearance inconsistent with the character of the structure or of neighbouring structures"*

The proposed works are all within the development envelope of the existing 110 kV OHL (maintained by the TAO) and do not include for the extension of the line. The replacement of wooden polesets will be located immediately adjacent to the locations of the in-situ structures on the same alignment and will not be materially different in the context of the overall alignment of the 110 kV OHL. Furthermore, the replacement of wooden polesets and apparatuses/hardware and the repairing of transmission assets (paint/corrosion and shear blocks) relate to the statutory undertaker's routine function associated with transmission infrastructure maintenance and improvement.

The replacement of the identified wooden polesets may result in an increase in height of up to 2m at certain points along the 110 kV OHL dependent on local topographical variation as shown in Figure 4 below in terms of the established character of the line. However, any minor height increase of an intermediate structure as a consequence of the proposed works will still be in proportion relative to other structures along the alignment.

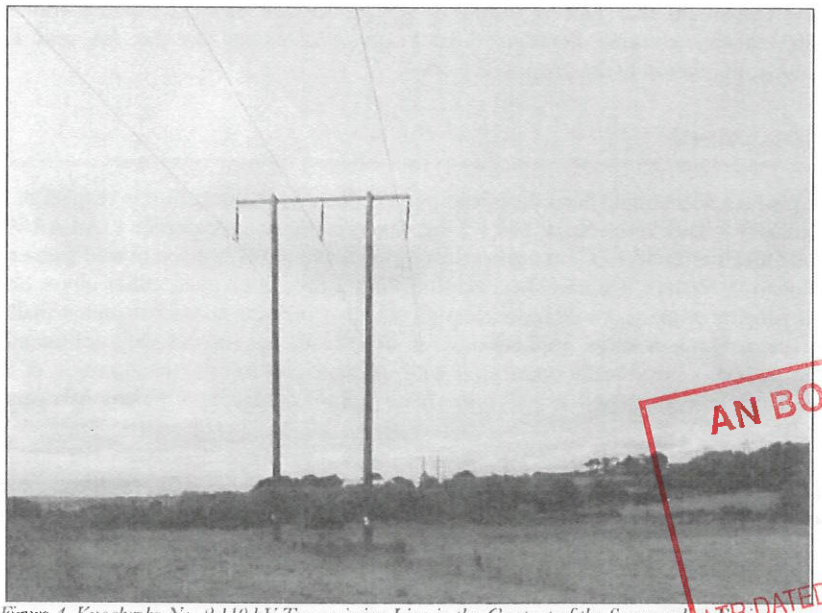

Figure 4. Knockraha No. 2 110 kV Transmission Line in the Context of the Surrounding Environment

It is important to emphasise that this Section of the Act provides for altering and improvement of existing transmission infrastructure where its appearance would not become '*inconsistent with the character of the structure or of neighbouring structures*' which does not necessarily equate to an exact replication of infrastructure. Given the minor scale of these potential variations in height, if applicable, the overall visual character of the Kilbarry – Knockraha No. 2 110 kV line within the receiving environment will remain consistent to what is currently in-situ. Furthermore, the minor increase in height, if and where applicable, will largely be indiscernible to receptors given the scale and established nature of the development.

In the context of the proposed replacement of Intermediate Mast 08 and Strain INT Mast 33 towers with wooden polesets, this is not considered a 'material change' to the overall 110 kV OHL as the wooden polesets will be sited immediately adjacent to the locations of the extant towers, and furthermore, the OHL already includes 55 no. double wooden polesets, which is over half of the transmission structures comprising the line. It is important to emphasise that this specific consideration has been assessed by An Bord Pleanála under Ref. RL3328 (Arva-Shankill 110 kV Line, Co. Cavan) in which they determined that the replacement of steel intermediate towers with wooden polesets is within the scope of section 4(1)(g) of the Act which facilitates, inter alia, the altering and renewing of apparatus by a statutory undertaker. Please refer to Section 4.2 for further discussion on this precedent case.

As such, the proposed works would not materially affect the external appearance of the Kilbarry – Knockraha No. 2 110 kV line nor render its appearance inconsistent with current character of the existing line, e.g. the 110 kV OHL will still look like an OHL upon completion of the proposed works.

3.2.2 De-Exemption Considerations: Section 4(4) of the Act

Section 4(4) of the Act clarifies that works which are normally exempted development under Section 4(1) (such as 4(1) (g) and 4(1)(h) as set out above) can only be de-exempted if an Environmental Impact Assessment (EIA) or Appropriate Assessment (AA) is required[1]. In this regard, Section 4 (4) of the Act, states the following:

> *"Notwithstanding paragraphs (a), (i), (ia) and (l) of subsection (1) and any regulations under subsection (2), development shall not be exempted development if an environmental impact assessment or an appropriate assessment of the development is required"*

As such, if the Stage 1 Screening for Appropriate Assessment concludes that Stage 2 Appropriate Assessment (Natura Impact Statement) is required, then the works automatically lose their exemption from the requirement to obtain statutory consent. Similarly, if it is the conclusion of a Screening for Environmental Impact Assessment that EIA is required, the works lose their exemption from the requirement to obtain statutory consent. Sections 3.3.1.1 and 3.3.1.2 sets out the AA and EIA considerations, respectively, in relation to the proposed works.

3.2.2.1 Appropriate Assessment

A comprehensive Appropriate Assessment Screening Report (AASR) has been prepared in respect of the subject works to the Kilbarry – Knockraha No. 2 110 kV line and is included as **Appendix 1**. An AASR is required under Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive). Where it cannot be excluded that a project or plan, either alone or in combination with other projects or plans, would have a significant effect on a European Site then it shall be subject to an appropriate assessment of its implications for the site in view of the site's conservation objectives. The current project is not directly connected with, or necessary for, the management of any European Site; consequently, the proposed works have been subject to the Appropriate Assessment Screening process.

The assessment set out in the AASR is based on a desk study and field survey undertaken in August 2020. It specifically assesses the potential for the proposed development to result in significant effects on

[1] *As the applicable exemptions in this instance relate to those specified under Section 4 of the Act, and do not arise from the exempted development provisions of the Planning and Development Regulations 2001 (as amended) the restrictions on exemptions arising from Article 9 and 6 of the Regulations do not apply.*

European sites in the absence of any best practice, mitigation or preventative measures. In preparation of the report, the following sources were used to gather information:

- Review of NPWS Site Synopses, Nature Standard Forms and Conservation Objectives for the European Sites.
- Review of OS maps and aerial photographs of the site of the proposed project.
- Site visit conducted on the 19th August 2020 Olivia O'Gorman (B.Sc., M.Sc.).

The AASR has concluded that the proposed works will not have an impact on any designated sites as summarised below:

- **Great Island Channel Special Area of Conservation (SAC) (001058), c. 2.4km south-east;**
  - The proposed works are small scale in nature and are fully associated with maintenance/refurbishment of the existing line infrastructure. No instream or bankside works are required. The proposed project works are located within the Butlerstown_030 sub basin. This basin discharges to the Glashaboy River which subsequently discharges into the transitional waters between the River Lee and Lough Mahon. As such, there is no direct hydrological connectivity between the proposed works and the SAC. Consequently, no potential for significant effect via any hydrological pathway exists;
  - No source-impact-pathway exists in relation to the habitats listed as QI's of this European site. As such, there is no potential for impacts to occur on these habitats; and
  - There is no likelihood for significant effects and no further assessment is required
- **Blackwater River (Cork/Waterford) SAC (002170), c. 9.1km north**; and
  - The proposed development and the SAC are located within different hydrological catchments and no pathway for direct or indirect effect exists; and
  - There is no likelihood for significant effects and no further assessment is required.
- **Cork Harbour Special Protection Area (SPA) (004030), c. 433m south**
  - The proposed project works are located within the same hydrological catchment as this European site. However, the works are terrestrially based and there is no direct surface water connectivity between the proposed works areas and the European site;
  - The proposed works are small scale in nature and are fully associated with maintenance/refurbishment of the existing line infrastructure. No instream or bankside works are required. Consequently, no potential for significant effect on supporting wetland habitat for SCI species, via any hydrological pathway, exists;
  - The proposed works are associated with the refurbishment of existing infrastructure. There will be no loss of supporting habitat for SCI species within or outside the SPA. Based on the nature and scale of the works, the nature of the habitats at the works areas and the intervening buffer between the existing line and the SPA; no potential for significant effect as a result of disturbance/displacement of any SCI species exists; and
  - There is no likelihood for significant effects and no further assessment is required.

The AASR concludes, it can be excluded on the basis of objective evidence, that there will be likely significant effects on European sites from the project alone, or in combination with other plans or projects.

3.2.2.2 Environmental Impact Assessment Screening

The requirement for Environmental Impact Assessment (EIA) has its origins in Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment. This Directive has been amended three times and was codified by Directive 2011/92/EU in 2011. Directive 2011/92/EU was then subsequently amended by Directive 2014/52/EU in 2014.

The primary objective of the EIA Directive (Directive 2011/92/EU), as amended by Directive 2014/52/EU, is to ensure a high level of protection of the environment and human health, through the establishment of minimum requirements for EIA, prior to development consent being awarded, of public and private developments that are likely to have significant effects on the environment. Section 172 of the Act provides the legislative basis for mandatory EIA:

> *"An environmental impact assessment shall be carried out by a Planning Authority or the Board, as the case may be, in respect of an application for consent for:*
>
> *(a) proposed development of a class specified in Schedule 5 to the Planning and Development Regulations 2001 which exceeds a quantity, area or other limit specified in that Schedule, and*
>
> *(b) proposed development of a class specified in Schedule 5 to the Planning and Development Regulations 2001 which does not exceed a quantity, area or other limit specified in that Schedule but which the planning authority or the Board determines would be likely to have significant effects on the environment."*

Further to the above, Schedule 5 of the Planning and Development Regulations 2001 (as amended) ('the Regulations') differentiates between the projects that always require EIA and those for which an EIA may be required. These projects are listed in Schedule 5 Part 1 and Part 2 of the Regulations.

Schedule 5, Part 1 Projects

These are projects which are considered as having significant effects on the environment and require a mandatory EIA. The most relevant project type is identified in paragraph (19) which refers:

> *"Construction of overhead electrical power lines with a voltage of 220 kilovolts or more and a length of more than 15 kilometres."*

The proposed works do not involve the construction of any new overhead electrical power lines with a voltage of 220 kilovolts or more and a length of more than 15 kilometres. The subject works do not exhibit any characteristics associated with the projects identified in Part 1, and therefore, an EIA is not automatically required.

Schedule 5, Part 2 Projects

These are projects where national authorities have to decide whether an EIA is needed. This is done by the "screening procedure", which determines the effects of projects on the basis of thresholds/criteria or a case by case examination. In general, the projects listed in Part 2 are those not included in Part 1 and which may be considered to have a lesser environmental impact.

In the context of Part 2 projects, the most relevant project type is identified in paragraph (3)(b) which refers:

> *"Industrial installations for carrying gas, steam and hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables not included in Part 1 of this Schedule, where the voltage would be 200 kilovolts or more."*

As described in Section 2 of this report, the voltage rate of the Kilbarry – Knockraha No. 2 110 kV line is less than 200 kV. It is also important to highlight Class 13(a) which relates to extensions, changes development and testing:

> *"Any change or extension of development already authorised, executed or in the process of being executed (not being a change or extension referred to in part 1) which would:*
>
> *(i) Result in the development being of a class listed in Part 1 or paragraphs 1 to 12 of Part 2 of this Schedule, and*
>
> *(ii) Result in an increase in size greater than –*
>
> *- 25%, or*

- An amount equal to 50% of the appropriate threshold,

Whichever is greater"

The proposed works will not result in an increase in size, capacity or threshold; specifically, the proposed works do not include for the extension of the line or movement of any individual transmission structures nor is it proposed to alter the overall functionality of the line in the context of the wider transmission system. As such, the provisions of Class 18(a) are not applicable.

As the proposed works are not a type of project identified in Schedule 5 Part 1 or Part 2 of the Regulations, there is no automatic requirement under the EIA Directive for it to be subject to EIA. Notwithstanding, Section 172 of the Act also sets out the basis for EIA for developments which may not be of a scale included in Schedule 5 of the Regulations. This allows a consenting authority [Cork City Council] to require EIA where it is of the opinion that the proposed development (although sub-threshold) is likely to have significant effects on the environment, and therefore should be subject to EIA. In this context, the consideration of 'significant effect' as per Schedule 7 of the Regulations ('*Criteria for Determining Whether Development Listed on Part 2 of Schedule 5 should be subject to an Environmental Impact Assessment*'). Class 15, Part 2 of Schedule 5 provides for EIA for developments under the relevant threshold, where the works would be likely to have significant effects on the environment:

> *"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."*

Notwithstanding the fact that, as set out above, none of the statutory thresholds in Schedule 5 of the Regulations are applicable to the subject works, a sub-threshold EIA Screening Report (**Appendix 2**) concludes that impacts associated with the renewal and altering of the Kilbarry – Knockraha No. 2 110 kV line are not significant in the context of Schedule 7 of the Regulations. This conclusion is based on the findings of the analysis relating to the following:

- Characteristics of Project;
- Location of Project; and
- Type and Characteristics of Potential Impact

As part of this analysis, a broad range of environmental media have been assessed. No potential impacts of significance were identified during either the construction or operational phase of the proposed development's lifetime. Although the recommendation of the EIA Screening Report is that an EIA is not required, it is acknowledged that Cork City Council, as the competent authority, will decide on the necessity or otherwise on an EIA in this instance.

3.2.3 De-Exemption Considerations: Part IV and Part XIII of the Act

Part IV of the Act (Architectural Heritage) states that a planning authority, *if it considers that all or part of an architectural conservation area (ACA) is of special importance to, or as respects, the civic life or the architectural, historical, cultural or social character of a city or town in which it is situated*, may prepare a scheme setting out development objectives for the preservation and enhancement of that area, or part of that area, and providing for matters connected therewith. In this regard, a planning authority under subsection (7) of the Act can apply the designation of 'area of special planning control' to an ACA, or part of an ACA, to which a scheme is approved.

Special Planning Control Orders (S.84) may include provisions to limit or exclude certain types of development, such as transmission network infrastructure. Specifically, paragraph 87 states that *'any development within an area of special planning control shall not be exempted development where it contravenes an approved scheme applying to that area'*. It is important to note that the renewal and altering of the 110 kV OHL within the Cork City Council functional area, between End Mast 01 (Kilbarry 110 kV Substation located at the northern extent of Cork City) and Angle Mast 45 (Ballinglanna townland, Co. Cork), is not situated within an ACA thus no limitations are applicable.

Part XIII of the Act (Amenities) sets out provisions for the preservation, improvement, extension of amenities, and the protection of the landscape. Specifically, Section 204 (1) states that a planning authority may, by order, for the purposes of the preservation of the landscape, designate any area or place within the functional area of the authority as a landscape conservation area (LCA) which under paragraph (2) the Minister may prescribe development normally exempted / permitted development as no longer exempt, including transmission network infrastructure. The renewal and altering of the 110 kV OHL within the Cork City Council functional area, is not situated within a LCA thus no de-exemptions on this basis are applicable.

4. PRECEDENT CASES

In order to assist the Planning Authority in their assessment of whether the proposal constitutes exempted development as per the provisions of the Act described in Section 3, a summary of applicable precedent cases is set out below . The objective of this analysis is to highlight that a certain degree of flexibility has historically been applied by relevant Authorities and An Bord Pleanála ('the Board') when determining whether development is or is not exempt / permitted development.

4.1 Maynooth-Ryebrook 110 kV line, Co. Kildare - An Bord Pleanála (Ref: RL3080)

Rossmore Properties Ltd. ('the Referrer') submitted a Section 5 Referral to the Board on the 6th March 2013 on the following question:

> *"Whether the proposed renewing and altering of existing Maynooth - Ryebrook 110kv overhead line, is or is not development or is or is not exempted development"*

Similar to the subject proposal, the renewal and alteration of the existing Maynooth - Ryebrook 110 kV overhead line comprised two distinct sub-types of work, including the following:

- Renewal of existing conductors (wires) along the entire length of the line which would be uprated to facilitate greater capacity while remaining at voltage rate of 110 kV. Similar to the proposed replacement of insulators, hardware and equipment and the renewal of shear blocks and painting / treatment of corrosion for the Kilbarry-Knockraha 110 kV line, the replacement of these new conductors would be '*visually identical*' to what was already in-situ.
- Replacement of tower structures along the alignment of the line with new stronger and larger pylon structures, located immediately adjacent to the existing structures, c. 0.5 to 1.0 metres higher than the existing pylons. This again is similar to the proposed replacement of wooden polesets along the alignment of the Kilbarry-Knockraha 110 kV line.

EirGrid, the applicant of the Section 5 Declaration Request referred to the Board, concluded that the above development is exempted both under Section 4(1)(g) and Section 4(1)(h) which the Referrer refuted; specifically, the development does not come within the scope of either sections of the Act.

In considering the case, the Board's Inspector sets out several conclusions which are considered relevant in establishing a common basis for assessing the proposed works to the Kilbarry-Knockraha 110 kV line.

> *"The works in this case – the construction of new steel pylon structures/removal of existing structures, all involve "works" which include "any act or operation of construction, excavation, demolition, extension, alteration, repair or renewal" as defined in Section 2(1) of the Act, and therefore constitute development."*

> *"I am fully satisfied that EirGrid meets the definition of "statutory undertaker" and "electricity undertaking" under the provisions of the Planning and Development Act, and the Planning and Development Regulations"*

In the context of the above conclusions, we are confident that the Planning Authority will similarly agree that the proposed renewing and altering of existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line is indeed development and that EirGrid, as the "*statutory undertaker*" is responsible for operating and ensuring the maintenance of an efficient electricity transmission system. As such, these matters will consequently not be raised again in this section in the interest of brevity.

The Board considered that the proposed works (e.g. the renewing of intermediate pylons and their replacement with towers of similar design, in an immediately adjacent location on the same alignment) comprises,

> *"A single renewal project being undertaken as part of the statutory undertaker's routine function associated with transmission infrastructure maintenance in which there will be no increase in the voltage of the line from the existing 110 kV and where the alterations would not differ materially from the existing infrastructure being renewed"*

The Board's conclusion that the proposed works come within the scope of Section 4 (1)(g) of the Act is a critical consideration for the proposed renewing and altering of existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line due to the significant similarity between the projects, particularly with regard to the removal and replacement of transmission structures (e.g. wooden polesets).

It is important to highlight that the Board's decision on this case was judicially reviewed in the High Court in the case of *Rossmore Properties Ltd & Anor -V- An Bord Pleanála & Ors [2014] IEHC 557*. The High Court upheld the decision of Board in that the '*construction of new steel electricity pylons in new locations along the route of the Maynooth-Ryebrook 110 kV electricity line, at a height of 0.5 to 1.0 metre higher than the existing pylons, is exempted development*'.

4.2 Arva-Shankill 110 kV Line, Co. Cavan - An Bord Pleanála (Ref: RL3328)

EirGrid ('the Referrer') submitted a Section 5 Referral to the Board on the 3rd June 2015 on the following question,

> *"Whether a change in existing structure types (steel intermediate towers being replaced with wooden intermediate polesets) on the Arva-Shankill 110 kV circuit no.1 is or is not exempted development"*

This specific query is considered particularly relevant in the context of the proposed replacement of Intermediate Mast 08 and Strain INT Mast 33 (steel intermediate towers) with wooden polesets as part of the renewal and altering of the existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line.

EirGrid concluded that the above development is exempted under Section 4(1)(g) on the basis that 'renewing', 'altering' and 'removing' implies a physical change to the existing structure, which in this case, includes for the replacement of steel transmission structures with wooden polesets. Having regard to RL3080 (Section 4.1 - Maynooth-Ryebrook 110 kV electricity line) and the direct comparability between the two projects, EirGrid set out a clear analysis demonstrating that a precedent has been established for this type of work, maintenance and improvement of transmission infrastructure.

The Board's Inspector, in their assessment of the proposed works in the context of Section 4(1)(g), provides an in-depth analysis of terminology of 'alter' and 'renewal' with regard to the cited provision:

> *"'Altering' can be viewed as affecting, and applying to, apparatus in a manner that changes the apparatus or makes it different. Therefore, the purpose of altering apparatus, i.e. altering the steel intermediate towers to wooden polesets, could reasonably mean making such alterations to the established apparatus"*

> *"In the context of the proposed development, the understanding of the purpose of 'renewing' could only be construed in this instance as 'replacement' of the existing polesets. One would not be giving fresh life to or restoring the established steel towers"*

Against this backdrop, the Inspector states that it is reasonable to conclude that replacing steel intermediate towers with wooden polesets by the statutory undertaker (EirGrid) would fall within the scope of Section 4(1)(g). However, the Inspector also draws attention to Section 4(1)(h) and the proposed replacement of one type of support structure, i.e. steel intermediate towers, by an entirely different type of support structure, i.e. wooden polesets. Specifically, where the replacement of transmission structures reasonably falls within the scope of 'altering / renewal', the physical change from steel towers to wooden polesets constitutes a material change, a substantial change in materials, form, appearance and structure, which renders '*the appearance of the replacement apparatus inconsistent with the character of the structures being replaced*'. As such, the Inspector concludes that,

"One cannot reasonably conclude that the purpose of "altering" in accordance with section 4(1)(h), by the removal of steel towers and their replacement by materially different structures, i.e. wooden polesets, could be construed as exempted development"

The Board did not adopt the Inspector's recommendation that the proposed works to the Arva-Shankill 110 kV circuit No.1 line did not constitute exempted development for the following reasons:

- The proposed works form one part of the renewing and altering operations on the wider general uprate works on the existing Arva-Shankill 110kV Circuit Number 1 and are being undertaken as part of the statutory undertaker's routine function associated with transmission infrastructure;
- The proposed wooden polesets are, in this case, considered to be of less visual significance than the steel towers being replaced and do not give rise to any material adverse planning considerations; and
- The replacement of steel intermediate towers with wooden polesets is considered, in this case, to come within the scope of section 4(1)(g) of the Act which facilitates, inter alia, the altering and renewing of apparatus by a statutory undertaker

It is important to re-emphasise that the exempted development query posed to the Board under RL3328 related to the replacement of 54 no. steel towers with wooden polesets whereas there are only 2 no. steel towers in the current section 5 submission subject to replacement. Although at significantly reduced scale than the precedent case cited, we are confident that the proposed replacement of Intermediate Mast 08 and Strain INT Mast 33 with wooden polesets will result in lower visual impact and will not give rise to any material adverse planning considerations (please refer to the EIA Screening Report – **Appendix 2** for further information). Furthermore, the OHL already includes 55 no. double wooden polesets, which is over half of the transmission structures comprising the line and as such the works are consistent with the established visual character.

The Board's decision on this case, including the Inspector's important analysis of 'alter' and 'renewal' within the context of Section 4(1) of the Act, further establishes the precedent initially set by *Rossmore Properties Ltd & Anor -V- An Bord Pleanála & Ors [2014] IEHC 557* judgement which indicates that the intended spirit, intent and letter of Section 4(1)(g) is to provide flexibility to statutory undertakers in carrying out their statutory functions.

5. Conclusion

This Section 5 Declaration Report has been prepared to assist Cork City Council in their determination of **whether the proposed renewing and altering of the existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line, in the townlands of Ballincolly, Ballyvolane, Arderrow, Ballyharoon, Banduff, Poulacurry North, Poulacurry South and Ballinglanna, Co. Cork, is or is not development, and if development, is or is not exempted development** in the context of the overall line as provided for by Section 5(1) of the Act.

The Report has set out the legislative basis of the proposal and has comprehensively examined the two principal considerations of the Section 5 Declaration process:

- Does the proposal constitute work / development?
- Does the proposal qualify as exempted development?

As demonstrated within the Report, proposed renewing and altering of existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line in our professional opinion, comes within the scope of the definition of development contained in Section 3 of the Planning and Development Act 2000 (as amended) ('the Act'). Secondly, the proposal is considered to fall under Section 4(1)(g) and (h) of the Act which states that the following is exempted development

> *"Development consisting of the carrying out by any local authority or statutory undertaker of any works for the purpose of inspecting, repairing, renewing, altering or removing any sewers, mains, pipes, cables, overhead wires, or other apparatus, including the excavation of any street or other land for that purpose".*
>
> *"Development consisting of the carrying out of works for the maintenance, improvement or other alteration of any structure, being works which affect only the interior of the structure or which do not materially affect the external appearance of the structure so as to render the appearance inconsistent with the character of the structure or of neighbouring structures".*

The legislative analysis (Section 3) and corresponding overview of precedent cases sets out the following conclusions in respect to the applicability of the above Sections of the Act to the proposed renewal and altering of the existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line:

- EirGrid is a statutory undertaker as per Section 2 of the Act. The proposed renewal and altering of the existing Kilbarry – Knockraha No. 2 110 kV line relates to the statutory undertaker's routine function associated with transmission infrastructure maintenance and improvement.
- The proposed works do not extend the line nor is it proposed to alter the overall functionality of the line in the context of the wider transmission system (e.g. no increase in the voltage of the line from the existing 110 kV).
- The proposed works are all within the development envelope of the existing 110 kV OHL (maintained by the TAO). The replacement of wooden polesets will be located immediately adjacent to the locations of the in-situ structures on the same alignment and will not be materially different in the context of the overall alignment of the 110 kV OHL.
- The Board's decisions on cases RL3080 and RL3328 and the High Court's judgement set out in *Rossmore Properties Ltd & Anor -V- An Bord Pleanála & Ors [2014] IEHC 557* establishes a strong precedent that the intended spirit, intent and letter of Section 4(1)(g) is to provide flexibility to statutory undertakers in carrying out their statutory functions.

The proposed works have been screened against the statutory requirements for both Appropriate Assessment and Environmental Impact Assessment which, as demonstrated within the appended Appropriate Assessment Screening Report (**Appendix 1**) and EIA Screening Report (**Appendix 2**), neither are required in the context of the works.

Accordingly, we request that Cork City Council confirm that, while the proposed renewing and altering of existing Kilbarry – Knockraha No. 2 110 kV overheard transmission line constitutes development, these works are in fact exempted development under the provisions (Section 4(1)(g) and (h)) of the Act.

MKO Planning and Environmental Consultants

Article 6 (3) Appropriate Assessment Screening Report

Kilbarry-Knockraha No. 2 110 kV Line Refurbishment.

DOCUMENT DETAILS

Client:	EirGrid
Project Title:	Kilbarry-Knockraha No. 2 110 kV Line Refurbishment.
Project Number:	**200532**
Document Title:	Article 6 (3) Appropriate Assessment Screening Report
Document File Name:	**200532 EirGrid CP0901 AASR 01.10.20 F**
Prepared By:	**MKO** **Tuam Road** **Galway** **Ireland** **H91 VW84**

Planning and Environmental Consultants

Rev	Status	Date	Author(s)	Approved By
03	Draft	23/09/2020	OOG	JH
04	Final	01/10/2020	OOG	JH

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1. INTRODUCTION

1.1 Background

MKO has been appointed to provide the information necessary to allow the competent authority to conduct an Article 6(3) Screening for Appropriate Assessment of the proposed Kilbarry-Knockraha No. 2 110 kV Line refurbishment works, Co. Cork.

Screening for Appropriate Assessment is required under Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive). Where it cannot be excluded that a project or plan, either alone or in combination with other projects or plans, would have a significant effect on a European Site then same shall be subject to an appropriate assessment of its implications for the site in view of the site's conservation objectives. The current project is not directly connected with, or necessary for, the management of any European Site consequently the project has been subject to the Appropriate Assessment Screening process.

The assessment in this report is based on a desk study and field survey undertaken in August 2020. It specifically assesses the potential for the proposed development to result in significant effects on European sites in the absence of measures intended to avoid or reduce harmful effects.

This Appropriate Assessment Screening Report has been prepared in accordance with the European Commission's Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2001) and Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2018) as well as the Department of the Environment's Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DoEHLG, 2010).

In addition to the guidelines referenced above, the following relevant documents were also considered in the preparation of this report:

1. *EC (2007) Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence. Opinion of the commission.*
2. *EC (2013) Interpretation Manual of European Union Habitats. Version EUR 28. European Commission.*

1.2 Appropriate Assessment

1.2.1 Screening for Appropriate Assessment

Screening is the process of determining whether an Appropriate Assessment is required for a plan or project. Under Part XAB of the Planning and Development Act, 2000, as amended, screening must be carried out by the Competent Authority. As per Section 177U of the Planning and Development Act, 2000, as amended 'A screening for appropriate assessment shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that Land use plan or proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site'. The Competent Authority's determination as to whether an Appropriate Assessment is required must be made on the basis of objective information and should be recorded. The Competent Authority may request information to be supplied to enable it to carry out screening.

Consultants or project proponents may provide for the competent authority the information necessary for them to determine whether an Appropriate Assessment is required and provide advice to assist them in the Article 6(3) Appropriate Assessment Screening decision.

Where it cannot be excluded on the basis of objective evidence at the Screening stage, that a proposed plan or project, individually or in combination with other plans and projects, would have a significant effect on the conservation objectives of a European site, an Appropriate Assessment is required.

Where an Appropriate Assessment is required, the Competent Authority may require the applicant to prepare a Natura Impact Statement.

The term Natura Impact Statement (NIS) is defined in legislation. As defined in Section 177T of the Planning and Development Act, 2000 as amended, an NIS means a statement, for the purposes of Article 6 of the Habitats Directive, of the implications of a proposed development, on its own and in combination with other plans and projects, for a European site in view of its conservation objectives. It is required to include a report of a scientific examination of evidence and data, carried out by competent persons to identify and classify any implications for the European site in view of its conservation objectives

An NIS, where required, should present the data, information and analysis necessary to reach a definitive determination as to 1) the implications of the plan or project, alone or in combination with other plans and projects, for a European site in view of its conservation objectives, and 2) whether there will be adverse effects on the integrity of a European site. The NIS should be underpinned by best scientific knowledge, objective information and by the precautionary principle such that no reasonable scientific doubt remains at the conclusion of the NIS.

This Article 6(3) Appropriate Assessment Screening Report has been prepared in compliance with the provision of section 177U of the Planning & Development Act 2010 as amended.

Statement of Authority

A baseline ecological survey was undertaken on the 19th of August 2020 by Olivia O' Gorman (B.Sc., M.Sc.) of McCarthy Keville O'Sullivan (MKO). This report has been prepared by Olivia O'Gorman. The report has been reviewed by John Hynes (B.Sc., M.Sc., MCIEEM) who has over 8 years' experience in ecological assessment.

2. DESCRIPTION OF THE PROPOSED DEVELOPMENT

2.1 Site Location

The existing Kilbarry-Knockraha No. 2 110 kV Line is an overhead cable connection which is located on the northern outskirts of Cork City and comprises c. 12.5km of overhead electricity transmission line traversing the townlands of Kilbarry, Ballincolly, Ballyvolane, Arderrow, Ballyharoon, Banduff, Poulacurry North, Poulacurry South, Ballinglanna, Corbally North, Corbally South, Ballynagarbragh, Lackenroe, Ballycurreen, Killeena, Ballynanelagh, Co. Cork.

The site location is shown in Figure 2.1.

2.2 Characteristics of the Proposed Development

2.2.1 Description of the project

In 2015, the Transmission Asset Owner (TAO), ESB Networks, carried out a Line Condition Assessment (LCA) of the Kilbarry – Knockraha No. 2 110 kV Transmission line in order to identify any potential safety and operational issues relating to the potential for mechanical failure of existing equipment, and subsequently, determine an overall programme of works. A ground level condition survey was completed in addition to a thorough review of maintenance records compiled for the line. A full model of the Kilbarry – Knockraha No. 2 110 kV Transmission line in its current condition was created using:

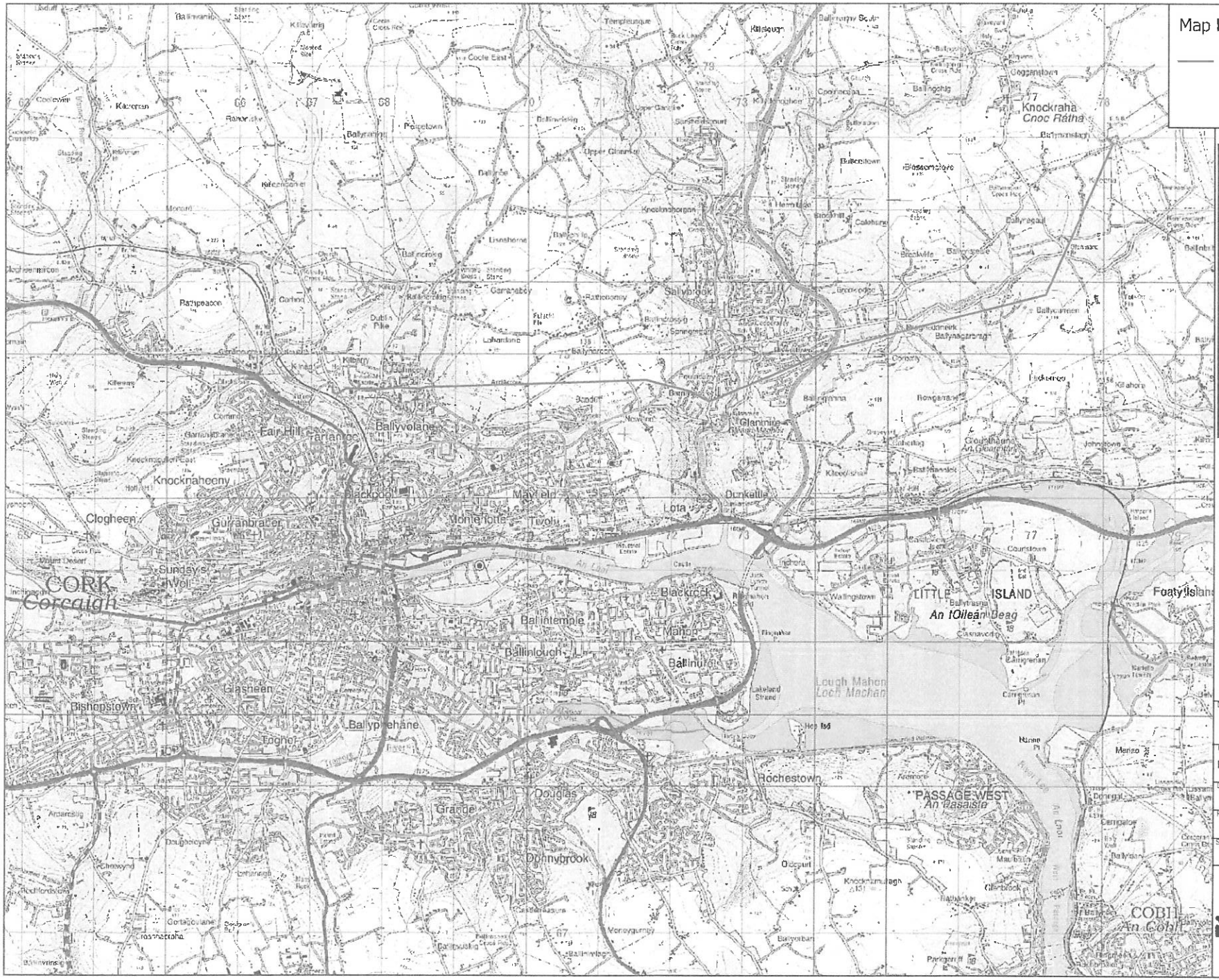
- Light Detection & Ranging (LiDAR) information collected from site;
- Information gathered from Kardex records;
- Site investigations & Site Surveys; and
- Standard established ESBI criteria for 110 kV overhead line design.

Corrective maintenance / renewal requirements are proposed which can be broadly grouped under the following headings:

1. ***Paint / Corrosion Treatment of Steel Towers***: Painting and corrosion treatment of existing steel structures;
2. ***Replacement of Wooden Polesets***: Removing of all hardware (including crossarm and insulators), installation of new poles and fittings / hardware, new or existing crossarm and new or existing insulators followed by the cutting and removal of old polesets;
3. ***Replacement of Existing Steel Intermediate Towers with Wooden Intermediate Polesets***: Removal of existing structure, fittings and foundations, followed by installation of new intermediate polesets and installation of fittings/hardware;
4. ***Replacement of Insulators and Hardware:*** Removal of existing hardware and insulators followed by the installation of new hardware and insulators;
5. ***Civil Works on Tower Shear Blocks:*** Reinforcement of shear blocks; and
6. ***Ancillary Works*** including the replacement and/or repair Anti-Climbing Guards

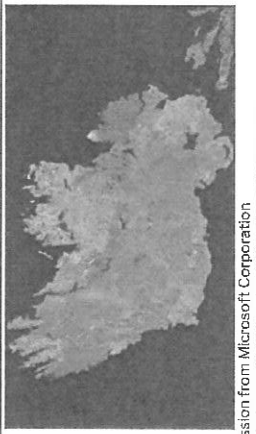
All works are within the development envelope of the existing equipment and the proposed works do not include for the extension of the line nor is it proposed to alter the overall functionality of the line in the context of the wider transmission system (e.g. no increase in the voltage of the line from the existing 110 kV). The replacement of wooden polesets will be located immediately adjacent to the locations of the in-situ structures on the same alignment and will not be materially different in the context of the overall alignment of the 110 kV OHL.

The proposed works to the 110 kV OHL will require access for heavy equipment such as tracked excavators, concrete delivery vehicles, mobile cranes, mobile elevated work platforms and etc. As a number of structures are located on agricultural lands and in close proximity to residential dwellings, gaining access



Map Legend

Kilbarry-Knockraha No. 2 110kV Line



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Drawing Title

Site Location

Project Title: Kilbarry-Knockraha No. 2 110 kV Line refurbishment	
Drawn By: OOG	Checked By: JH
Project No.: 200523	Drawing No.: Figure 2.1
Scale: 1:68300	Date: 20.08.2020

MKO
Planning and Environmental Consultants
Tu Galway
Tr VW84
+3 735611
email:mko@mkoireland.ie
Website: ww.mkoireland.ie

to these lands to carry out the proposed works will be coordinated with relevant stakeholders in accordance with the relevant ESB/IFA Code of Practice and relevant statutory provisions.

It should also be noted that the undertaking of the proposed works is dependent on outage availability. Cork County Council and Cork City Council would be notified in advance of any work commencing on the line.

Overviews of the proposed renewal and alteration works, subject to this Section 5 Declaration of Exempted Development, are outlined below in the following sections.

2.2.1.1 Paint / Corrosion Treatment of Steel Towers

The site investigations and surveys undertaken as part of the LCA inspected all steel towers comprising the Kilbarry – Knockraha No. 2 110 kV line to assess existing conditions of galvanising/paint and to identify any damage to the structures. Paint damage and corrosion were recorded at several towers during the assessment.

Corrosion is treated by specialist contractors who climb the tower using safe tower climbing methods, treat the corrosion and paint the tower. The painting and corrosion treatment of the identified steel towers (01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 28, 45, 63, 75) will be undertaken in line with ESB's work practice as outlined below, to comply with technical requirements, and having regard for third party landowners:

- An impervious sheet will be laid on the existing ground under the mast base to prevent paint from dripping to the soil;
- A cleaning agent will first be applied to the towers and then cleaned by means of wire brushing or sanding. When dry, a primer and top coat of paint will be applied; and
- The paint specification will provide protection to the steel for a minimum of 15 no. years. The top coat of matt grey will remain the same and there will be no deviation to the visual appearance of these structures.

2.2.1.2 Replacement of Wooden Polesets

Thirty five wooden pole-sets will be replaced as part of the proposed renewal and alteration works.

The replacement of the identified wooden polesets may result in an increase in height of up to 2m at certain points along the 110 kV OHL dependent on local topographical variation. However, any minor height increase of a wooden poleset as a consequence of the proposed works will still be in proportion relative to other structures along the alignment. A typical wooden poleset (Portal IMP) for a 110 kV line is shown in Plate 2-1 below and Appendix 3 of the Section 5 Declaration Report.

one pole;

- The pole is supported at all times and the holes manually backfilled initially to a minimum

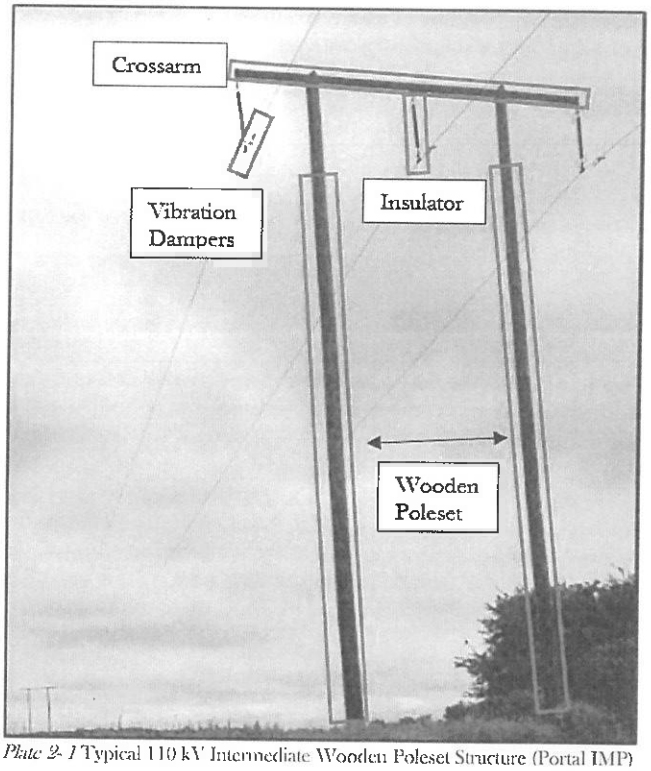


Plate 2- 1 Typical 110 kV Intermediate Wooden Poleset Structure (Portal IMP)

Where a wooden poleset is being replaced, the crossarm, insulators and hardware will either be reused, or alternatively, new crossarms and equipment will be installed. The final appearance of the newly installed wooden polesets will be consistent with the existing structures. Please refer to Appendix 3 of the Section 5 Declaration Report for typical plans of the proposed 110 kV 'Lines Suspension Portal Wood Pole Set' transmission structures.

The installation of replacement polesets will be undertaken as follows:

- Transportation of two wooden poles, crossarm (where required) and insulators and hardware (where required) to the area immediately adjacent to the poleset due to be replaced;
- The replacement poles will be installed to a minimum depth below ground of 2.3m. The average working area for construction of a wooden poleset is 10m² around the base of the poleset. The excavation for each hole will be carried out using a wheeled or tracked excavator;
- Each of the two poles are lined up with the excavated holes and the machine operator will then drive forward pushing the pole up until the pole is in an almost vertical position. If the crossarm is to be replaced as part of the identified works, the new crossarm is attached to one pole;
- The pole is supported at all times and the holes manually backfilled initially to a minimum depth of 1.0m to ensure temporary stability prior to installing the sleepers. Should the ground conditions be poor, additional stability will be provided by installing stay wires. Following the initial backfilling, a strip approximately 2.7m long is excavated to a depth of 0.8m parallel to the line. This is necessary to install the rectangular wooden sleepers which add additional stability to the poleset and are attached to the poles using U-bolts; and
- The two installed poles are connected near the top by a steel crossarm from which insulators are attached. The existing conductor is then attached to these insulators. Where the existing crossarm is to be retained, the crossarm is detached from the decommissioned poles and lifted into place and attached to the newly installed poles

Once the new wooden poleset is installed, the decommissioned poleset will be cut at the base 1m below ground level and removed from the site for recycling by licensed waste contractors and hauliers.

2.2.1.3 Replacement of Existing Steel Intermediate Towers with Wooden Intermediate Polesets

Intermediate Mast 08 and Strain INT Mast 33 are to be replaced with wooden polesets due to their age and condition. Prior to commencing any works to the structures, it will be necessary to detach the conductor and fibre wrap from the towers. The detached conductor and fibre wrap will be disconnected from the mast and connected to temporary poles erected adjacent to the location. The temporary poles will be erected in the same manner as the replacement of wooden polesets, as discussed below. Once the conductors have been diverted to the temporary poleset, the body of the tower will be dismantled. Sections of the tower will be unbolted and lifted down to ground level. The final section, which includes the tower legs will be cut at ground level and removed. All steelwork will be removed from site for recycling by licensed waste carriers. An excavator will be used to excavate around the existing foundations to facilitate their removal. New wooden polesets will then be installed, subject to the requirements of the detailed design.

The installation of the replacement wooden polesets will follow the same methodology as set out above under Section 2.2.1.2.

2.2.1.4 Replacement of Insulators and Hardware

All insulators and hardware apparatus were inspected as part of the LCA for damage, corrosion, wear and fatigue. Conductors were also visually inspected along the entire length of the 110 kV OHL to check for any signs of damaged/broken conductor strands. The majority of insulators were found to be in good condition with associated hardware also in good condition at these sites. There were a number of glass anti-fog type insulators exhibiting corrosion in addition to several cases of corrosion and wear to associated hardware. Vibration dampers were also found to be fatigued or missing at a number of sites. Four polesets require the replacement of insulators and hardware only (18, 54, 72 and 74).

The insulators and hardware holding the conductor are attached to steel crossarms linking the wooden poles. The replacement of the insulators and hardware will require the disconnection of the conductor from existing insulators and hardware. The weight of the conductors can be supported by a strap attached to the crossarm. The insulators and hardware are then accessed by a mobile elevated work platforms (MEWP) where the insulator is supported by straps as it is unbolted and removed. New insulators and hardware are fitted, conductors are re-attached and decommissioned insulators and hardware / equipment are removed. Replacement crossarms, if required, will be lifted into position with a lifting device such as a pulley system or telescopic handler. A typical Transmission Tower Structure for a 110 kV line is shown in Figure 3 below and included within Appendix 3 of the Section 5 Declaration Report.

The decommissioned equipment will be stored under appropriate conditions until it can be recycled or disposed of through licensed waste contractors and hauliers.

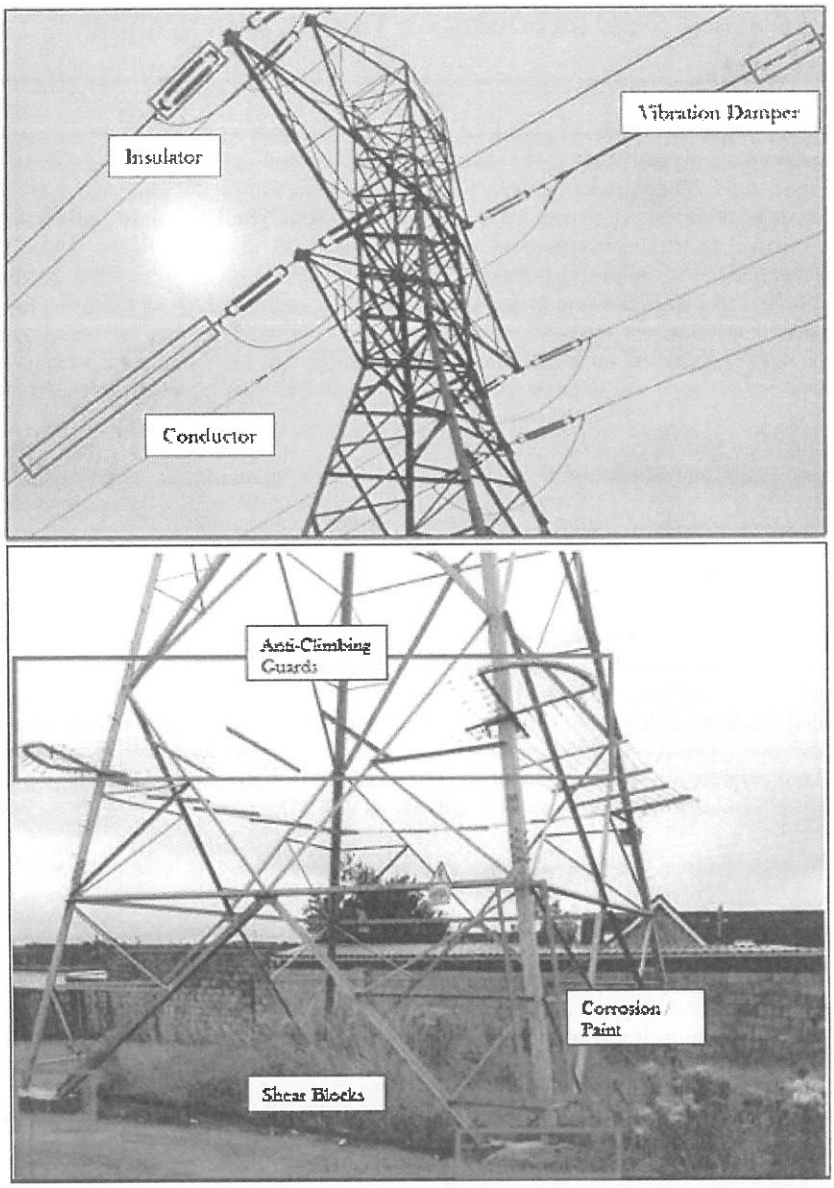


Plate 2- 2 Example Transmission Tower Structure

2.2.1.5 Civil Works on Foundations

Site investigation works of the existing tower foundations were undertaken as part of the LCA to determine the foundation dimensions and conditions along with the ground conditions of the tower sites. In line with ESB specifications, , the tower foundations were assessed to determine whether there were of sufficient size to cater for the overall weight of the OHL. Concrete cores were also retrieved to determine the compressive strength of the concrete within the existing foundations. The following information was gathered from the site investigations:

- Foundation size;
- Foundation concrete strength and condition; and
- Soil Characteristics and bearing capacity

Typical steel angle masts have four legs each with their own individual and independent foundation block; specifically, 2 no. of the legs will be in compression with the remaining 2 no. legs being in tension. In order to assess the stability of the steel angle mast, one compression leg foundation was exposed at each tower for investigation. The investigation methodology was as follows:

- Concrete cores were extracted and in-situ measurements recorded;
- Dynamic probing was carried out on all sites to establish the soil bearing capacity at the site; and
- Concrete cores were tested and the compression strength recorded.

The concrete shear blocks of all tower foundations were also visually examined during this survey. The shear blocks are used to form a watershed between the tower foundation and the tower legs. Part of the shear block will be visible above ground and work to it is considered maintenance to the tower. The following civil works were identified and are included as part of this proposed programme of works:

Table 2- 1 Proposed Civil Works to Kilbarry – Knockraha No. 2 110 kV Line Tower Structures

Kilbarry – Knockraha No. 2 110 kV Structure No.	Physical Description
Kilbarry – Knockraha No. 2 110 kV Structure within Cork Country	
03	Raise shear blocks
04	Raise shear blocks
05	Raise shear blocks
06	Raise shear block
07	Clear base & raise shear blocks
09	Raise shear blocks
10	Raise shear blocks
20	Clear base & raise shear blocks
28	Clear base & raise shear blocks
32	Clear shear blocks
34	Clear shear blocks
35	Clear base & raise shear blocks
45	Clear base & raise shear blocks
Kilbarry – Knockraha No. 2 110 kV Structure within Cork Country	
63	Clear base and raise shear block
75	Raise shear block

Raising the shear blocks will consists of re-pouring concrete around the bottom of the tower leg as the exposed shear block condition can degrade over time. Concrete trucks are brought as close as possible to the exposed shear blocks to pour directly around the bottom of the tower leg. In the event of this not being possible, concrete will be is transported in dumpers.

2.2.1.6 Ancillary Works

Anti-Climbing Guards (ACGs) installed on the steel tower structures comprising the 110 kV OHL were inspected as part of the line condition assessment to determine whether or not they complied with existing TAO standards and to note any repair/renewal works necessary. A number of existing anti-climbing guards were recorded as requiring replacement or repair and addition of locks in some cases.

Table 2- 2 Proposed Anti-Climbing Guards (ACGs) Refurbishment Works

Kilbarry – Knockraha No. 2 110 kV Structure No.	Anti-Climbing Guards (ACGs) Refurbishment Works
Kilbarry – Knockraha No. 2 110 kV within Cork City	
01	Replace ACG
02	Re-wire ACG
03	Replace ACG
04	Replace ACG
05	Replace ACG
06	Replace ACG
07	Replace ACG
09	Rewire ACG & fit locks
10	Rewire ACG & fit locks
20	Replace barb wire ACG
32	Re-wire ACG & fit lock
33	Re-tension barb wire ACG

Kilbarry – Knockraha No. 2 110 kV Structure No.	Anti-Climbing Guards (ACGs) Refurbishment Works
Kilbarry – Knockraha No. 2 110 kV within Cork City	
34	Re-tension barb wire ACG
35	Re-tension barb wire ACG
45	Re-wire ACG

Table 2-3 Summary of Proposed Works to Kilbarry – Knockraha No. 2 110 kV

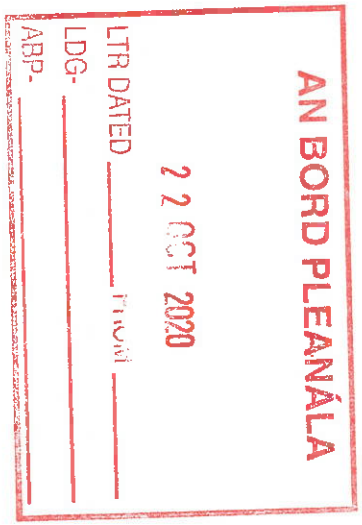
Structure	Local Authority	Townland	Plan Sheet Number(s)'	Proposed Works
Summary of Proposed Works to Kilbarry – Knockraha No. 2 110 kV within Cork City				
01	Cork City Council	Cork City and suburbs	1	Treat corrosion & paint Replace Anti-Climbing Guards
02	Cork City Council	Cork City and suburbs	1	Treat corrosion & paint Replace single circuit insulators and hardware Replace vibration dampers Replace Anti-Climbing Guards
03	Cork City Council	Cork City and suburbs	1	Treat corrosion & paint Replace double circuit insulators and hardware Replace vibration dampers Civil works (reinforcement / reparation) to foundations Replace Anti-Climbing Guards
04	Cork City Council	Cork City and suburbs	1	Paint Replace double circuit insulators and hardware Replace U bolts Replace vibration dampers Civil works (reinforcement / reparation) to foundations Replace Anti-Climbing Guards
05	Cork City Council	Ballincolly	1	Paint Replace double circuit insulators and hardware Civil works (reinforcement / reparation) to foundations Replace Anti-Climbing Guards
06	Cork City Council	Ballincolly	2	Paint Replace double circuit insulators and hardware Replace U bolts Replace vibration dampers Civil works (reinforcement / reparation) to foundations Replace Anti-Climbing Guards
07	Cork City Council	Ballincolly	2	Paint Replace double circuit insulators and hardware Civil works (reinforcement / reparation) to foundations Replace Anti-Climbing Guards
08	Cork City Council	Ballincolly	2	Replace tower with 110 kV wooden poleset
09	Cork City Council	Ballincolly	2	Paint

Structure	Local Authority	Townland	Plan Sheet Number(s)'	Proposed Works
				> Replace single circuit hardware > Civil works (reinforcement / reparation) to foundations > Rewire Anti-Climbing Guards and fit locks
10	Cork City Council	Ballincolly	2	> Paint > Replace single circuit insulators and hardware > Rewire Anti-Climbing Guards and fit locks
12	Cork City Council	Ballincolly	3	> Replace wooden poleset
13	Cork City Council	Ballyvolane	3	> Replace wooden poleset > Replace hardware
14	Cork City Council	Arderrow	4	> Replace wooden poleset > Replace hardware
15	Cork City Council	Arderrow	4	> Replace wooden poleset > Replace hardware
16	Cork City Council	Arderrow	4	> Replace wooden poleset > Replace hardware
17	Cork City Council	Arderrow	4	> Replace wooden poleset > Replace hardware
18	Cork City Council	Arderrow	5	> Replace hardware
20	Cork City Council	Banduff	5	> Replace J bolts > Civil works (reinforcement / reparation) to foundations > Replace barbwire Anti-Climbing Guards
21	Cork City Council	Banduff	5	> Replace wooden poleset
22	Cork City Council	Banduff	5	> Replace wooden poleset
24	Cork City Council	Banduff	6	> Replace wooden poleset > Replace hardware
25	Cork City Council	Banduff	6	> Replace wooden poleset
26	Cork City Council	Banduff	6	> Replace wooden poleset > Replace hardware
28	Cork City Council	Poulacurry North	7	> Paint > Civil works (reinforcement / reparation) to foundations
29	Cork City Council	Poulacurry North	7	> Replace wooden poleset
30	Cork City Council	Poulacurry South	7	> Replace wooden poleset
31	Cork City Council	Poulacurry South	7	> Replace wooden poleset
32	Cork City Council	Poulacurry South	8	> Civil works (reinforcement / reparation) to foundations

Structure	Local Authority	Townland	Plan Sheet Number(s)'	Proposed Works
				› Rewire Anti-Climbing Guards and fit locks
33	Cork City Council	Poulacurry South	8	› Replace tower with 110 kV wooden poleset
34	Cork City Council	Poulacurry South	8	› Replace vibration dampers › Civil works (reinforcement / reparation) to foundations › Re-tension barbwire Anti-Climbing Guards
35	Cork City Council	Poulacurry South	8	› Replace vibration dampers › Civil works (reinforcement / reparation) to foundations › Re-tension barbwire Anti-Climbing Guards
45	Cork City Council	Ballinglanna	10	› Paint › Replace single circuit insulators and hardware › Civil works (reinforcement / reparation) to foundations › Re-wire Anti-Climbing Guards
Summary of Proposed Works to Kilbarry – Knockraha No. 2 110 kV within Cork County				
46	Cork County Council	Ballinglanna	1	› Treat corrosion & paint › Replace single circuit insulators and hardware › Civil works (reinforcement / reparation) to foundations
47	Cork County Council	Ballinglanna	1	› Replace wooden poleset › Replace hardware › Replace vibration dampers
48	Cork County Council	Corbally North	1	› Replace wooden poleset
49	Cork County Council	Corbally North	1	› Replace wooden poleset
50	Cork County Council	Corbally North	1	› Replace wooden poleset
51	Cork County Council	Corbally North	2	› Replace wooden poleset ›
53	Cork County Council	Ballynagarbragh	2	› Replace wooden poleset › Replace hardware
54	Cork County Council	Ballynagarbragh	2	› Replace hardware
55	Cork County Council	Ballynagarbragh	3	› Replace wooden poleset

Structure	Local Authority	Townland	Plan Sheet Number(s)[1]	Proposed Works
56	Cork County Council	Ballynagarbragh	3	› Replace wooden poleset › Replace hardware
57	Cork County Council	Ballynagarbragh	3	› Replace wooden poleset
59	Cork County Council	Lackenroe	4	› Replace wooden poleset
60	Cork County Council	Lackenroe	4	› Replace wooden poleset
61	Cork County Council	Lackenroe	4	› Replace wooden poleset
63	Cork County Council	Lackenroe	5	› Treat corrosion & paint › Replace J bolts › Civil works (reinforcement / reparation) to foundations › Re-tension barbwire Anti-Climbing Guards
64	Cork County Council	Ballycurreen	5	› Replace wooden poleset › Replace hardware
65	Cork County Council	Ballycurreen	5	› Replace wooden poleset › Replace hardware
66	Cork County Council	Ballycurreen	5	› Replace wooden poleset › Replace crossarms › Replace hardware
67	Cork County Council	Killeena	6	› Replace wooden poleset › Replace hardware
68	Cork County Council	Killeena	6	› Replace wooden poleset › Replace hardware
69	Cork County Council	Killeena	6	› Replace wooden poleset › Replace hardware
70	Cork County Council	Killeena	6	› Replace wooden poleset › Replace hardware
71	Cork County Council	Killeena	6	› Replace wooden poleset
72	Cork County Council	Killeena	7	› Replace hardware

Structure	Local Authority	Townland	Plan Sheet Number(s)[1]	Proposed Works
73	Cork County Council	Killeena	7	> Replace wooden poleset > Replace crossarms > Replace hardware
74	Cork County Council	Killeena	7	> Replace hardware
75	Cork County Council	Killeena	7	> Paint > Civil works (reinforcement / reparation) to foundations



2.2.2 Description of the Baseline Ecological Environment

Assessing the impacts of any project and associated activities requires an understanding of the ecological baseline conditions prior to and at the time of the project proceeding. Ecological Baseline conditions are those existing in the absence of proposed activities (CIEEM 2018).

A multidisciplinary walkover survey was conducted on the on the 19th of August 2020 in line with NRA (2009) guidelines (Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes) by Olivia O' Gorman (B.Sc., M.Sc.). The ecological survey was undertaken within the optimal time of year to undertake a habitat and flora survey (Smith et. al 2011).

The existing Kilbarry-Knockraha No. 2 110 kV Line passes over a number of different habitat types which are predominately comprised of residential areas and roadways classified as ***Buildings and Artificial Surfaces (BL3), Amenity Grassland (GA2), Improved Agricultural Grassland (GA1), Dry meadows and grassy verges*** **(GS2)** scattered areas of ***Scrub (WS1)*** *and* ***Hedgerows (WL1)*** which are often associated with ***Earthen banks (BL2)*** and stonewalls classified as ***Stonewalls and other stone work (BL1).***

The grasslands crossed by the existing 110kVline are predominately used for agricultural purposes many of which contained cattle and were highly grazed. These areas of grassland contained species including perennial ryegrass *(Lolium perenne),* meadow grasses *(poa spp.)* ribwort plantain *(Plantago lanceolate),* broadleaf dock *(Rumex obtusifolius),* creeping buttercup *(Ranunculus repens),* silverweed *(Potentilla anserine)* and creeping thistle *(Cirsium arvense).* There were sections of grassland crossed by the existing line used for tillage agriculture specifically maize production.

There were a number of polesets/masts which are adjacent to or within hedgerows comprised of species including ash *(Fraxinus excelsior)* , sycamore *(Acer pseudoplatanus),* hawthorn *(Crataegus monogyna),* gorse *(Ulex europaeus),* bramble *(Rubus fruticosus agg.),* ivy (*Hedera ssp.),* and herb-robert *(Geranium robertianum).* These hedgerows were associated with earthen banks and stone walls in places along the project route.

There were areas of grassland associated with hedgerows adjacent to roadway classified as **Dry meadow and grassy verges (GS1)** with a larger area of grassland within the vicinity of the Killbarry substation which also most closely resembled Dry meadow and grassy verges habitat. These areas were comprised of species including false oat grass *(Arrhenatherum elatius),* yorkshire fog *(Holcus lanatus),* bush vetch (*Vicia sepium),* tufted vetch *(Vicia cracca),* silverweed, grounsel *(Senecio vulgaris),* ribwort plantain, birds-foot trefoil *(Lotus corniculatus),* broadleaf dock, ragwort *(Jacobaea vulgaris)* and soft rush *(Juncus effuses)* with some young willow *(Salix spp.)* regenerating within the larger area of grassland.

The existing line route passes through residential areas composed of housing estates with associated roadways classified as ***Buildings and artificial surfaces (BL3).*** In these locations, the project infrastructure is situated within a variety of area including private gardens adjacent to the roadway comprised of amenity grassland with ornamental plant species such as Leydandii *(Cupressus × leylandii)* present, within open areas of amenity grassland and adjacent to hedgerows. The amenity grassland was generally comprised of dandelion *(Taraxacum officinale agg),* red clover (*Trifolium pratense),* white clover (*Trifolium repens),* ribwort plantain *(Plantago lanceolate),* greater plantain *(Plantago major),* curled dock *(Rumex crispus),* broadleaf dock (*Rumex obtusifolius),* creeping buttercup *(Ranunculus repens),* self-heal *(Prunella vulgaris)* and daisy *(Bellis perennis).* There was ***Scrub (WS1)*** in places composed predominantly of bramble and nettle *(Urtica dioica)* with non-native species butterfly bush *(Buddleja davidii)* and traveller's joy *(Clematis vitalba)* also recorded. The hedgerows were comprised of sycamore, elder *(Sambucus nigra),* hawthorn, ash and ivy.

The project route crosses six watercourses which from east to west include the Glashaboy [EPA code: 19G01], Rowgarrane [EPA code: 19R39], Lackinroe [EPA code: 19L50], Glenmore [EPA code: 19G82], Lisheenroe [EPA code: 19L40] and the Goganstown [EPA code: 19G68]. In all instances the existing line passes over the watercourses and there will be no bankside or instream works required as part of the refurbishment works.

There were no Qualifying Interests (QIs) of SACs, or Special Conservation Interests (SCIs) of SPAs recorded during the site visit.

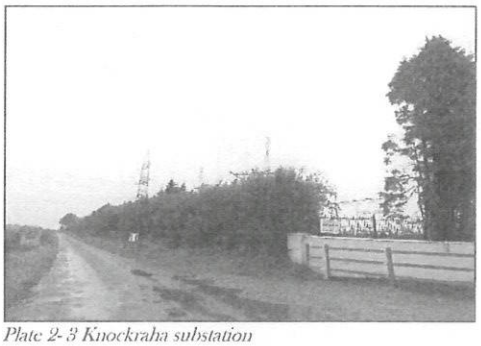


Plate 2- 3 Knockraha substation

Plate 2- 4 Kilbarry-Knockraha No. 2 110 kV Line crossing agricultural grassland (GA1)

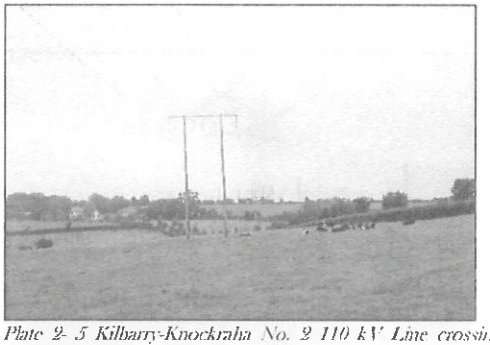


Plate 2- 5 Kilbarry-Knockraha No. 2 110 kV Line crossing agricultural grassland (GA1)

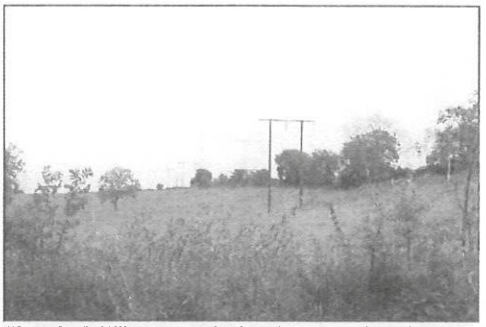


Plate 2- 6 Kilbarry-Knockraha No. 2 110 kV Line crossing agricultural grassland (GA1)

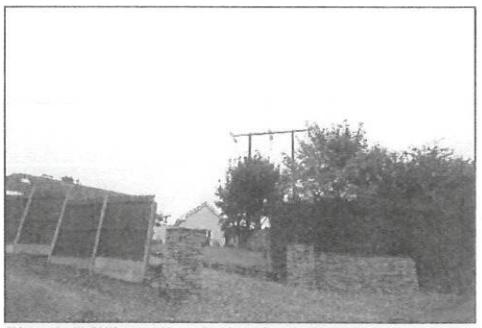


Plate 2- 7 Kilbarry-Knockraha No. 2 110 kV Line adjacent to residential dwelling

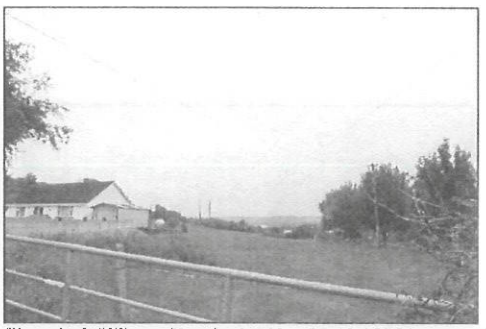


Plate 2- 8 Kilbarry-Knockraha No. 2 110 kV Line crossing agricultural grassland (GA1)

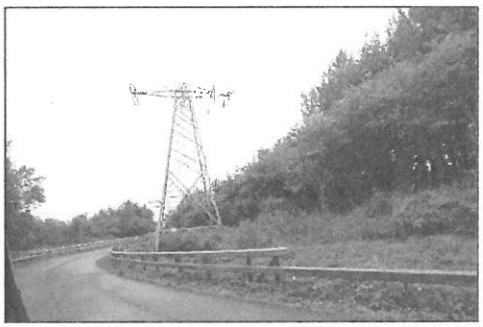


Plate 2- 9 Kilbarry-Knockraha No. 2 110 kV Line adjacent to the roadway classified as Buildings and Artificial surfaces (BL3)

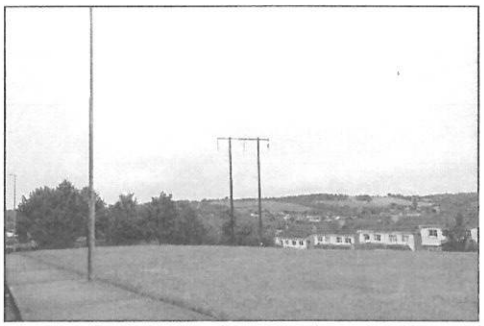


Plate 2- 10 Kilbarry-Knockraha No. 2 110 kV Line crossing amenity grassland (GA2) within a residential area

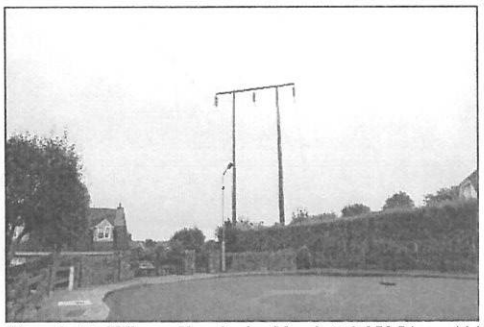


Plate 2- 11 Kilbarry-Knockraha No. 2 110 kV Line within a residential area classified as Buildings and Artificial surfaces (BL3)

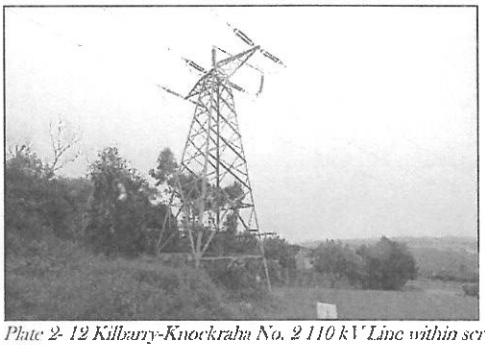


Plate 2- 12 Kilbarry-Knockraha No. 2 110 kV Line within scrub (WS1) and amenity grassland within a residential area

Plate 2- 13 Kilbarry-Knockraha No. 2 110 kV Line crossing agricultural grassland (GA1)

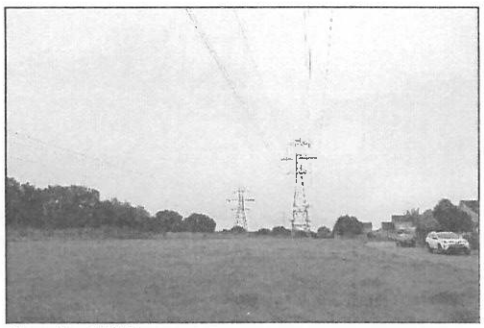


Plate 2- 14 Kilbarry-Knockraha No. 2 110 kV Line crossing amenity grassland (GA2)

Plate 2- 15 Kilbarry-Knockraha No. 2 110 kV Line within Dry meadows and grassy verges (GS1)

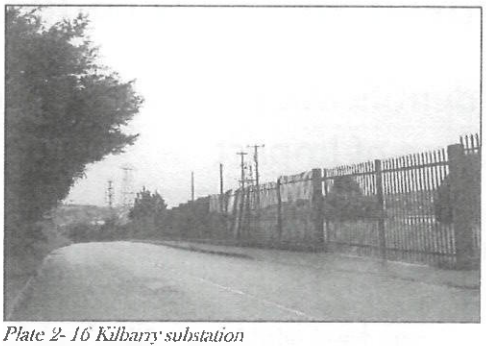


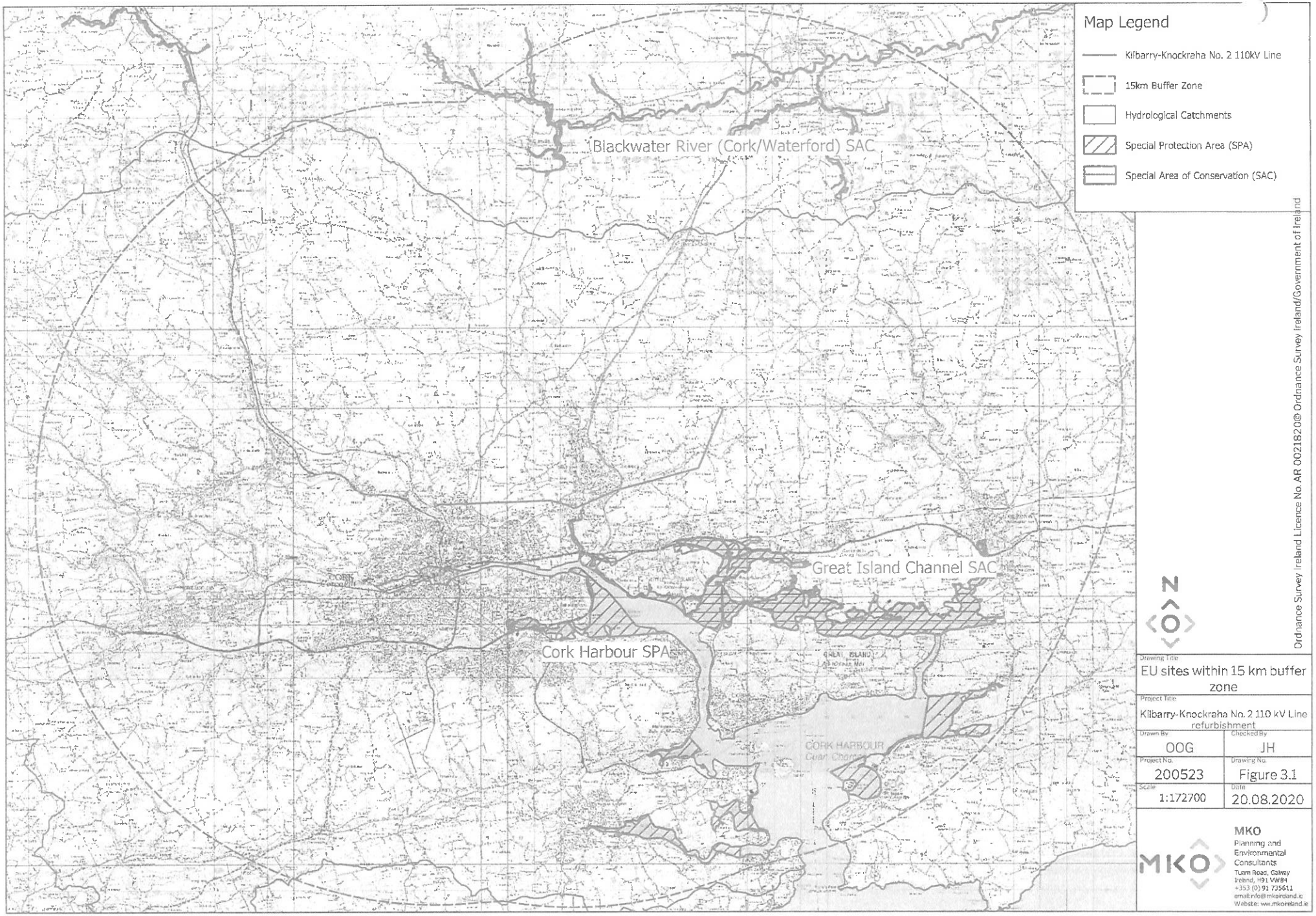
Plate 2- 16 Kilbarry substation

3. IDENTIFICATION OF RELEVANT EUROPEAN SITES

3.1 Identification of the European Sites within the Likely Zone of Impact

The following methodology was used to establish which European Sites are within the Likely Zone of Impact of the proposed development:

- Initially the most up to date GIS spatial datasets for European designated sites and water catchments were downloaded from the NPWS website (www.npws.ie) and the EPA website (www.epa.ie) on the 01/10/2020. The datasets were utilized to identify European Sites which could feasibly be affected by the proposed development.
- All European Sites within a distance of 15km surrounding the development site were identified and are shown on Figure 3.1. In addition, the potential for connectivity with European Sites at distances of greater than 15km from the proposed development was also considered (e.g. Ballymacoda Bay SPA and Ballymacoda (Clonpriest and Pillmore) SAC) in in this initial assessment. In this case, no potential connectivity with sites located at a distance of over 15km from the proposed development was identified.
- The catchment mapping was used to establish or discount potential hydrological connectivity between the site of the proposed development and any European Sites. The hydrological catchments are also shown in Figure 3.1.
- In relation to Special Protection Areas, in the absence of any specific European or Irish guidance in relation to bird dispersal and SPA connectivity, the Scottish Natural Heritage (SNH) Guidance, 'Assessing Connectivity with Special Protection Areas (SPA)' (2016) was consulted. This document provides guidance in relation to the identification of connectivity between proposed development and Scottish Special Protection Areas. The guidance takes into consideration the distances species may travel beyond the boundary of their SPAs and provides information on dispersal and foraging ranges of bird species which are frequently encountered when considering plans and projects.
- Table 3.1, provides details of all relevant European Sites as identified in the preceding steps and assesses which are within the likely Zone of Impact. Section 3.2 provides details of other relevant project and plans The assessment considers any likely direct or indirect impacts of the proposed development, both alone and in combination with other plans and projects, on European Sites by virtue of the following criteria: size and scale, land-take, distance from the European Site or key features of the site, resource requirements, emissions, excavation requirements, transportation requirements and duration of construction, operation and decommissioning were considered in this screening assessment
- The site synopses and conservation objectives of these sites, as per the NPWS website (www.npws.ie), were consulted and reviewed at the time of preparing this report 01/10/2020.



Map Legend

- Kilbarry-Knockraha No. 2 110kV Line
- 15km Buffer Zone
- Hydrological Catchments
- Special Protection Area (SPA)
- Special Area of Conservation (SAC)

N

Drawing Title: EU sites within 15 km buffer zone

Project Title: Kilbarry-Knockraha No. 2 110 kV Line refurbishment

Drawn By	Checked By
OOG	JH
Project No.	Drawing No.
200523	Figure 3.1
Scale	Date
1:172700	20.08.2020

MKO
Planning and Environmental Consultants
Tuam Road, Galway
Ireland, H91 VW84
+353 (0) 91 735611
email:info@mkoireland.ie
Website: www.mkoireland.ie

Table 3- 1 Identification of Designated sites within the Likely Zone of Impact

European Sites and distance from proposed development	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 01/10/2020	Conservation Objectives	Likely Zone of Impact Determination
Special Areas of Conservation (SAC)			
Great Island Channel SAC (001058) **Distance:** 2.4 km	› Mudflats and sandflats not covered by seawater at low tide [1140] › Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)* [1330]	Detailed conservation objectives for this site, (Version 1, June 2014), were reviewed as part of the assessment and are available at www.npws.ie	There will be no direct effects as the project footprint is located entirely outside the designated site. The proposed works are small scale in nature and are fully associated with maintenance/refurbishment of the existing line infrastructure. No instream or bankside works are required. The proposed project works are located within the Butlerstown_030 sub basin. This basin discharges to the Glashaboy River which subsequently discharges into the transitional waters between the River Lee and Lough Mahon. As such, there is no direct hydrological connectivity between the proposed works and the SAC. Consequently, no potential for significant effect via any hydrological pathway exists. No source-impact-pathway exists in relation to the habitats listed as QI's of this European site. As such, there is no potential for impacts to occur on these habitats. There is no likelihood for significant effects and no further assessment is required.
Blackwater River (Cork/Waterford) SAC (002170) **Distance:** 9.1 km	› Estuaries [1130] › Mudflats and sandflats not covered by seawater at low tide [1140] › Perennial vegetation of stony banks [1220] › Salicornia and other annuals colonising mud and sand [1310] › Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)* [1330] › Mediterranean salt meadows *(Juncetalia maritimi)* [1410]	Detailed conservation objectives for this site (Version 1, July 2012) were reviewed as part of the assessment and are available at www.npws.ie	There will be no direct effects as the project footprint is located entirely outside the designated site. The proposed development and the SAC are located within different hydrological catchments and no pathway for direct or indirect effect exists. There is no likelihood for significant effects and no further assessment is required.

	› Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation [3260] › Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] › Alluvial forests with *Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)* [91E0] › Freshwater Pearl Mussel *(Margaritifera margaritifera)* [1029] › White-clawed Crayfirsh *Austropotamobius pallipes* [1092] › Sea Lamprey *Petromyzon marinus* [1095] › Brook Lamprey *Lampetra planeri* [1096] › River Lamprey *Lampetra fluviatilis* [1099] › Twaite Shad *Alosa fallax fallax* [1103] › Salmon *Salmo salar* [1106] › Otter *Lutra lutra* [1355] › Killarney Fern *Trichomanes speciosum* [1421]		
Special Protection Area (SPA)			
Cork Harbour SPA (004030) **Distance**: 433m	› Little Grebe *(Tachybaptus ruficollis)* [A004] › Great Crested Grebe *(Podiceps cristatus)* [A005] › Cormorant *(Phalacrocorax carbo)* [A017] › Grey Heron *(Ardea cinerea)* [A028] › Shelduck *(Tadorna tadorna)* [A048] › Wigeon *(Anas penelope)* [A050] › Teal *(Anas crecca)* [A052] › Pintail *(Anas acuta)* [A054] › Shoveler *(Anas clypeata)* [A056] › Red-breasted Merganser *(Mergus serrator)* [A069] › Oystercatcher *(Haematopus ostralegus)* [A130] › Golden Plover *(Pluvialis apricaria)* [A140] › Grey Plover *(Pluvialis squatarola)* [A141] › Lapwing *(Vanellus vanellus)* [A142] › Dunlin *(Calidris alpina)* [A149] › Black-tailed Godwit *(Limosa limosa)* [A156] › Bar-tailed Godwit *(Limosa lapponica)* [A157] › Curlew *(Numenius arquata)* [A160]	Detailed conservation objectives for this site (Version 1.0, December 2014) were reviewed as part of the assessment and are available at www.npws.ie	There will be no direct effects as the project footprint is located entirely outside the designated site. The proposed project works are located within the same hydrological catchment as this European site. However, the works are terrestrially based and there is no direct surface water connectivity between the proposed works areas and the European site. The proposed works are small scale in nature and are fully associated with maintenance/refurbishment of the existing line infrastructure. No instream or bankside works are required. Consequently, no potential for significant effect on supporting wetland habitat for SCI species, via any hydrological pathway, exists. The proposed works are associated with the refurbishment of existing infrastructure. There will be no loss of supporting habitat for SCI species within or outside the SPA. Based on the nature and scale of the works, the nature of the habitats at the works areas and the intervening buffer between the existing

	> Redshank *(Tringa totanus)* [A162] > Black-headed Gull *(Chroicocephalus ridibundus)* [A179] > Common Gull *(Larus canus)* [A182] > Lesser Black-backed Gull *(Larus fuscus)* [A183] > Common Tern *(Sterna hirundo)* [A193] > Wetland and Waterbirds [A999]		line and the SPA; no potential for significant effect as a result of disturbance/displacement of any SCI species exists. There is no likelihood for significant effects and no further assessment is required.

3.2 Likely In-combination impacts of the Proposed Works on European Sites, in-combination with other plans and projects

The potential for the development to contribute to a cumulative impact on European sites was considered. The online planning system for Cork County Council and Cork City Council was consulted on 01/10/2020.

Additional projects within the townland of Kilbarry, Ballincolly, Ballyvolane, Arderrow, Ballyharoon, Banduff, Poulacurry North, Poulacurry South, Ballinglanna, Corbally North, Corbally South, Ballynagarbragh, Lackenroe, Ballycurreen, Ballynagaul, Killeena, Ballynanelagh. Co. Cork within the last 5 years include:

- Retention of existing 24m high telecommunications structure carrying associated antennae and link dishes and associated equipment cabin, associated cabinet, within security compound, and existing access track. The development will continue to form part of Vodafone Irelands Ltd's existing GSM and 3G/4G broadband telecommunications network [Pl. Ref. 15/6184]
- Permission for the construction of 2 no. semi-detached residential units and associated site works including provision of open space in lieu of crèche as granted under Planning Reg. No. 04/9737 [Pl. Ref. 165707]
- Retention of attic conversion to store-room including rooflights to front and rear of dwelling, and change of rooflight design to extension permitted under Pl. Reg. No. 05/4544 [Pl. Ref 166774]
- Retention of as constructed dwelling house and all associated site works [Pl. Ref. 174707]
- Retention of attic conversion including roof windows to front and rear elevations of dwelling house [Pl. Ref. 175512]
- Permission for a single storey rear and side extension to an existing dwelling and associated site works [Pl. Ref. 177314]
- Permission to convert the existing garage and car port attached to existing dwelling to a granny flat including and associated site works [Pl. Ref. 187027]
- Permission for retention for development of this site at Banduff, Ballyvolane, Co. Cork. The development consists of retention of an existing 15m telecommunications structure with all associated equipment and cabin within a fenced compound. Permission is also sought for an extension of the existing telecommunications structure to an overall height of 21 metres to allow for the repositioning of dishes and antenna in order to maintain and improve telecommunications services in the area [Pl. Ref. 1938927]
- Permission for the construction of 20 no. residential units and all ancillary site works consisting of 14 no. 2-storey 3-bedroom semi-detached units and 6 no. 2-storey 3-bedroom townhouses. The proposed development represents a change of plan and increase in density from that permitted under Cork County Council Planning Reference 09/6705 as extended by Planning Reference 14/6172. Ancillary site works to include landscaping and open space provision including a neighbourhood play area. Access to the site will be from Banduff Road via 2 no. proposed entrances to the neighbouring Ard na Rí Estate [Pl. Ref. 195326]
- Permission to construct a dwelling house, domestic garage, new entrance, install a septic tank and all associated site works [Pl. Ref. 186831]
- Permission for development comprising internal and external alterations to the existing Lidl Licensed Discount Foodstore and the adjoining Unit 1 retail unit along with amendments to the car park all at a site of approximately 0.419 ha located at Ballyhooly Road Ballyvolane Arderrow Co Cork. The proposed alterations will consist of the construction of an extension on the southern elevation of the existing Licensed Discount Foodstore along with the construction of a new trolley bay on the Eastern elevation of the building all resulting in a 229 sq m increase in the Gross Floor Area of the building in conjunction with revised elevational treatments the expansion of the existing Licensed Discount Foodstore into part of the adjoining Unit 1 retail unit increasing the Gross Retail Area of the Licensed Discount Foodstore by 191 sq m to accommodate enhanced staff welfare facilities , including canteen meeting room locker area shower toilets and lobby and storage facilities including cold storage. The internal reconfiguration of the Licensed Discount Foodstore to include the expansion of the existing storage area the repositioning and enhancement of the existing public facilities including lobby and toilets office plant room and bakery along with an increase in the Net Retail Sales Area from 1391 sq m to 1418 sq m an increase of 27 sq m Corporate Signage consisting of 2 no building mounted

corporate internally illuminated signs 1 no poster panel display sign and 1 no free standing externally illuminated poster display boards and the amendment of the car park to include the omission of 19 no car parking spaces along with new hard and soft landscaping treatments and all other ancillary and associated site development works above and below ground level [Pl. Ref. 2039326]

- Retention of alterations and extension to dwelling house including (A) change of use of attic to living area including rooflights to front and back elevations, door in lieu of window at first floor level to side (East) elevation, (b) garage/outhouse extension to side (West) elevation, (C) stone finish to front (South) elevation, (D) chimney to side (West) elevation [Pl. Ref. 2039326]
- Permission for the sub-division of the existing retail unit (existing gross area 970sqms gross floor area) located on the east side of the existing Lidl store, into two units (Unit 1 and Unit 2). Unit 1 would remain in retail use and have a gross floor area of 396sqms. Unit 2 will have a gross floor area of 540sqms and would be used as a Bingo Hall. As well as elevational adjustments to create a new point of public access to the Unit 2, the development includes new signage above the proposed access to Unit 2 on the north elevation of the property. Additional signage is also proposed on the southern elevation of the property to advertise the uses in both Units 1 and 2. All other associated works [Pl. Ref. 187173]
- Permission for the construction of a two-storey dwelling house and all associated site works [Pl. Ref. 156793]
- Permission for the demolition of an existing semi-detached cottage and construction of 6 no. dwellings, a new shared site entrance and all associated site works [Pl. Ref. 165481]
- Permission for the refurbishment and extension of existing dwelling to incorporate the following elements; A) Addition of a 1st floor element over existing ground floor side annex including 2 storey bay window and alignment of ridge line, B) Addition of front entrance porch and realignment of 1st floor ensuite window, C) Two storey extension to the rear of dwelling together with all associated site development works [Pl. Ref. 174725]
- Permission for a change of 3 number dwelling houses (house type A as granted under planning application 16/5481) to house type C and changes as necessary to ancillary works [Pl. Ref. 174976]
- Permission for the construction of no. 2 dwelling houses, connection to existing shared site entrance and all associated site works [Pl. Ref. 177378]
- Permission for the construction of a vehicular entrance to existing dwelling and all associated site works [Pl. Ref. 186755]
- Permission for the construction of a two-storey dwelling house domestic wastewater treatment system, vehicular entrance and all associated site works [Pl. Ref. 186756]
- Permission for the retention of (1) an attached garage converted to living accommodation and (2) a single storey extension, both to the side of an existing dwelling [Pl. Ref. 1887193]
- Permission for the demolition of existing domestic garage to west elevation and the construction of a new two storey extension to west elevation, entrance porch to south elevation to existing dwelling and all associated site works [Pl. Ref. 187445]
- The construction of a storey and a half dwelling (change of plan to that permitted under planning ref no. 15/4669), a detached garage, and all associated site works [Pl. Ref. 166650]
- Permission for the construction of a single storey extension to the rear and side of an existing two storey dwelling and all associated site works [Pl. Ref. 1743336]
- Permission for a single storey bungalow on site, adjacent to existing dwelling house, incorporating parking area and all associated drainage and site development works, (planning permission previously granted under planning reference 0631378) [Pl. Ref. 1636949]
- Permission for the construction of a new 110kV Gas Insulated Switchgear (GIS) building, located entirely within the footprint of the existing Kilbarry 110 kV Substation, measuring approximately 603.5m2 and 15m in height. The works will include the demolition of the existing disused control building and oil storage facility; the removal of three existing 110kV Overhead Line Towers and construction of four Line Cable Interface Masts (LCIM) with a height of up to 23.75m; connection of existing overhead lines to new LCIMs and 110 kV GIS Substation by means of underground cables and overhead line connections; modification to the existing entrance, the internal access roads, fences and internal access gates; temporary construction facilities, compounds, hardstands; and all associated and ancillary development and site works including provision and/or replacement of electrical structures and equipment, drainage works, laying of new or replacement cables and the diversion of existing cables. A Natura Impact Statement is submitted with this application [Pl. Ref. 1938211]
- Permission for alterations and to construct a single storey extension to side and rear of our dwelling with associated site works [Pl. Ref. 2039404]

In addition to the above, the objectives and policies of both the Cork County Development Plan 2014 and the Cork City Development Plan 2015-2021 (Table 3.2) were considered during the review of the plans and projects within the wider area of the development.

Table 3- 2: Review of plans and policies

Plans	Key Policies/Issues/Objectives Directly Related To European Sites, Biodiversity and Sustainable Development In The Zone of Influence	Assessment of development compliance with policy
Cork City Development Plan 2015-2021	**Objective 10.7 Designated areas and protected species** a). To protect enhance and conserve designated areas of natural heritage and biodiversity and the habitats, flora and fauna for which it is designated; b). To protect enhance and conserve designated species and the habitats on which they depend; c). To ensure that any plan/ project and any associated works, individually or in combination with other plans or projects are subject to Appropriate Assessment Screening to ensure there are no likely significant effects on the integrity (defined by the structure and function) of any Natural 2000 site (s) and that the requirements of Article 6 (3) and 6(4) of the EU Habitats Directive are fully satisfied. When a plan/project is likely to have a significant effect on a Natural 2000 site or there is uncertainty with regard to effects, it shall be subject to Appropriate Assessment. The plan/project will proceed only after it has been ascertained that it will not adversely affect the integrity of the site or where, in the absence of alternative solutions, the plan/project is deemed imperative for reasons of overriding public interest, all in accordance with the provisions of Article 6(3) and 6(4) of the EU Habitats Directive.	The proposed project works surveys will not adversely affect the Qualifying Interests/Special Conservation Interests associated with the Great Island Channel SAC, Blackwater River (Cork/Waterford) SAC or Cork Harbour SPA.
Cork County Development Plan 2014	**Objective HE 2-1: Site Designated for Nature Conservation** Provide protection to all natural heritage sites designated or proposed for designation under National and European legislation and International Agreements, and to maintain or develop linkages between these. This includes Special Areas of Conservation, Special Protection Areas, Natural Heritage Areas, Statutory Nature Reserves, Refuges for Fauna and Ramsar Sites.	The proposed project works surveys will not adversely affect the Qualifying Interests/Special Conservation Interests associated with the Great Island Channel SAC, Blackwater River (Cork/Waterford) SAC or Cork Harbour SPA.
	Objective HE 2-7: Control of Invasive Species Control the spread of invasive plant and animal species within the county.	The proposed project will not cause the spread or cause invasive species to be spread within the areas associated with the proposed project works.

In the review of the plans and projects that was undertaken, no connection, that could potentially result in in-combination effects was identified. There was no potential for different (new) impacts resulting from the combination of the various projects and plans in association with the proposed retention and development identified.

Taking into consideration the reported impacts from other plans and projects in the area and the predicted impacts with the proposed development, no potential for cumulative impact exists.

The proposed works, by itself, does not have the potential to result in any significant direct or indirect effect on any European Site. As a result, the proposed project works will not contribute to any potential cumulative effect on any European Site when considered in combination with other plans and projects.

4 ARTICLE 6(3) APPROPRIATE ASSESSMENT SCREENING STATEMENT AND CONCLUSIONS

The findings of this Screening Assessment are presented following the European Commission's Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2001) and Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2018) as well as the Department of the Environment's Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DoEHLG, 2010).

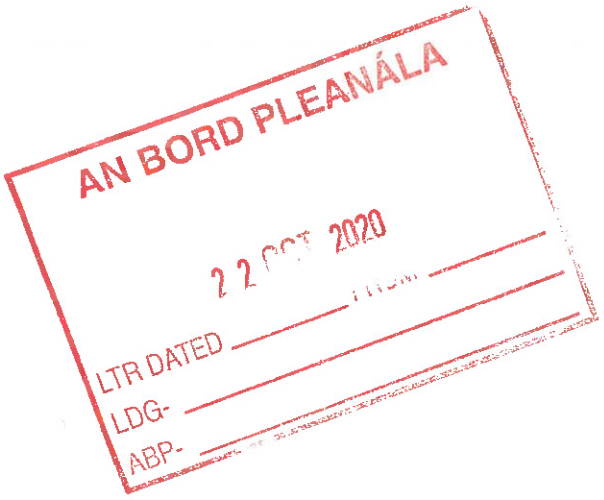
4.1 Data Collected to Carry Out Assessment

In preparation of the report, the following sources were used to gather information:

- Review of NPWS Site Synopses, Nature Standard Forms and Conservation Objectives for the European Sites.
- Review of OS maps and aerial photographs of the site of the proposed project.
- Site visit conducted on the 19th August 2020 Olivia O'Gorman (B.Sc., M.Sc.).

4.2 Concluding Statement

It can be excluded on the basis of objective evidence, that there will be likely significant effects on European sites from the project alone, or in combination with other plans or projects.



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APPENDIX 2

EIA SCREENING REPORT

Planning and Environmental Consultants

EirGrid CP0901 – Kilbarry-Knockraha No. 2 110 kV Line Renewal and Alteration

Environmental Impact Assessment Screening Report

DOCUMENT DETAILS

Client:	EirGrid Plc
Project Title:	CP0901 Kilbarry-Knockraha No. 2 110 kV Line Section 5 Declaration
Project Number:	**200532**
Document Title:	Environmental Impact Assessment Screening Report
Document File Name:	**200532 EirGrid CP0901 EIASR 30.09.20 F**
Prepared By:	**MKO** **Tuam Road** **Galway** **Ireland** **H91 VW84**

Planning and Environmental Consultants

Rev	Status	Date	Author(s)	Approved By
03	Final	30/09/2020	JB	JG

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1. INTRODUCTION

1.1 Project Background

MKO has been commissioned by EirGrid plc to complete an Environmental Impact Assessment (EIA) Screening Report to accompany a Section 5 Declaration of Exempted Development in relation to the renewal and altering of the existing Kilbarry-Knockraha No. 2 110 kV transmission line in the townlands of Kilbarry, Ballincolly, Ballyvolane, Arderrow, Ballyharoon, Bandulf, Poulacurry North, Poulacurry South, Ballinglanna, Corbally North, Corbally South, Ballynagarbragh, Lackenroe, Ballycurreen, Ballynagaul, Killeena, Ballynanelagh, Co. Cork.

The Kilbarry-Knockraha No. 2 110 kV transmission line was constructed over three phases with structures 1-7 built in 1954, structures 62-75 built in 1964 and structures 7-62 built in 1974. The Kilbarry – Knockraha No. 2 110 kV overhead line (OHL) comprises 75 no. individual structures along its length; specifically, the 110 kV OHL is constructed of double wood polesets (55 no.) at intermediate locations, galvanised steel angle masts (18 no.) where the direction of the OHL changes and galvanised steel end masts (2 no.), as described below in Table 1, where the line terminates at Kilbarry and Knockraha 110 kV Substations.

Table 1. Transmission Infrastructure - Kilbarry – Knockraha No. 2 110 kV

Infrastructural Type	Physical Description	Height	Kilbarry – Knockraha No. 2 110 kV Structure No.
End Mast Tower	End masts are steel lattice towers. They are designed to take the tension of the line in only one direction and are therefore generally shorter and heavier in construction.	12.5m-14m	1, 75
Double Current (DC) Intermediate Mast Tower	Double circuit intermediate towers are steel lattice suspension towers which are designed to ensure clearances are maintained on two circuits.	22.1m-32.1m	4, 6
DC Angle Mast Tower	Double circuit angle masts are steel lattice tower constructions. They are designed to support directional change and also maintain the required clearances for two circuits. They are heavier duty than suspension towers.	22m-27m	3, 5, 7
Angle Mast Tower	Single circuit angle masts are steel lattice tower constructions. They are designed to support directional change and are therefore heavier duty than suspension towers or intermediate polesets.	12.5m-14m	2, 9, 10, 20, 28, 32, 34, 35, 45, 46, 63
Strain Intermediate (INT) Tower	A strain intermediate tower is a steel lattice tower. They are designed to take the tension of the line in only one direction and are therefore shorter and heavier in construction than suspension towers.	11m-24m	37, 52
Portal Intermediate Poleset (IMP) (Wooden)	At 110 kV, these consist of two wooden poles (portal), treated with creosote, with a steel cross arm. The insulators and conductors are supported via this cross arm.	11m - 22m	8, 11-19, 21-27, 29-31, 33, 36, 38-44, 47-51, 53-62, 64-74

This EIA Screening assessment was undertaken to determine if an EIA is required for the proposed works in their entirety as set out in the mandatory and discretionary provisions of the Planning and Development Act 2000 (as amended) ('the Act') and set in Schedule 5 of the Planning and Development Regulations 2001 (as amended) ('Regulations').

Information on the proposed renewal and alteration works to the Kilbarry-Knockraha No. 2 110 kV transmission line is provided in Section 2. Additional information is provided in the Screening for

Appropriate Assessment which has also been submitted in support of the Section 5 Declaration for Exempted Development for these proposed works.

1.2 Site Location and Context

The existing Kilbarry – Knockraha No. 2 110 kV line, as shown in Figure 1, is located on the northern outskirts of Cork City. The transmission line traverses a range of semi-rural and rural agricultural greenfield and high density urban environments along its route between Kilbarry and Knockraha 110 kV substations.

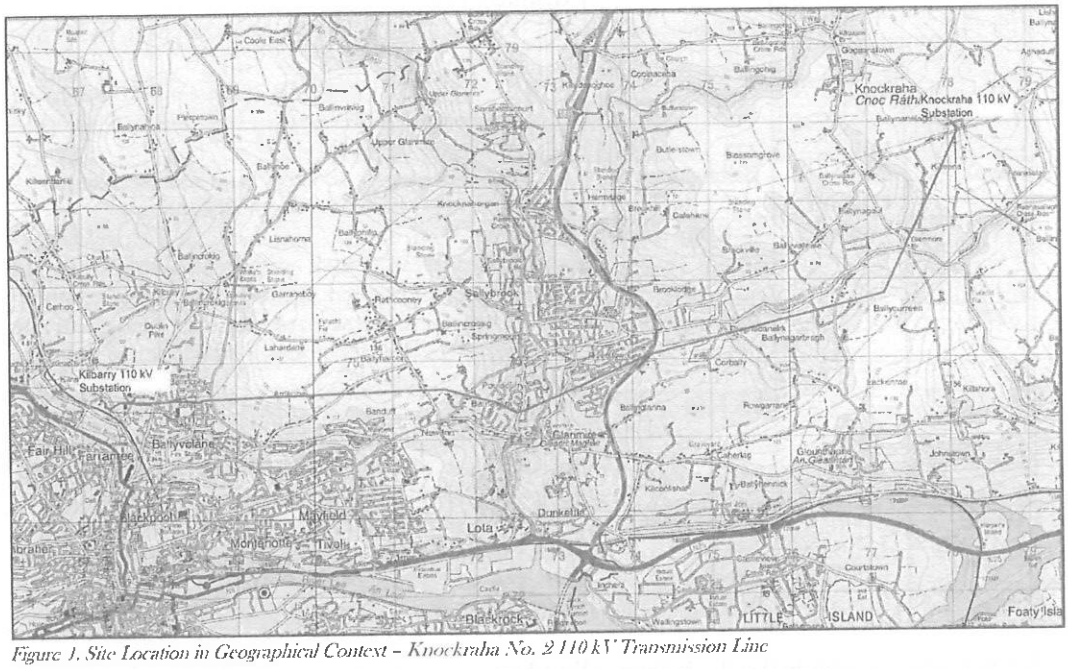

Figure 1. Site Location in Geographical Context – Knockraha No. 2 110 kV Transmission Line

Table 2 below provides a high level contextual analysis of the Kilbarry – Knockraha No. 2 110 kV line within the Cork County Council and Cork City Council administrative boundaries.

Table 2. Site Context - Kilbarry - Knockraha No. 2 110 kV

Structures	Local Authority	Townland(s)	Site Context
1-4	Cork City Council	Cork City and suburbs	› Outer compound of Kilbarry 110 kV Substation › 110 kV OHL crosses public greenfield space within and adjacent to the Kilbarry Enterprise Centre
5-12		Ballincolly	› DC Angle Mast 05 is located immediately adjacent to residential dwelling within the Thorndale Estate › Crosses through greenfield spaces within high density residential estates: Thorndale, Kinvara and Mervue › 110 kV OHL route is immediately adjacent to St. Aidan's Community College and runs above Kilmorna Heights › Starting at Portal IMP 11, 110 kV OHL crosses semi-rural undulating agricultural greenfield
13-18		Ballyvolane Arderrow	110 kV OHL crosses semi-rural undulating agricultural greenfield
19-26		Ballyharoon Banduff	110 kV OHL crosses semi-rural agricultural greenfield up to Portal IMP 19 Angle Mast 20 is situated within the immediate vicinity of a cluster of 7 no. residential dwellings on Banduff Road

Structures	Local Authority	Townland(s)	Site Context
			Crosses semi-rural agricultural greenfield with low density residential housing in the vicinity of Portal IMP 26
27-29		Poulacurry North	110 kV OHL crosses primarily semi-rural agricultural greenfield with low density residential housing / agricultural infrastructure
30-37		Poulacurry South	110 kV OHL crosses through greenfield spaces within high density residential estates: Crawford, Castlejane and Glanmire Court
38-45		Ballinglanna	› 110 kV OHL crosses over football pitch on E Cliff Road › 110 kV OHL crosses through greenfield spaces and private back gardens within high density Glyntown residential estate
46-47	Cork County Council	Ballinglanna	110 kV OHL crosses primarily semi-rural agricultural greenfield with low density residential housing
48-51		Corbally North	110 kV OHL crosses primarily semi-rural agricultural greenfield with low density residential housing (Portal IMP 52) and commercial infrastructure (Brooklodge East)
52-57		Ballynagarbragh	110 kV OHL crosses primarily semi-rural greenfield with low density residential housing (Portal IMP 53) and rural agricultural greenfield
58-62		Lackenroe	110 kV OHL crosses primarily semi-rural greenfield with occasional low density residential housing and agricultural infrastructure (Portal IMP 59 – Portal IMP 61) and rural agricultural greenfield
63-74		Ballycurreen Killeena	110 kV OHL crosses rural agricultural greenfield with occasional low density residential housing and agricultural infrastructure (Portal IMPs 67, 68 and 71)
75		Ballynanelagh	Outer compound of Knockraha 110 kV Substation

It is important to highlight that the Kilbarry – Knockraha No. 2 110 kV line predates the urban residential environment of north Cork City which has developed along the periphery of the transmission line over the last 50 no. years.

The proposed works are intended to maintain through corrective maintenance, and ultimately safeguard, the operational functionality of the existing Kilbarry – Knockraha No. 2 110 kV line. All proposed works are within the development envelope of the existing equipment and the proposed works do not include for the extension of the line nor is it proposed to alter the overall functionality of the line in the context of the wider transmission system (e.g. no increase in the voltage of the line from the existing 110 kV).

1.3 EIA Legislative Background

The requirement for Environmental Impact Assessment (EIA) has its origins in Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment. This Directive has been amended three times and was codified by Directive 2011/92/EU in 2011. Directive 2011/92/EU was then subsequently amended by Directive 2014/52/EU in 2014.

The primary objective of the EIA Directive (Directive 2011/92/EU), as amended by Directive 2014/52/EU, is to ensure a high level of protection of the environment and human health, through the establishment of minimum requirements for EIA, prior to development consent being awarded, of public and private developments that are likely to have significant effects on the environment.

Directive 2014/52/EU provides a definition of environmental impact assessment as being a process consisting of:

› The preparation of an environmental impact assessment report (EIAR);
› The carrying out of consultations required to inform the EIAR;

- The examination by the competent authority of the information presented in the EIAR and any supplementary information provided, where necessary, by the developer and relevant information received through consultations with the public, prescribed bodies and any affected Member States;
- The reasoned conclusion by the competent authority on the significant effects of the project on the environment; and
- The integration of the competent authority's reasoned conclusion into any development consent decision.

Section 172 of the Act provides the legislative basis for mandatory EIA, and in summary states that EIA must be carried out by the relevant consenting authority in respect of an application for consent where either–

- The proposed development would be of a Class specified in Part 1 or Part 2 of Schedule 5 of the Planning and Development Regulations 2001 (as amended) ("the Regulations"), and would equal or exceed the relevant quantity, area or other limit specified therein. Should no quantity or area of other limit be specified there are some developments which require EIA regardless of size (e.g. integrated works for the smelting of cast iron and steel), or
- The proposed development **would be of a class** specified in Part 2 of Schedule 5 of the Regulations **and not reach** or exceed the relevant quantity, area or other limit specified, **and it is concluded by the relevant authority** that the development is likely to have a significant effect on the environment.

Section 176 of the Act states that the Minister shall for the purposes of giving effect to the EIA Directive making regulations identifying development which may have significant effects on the environment. Part 10 of the Regulations states that the prescribed classes of development for the purposes of Section 176 of the Act are set out in Schedule 5. Schedule 5 of the Regulations differentiates between the projects that always require EIA and those for which an EIA may be required. These projects are listed in Schedule 5 Part 1 and Part 2 of the Regulations. For the purposes of clarity, please note that the subject works proposed by the Applicant, as detailed below, do not fall into any of the classes set out in either parts of Schedule 5.

1.3.1 Schedule 5, Part 1 Projects

These are projects which are considered as having significant effects on the environment and require a mandatory EIA. The subject works as set out above do not fall under any of the categories set out in Schedule 5, Part 1. The only class of development within Part 1 which could potentially be considered related to the subject works is project description for development type is class 20 which refers to:

> *"Construction of overhead electrical power lines with a voltage of 220 kilovolts or more and a length of more than 15 kilometres."*

The proposed works do not involve the construction of any new overhead electrical power lines, and do not relate to any works with a voltage of 220 kilovolts or more and a length of more than 15 kilometres. Accordingly, the subject works do not exhibit any characteristics associated with the projects identified in Part 1, and therefore, an EIA is not automatically required.

1.3.2 Schedule 5, Part 2 Projects

In the context of Schedule 5, Part 2 projects, the only potentially relevant project type is identified under Class (3)(b) which refers to:

> *"Industrial installations for carrying gas, steam and hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables not included in Part 1 of this Schedule, where the voltage would be 200 kilovolts or more."*

As described in Section 2 of this report, the voltage rate of the Kilbarry – Knockraha No 2, 110 kV line is less than 200 kV. Accordingly the works do not fall under this class.

As the subject works constitute renewal and altering an existing line it is worth referencing Class 13(a), Part 2 Schedule 5, which relates to extensions, changes development and testing, it states the following:

> *"Any change or extension of development already authorised, executed or in the process of being executed (not being a change or extension referred to in part 1) which would:*
>
> *(i) Result in the development being of a class listed in Part 1 or paragraphs 1 to 12 of Part 2 of this Schedule, and*
>
> *(ii) Result in an increase in size greater than –*
>
> *- 25%, or*
>
> *- An amount equal to 50% of the appropriate threshold,*
>
> *Whichever is greater"*

The proposed works will not, however, result in an increase in size, capacity or threshold; specifically, the proposed works do not alter the overall functionality capacity of the line in the context of the wider transmission system. As such, the provisions of Class 13(a) are not applicable.

1.3.3 Sub-threshold EIA Screening Considerations

As the proposed works are not a type of project identified in Schedule 5 Part 1 or Part 2 of the Regulations, there is no automatic requirement under the EIA Directive for it to be subject to EIA. Furthermore as the subject works do not satisfy any of the description criteria set out in Schedule 5 (as the works do not relate to any works on a transmission line exceeding 200kV, there should be no requirement to consider potential sub-threshold effects (i.e. as there are no thresholds established within Schedule 5 for altering and renewal of an existing 110kV line. Notwithstanding, this fact however, in the interests of completeness, this report continues to consider the potential sub-threshold considerations as set out below.

Section 172(b)(i) of the Act also sets out the basis for EIA for developments which may not be of a scale included in Schedule 5 of the Regulations but for which EIA may yet be required.

> *"(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*
>
> *(ii) it is concluded, determined or decided, as the case may be by ...[*the relevant authority*]...that the proposed development is likely to have a significant effect on the environment"*

This allows a consenting authority to require EIA where it is of the opinion that the proposed development (although sub-threshold) is likely to have significant effects on the environment, and therefore should be subject to EIA. As set out previously, while the subject works do not fall within a class of development set out in Part 2 of Schedule 5, and as such, no threshold applies, and accordingly, nor can the need for a subthreshold EIA. Nonetheless, in the interests of completeness the subthreshold considerations are set out below.

In this context, the consideration of 'significant effect' should not be determined by reference to size only and the nature and location of a project must also be taken into account. Class 15 of Schedule 5 provides for EIA/EIAR for developments under the relevant threshold, where the works would be likely to have significant effects on the environment.

> *"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."*

Notwithstanding the fact that, as set out above, none of the statutory thresholds in Part 2 of Schedule 5 of the Regulations are applicable to the subject works, a sub-threshold EIA Screening Report has been

prepared. When considering or making a determination as to whether EIA is required Schedule 7 of the Regulations sets out the criteria for determining whether development listed in Part 2 of Schedule 5 should be subject to an EIA while schedule 7A sets out the information to be provided by the applicant or developer for the purposes of screening sub-threshold development for environmental impact assessment. The criteria for assessment under the provisions of Schedule 7 are 1) *Characteristics of proposed development*, 2) *Location of proposed development*, and 3) *Types and characteristics of potential impacts*. The Schedule 7A information requirements constitutes:

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. *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.*

The information required by Schedule 7 and 7A has been set out in Sections 2 and 3 below. The assessment of the criteria set-out on Schedule 7 provides the description and assessment of any likely significant effects from the proposed development.

1.3.4 Other Relevant Guidelines

In addition to the various requirements of the Planning Regulations, the following guidance was also considered in the preparation of this EIA Screening Report:

- The Planning and Development Acts 2000 (as amended) and the Planning and Development Regulations 2001 (as amended);
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, Department of Housing, Planning and Local Government, August 2018;
- Guidance on EIA Screening (Directive 2011/92/EU as amended by 2014/52/EU), European Commission, 2017;
- Draft Guidelines on the Information to be Contained in Environmental Impact Assessment Reports, EPA, Draft, August 2017;
- Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government 2009; and
- The Planning System and Flood Risk Management, Guidelines for Planning Authorities, Department of the Environment, Heritage and Local Government and the Office of Public Works, 2009.

2. DESCRIPTION OF THE PROPOSED WORKS

Corrective maintenance / renewal requirements are proposed which can be broadly grouped under the following headings:

1. ***Paint / Corrosion Treatment of Steel Towers***: Painting and corrosion treatment of existing steel structures;
2. ***Replacement of Wooden Polesets***: Removal of all hardware (including crossarm and insulators), installation of new poles and fittings / hardware, new or existing crossarm and new or existing insulators followed by the cutting and removal of old polesets;
3. ***Replacement of Existing Steel Intermediate Towers with Wooden Intermediate Polesets:*** Removal of existing structure, fittings and foundations, followed by installation of new intermediate polesets and installation of fittings/hardware;
4. ***Replacement of Insulators and Hardware:*** Removal of existing hardware and insulators followed by the installation of new hardware and insulators;
5. ***Civil Works on Tower Shear Blocks:*** Reinforcement of shear blocks; and
6. ***Ancillary Site Works*** including the replacement and/or repair Anti-Climbing Guards

It is important to emphasise that the proposed works are intended to maintain, and ultimately safeguard, the operational functionality of the existing Kilbarry – Knockraha No. 2 110 kV line. The renewal and alteration of the 110 kV OHL will not result in any material changes to the appearance or functionality of the line. Specifically, all works are within the development envelope of the existing equipment and no extension of the line is proposed. The replacement of wooden polesets will be located immediately adjacent to the locations of the in-situ structures on the same alignment and will not be materially different in the context of the overall alignment of the 110 kV OHL.

The proposed works to the 110 kV OHL will require access for equipment such as tracked excavators, concrete delivery vehicles, mobile cranes, mobile elevated work platforms etc. As a number of structures are located on agricultural lands and in close proximity to residential dwellings, gaining access to these lands to carry out the proposed works will be coordinated with relevant stakeholders in accordance with the relevant ESB/IFA Code of Practice and relevant statutory provisions. It should also be noted that the undertaking of the proposed works is dependent on outage availability. Cork County Council and Cork City Council would be notified in advance of any work commencing on the line.

Details of the proposed renewal and alteration works are outlined below in the following sections.

2.1 Paint / Corrosion Treatment of Steel Towers

Corrosion is treated by specialist contractors who climb the tower using safe tower climbing methods, treat the corrosion and paint the tower. The painting and corrosion treatment of the identified steel towers (01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 28, 45, 63, 75) will be undertaken in line with ESB's work practice as outlined below, to comply with technical requirements:

- An impervious sheet will be laid on the existing ground under the mast base to prevent paint from dripping to the soil;
- A cleaning agent will first be applied to the towers and then cleaned by means of wire brushing or sanding. When dry, a primer and top coat of paint will be applied; and
- The paint specification will provide protection to the steel for a minimum of 15 no. years. The top coat of matt grey will remain the same and there will be no deviation to the visual appearance of these structures.

2.2 Replacement of Wooden Polesets

Thirty five wooden pole-sets will be replaced as part of the proposed renewal and alteration works.

The replacement of the identified wooden polesets may result in an increase in height of up to 2m at certain points along the 110 kV OHL dependent on local topographical variation (please refer Section 4 (Precedent Cases) of the S5 Declaration Report submitted with this application for details of precedent case law on increase in height of electrical infrastructure). However, any minor height increase of a wooden poleset as a consequence of the proposed works will still be in proportion relative to other structures along the alignment. A typical wooden poleset (Portal IMP) for a 110 kV line is shown in Figure 2 below and Appendix 3 of the Section 5 Declaration Report. Typical 110 kV wooden polesets range in height from 16m to 22m as described above in Table 1.

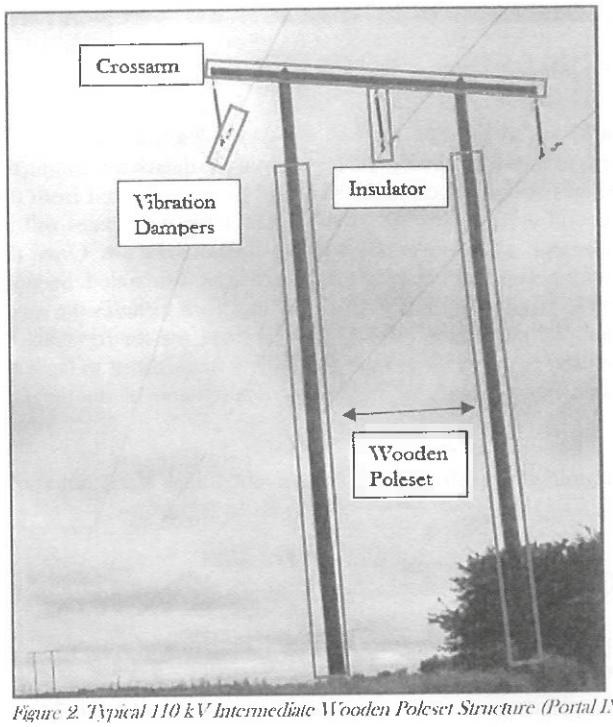

Figure 2. Typical 110 kV Intermediate Wooden Poleset Structure (Portal IMP)

Where a wooden poleset is being replaced, the crossarm, insulators and hardware will either be reused, or alternatively, new crossarms and equipment will be installed. The final appearance of the newly installed wooden polesets will be consistent with the existing structures. Please refer to Appendix 3 of the Section 5 Declaration Report for typical plans of the proposed 110 kV 'Lines Suspension Portal Wood Pole Set' transmission structures.

The installation of replacement polesets will be undertaken in line with established best practice as outlined below:

- Transportation of two wooden poles, crossarm (where required) and insulators and hardware (where required) to the area immediately adjacent to the poleset due to be replaced;
- The replacement poles will be installed to a minimum depth below ground of 2.3m. The estimated working area for construction of a wooden poleset is 10m^2 around the base of the poleset. The excavation for each hole will be carried out using a wheeled or tracked excavator;
- Each of the two poles are lined up with the excavated holes and the machine operator will then drive forward pushing the pole up until the pole is in an almost vertical position. If the crossarm is to be replaced as part of the identified works, the new crossarm is attached to one pole;
- The pole is supported at all times and the holes manually backfilled initially to a minimum depth of 1.0m to ensure temporary stability prior to installing the sleepers. Should the ground conditions be poor, additional stability will be provided by installing stay wires. Following the initial backfilling, a strip approximately 2.7m long is excavated to a depth of 0.8m parallel to the line. This is necessary to install the rectangular wooden sleepers which add additional stability to the poleset and are attached to the poles using U-bolts; and

- The two installed poles are connected near the top by a steel crossarm from which insulators are attached. The existing conductor is then attached to these insulators. Where the existing crossarm is to be retained, the crossarm is detached from the decommissioned poles and lifted into place and attached to the newly installed poles

Once the new wooden poleset is installed, the decommissioned poleset will be cut at the base 1m below ground level and removed from the site for recycling by a licensed waste contractors and hauliers.

2.3 Replacement of Existing Steel Intermediate Towers with Wooden Intermediate Polesets

Intermediate Mast 08 and Strain INT Mast 33 are to be replaced with wooden polesets due to their age and condition. Prior to commencing any works to the structures, it will be necessary to detach the conductor and fibre wrap from the towers. The detached conductor and fibre wrap will be disconnected from the mast and connected to temporary poles erected adjacent to the location. The temporary poles will be erected in the same manner as the replacement of wooden polesets, as discussed below. Once the conductors have been diverted to the temporary poleset, the body of the tower will be dismantled. Sections of the tower will be unbolted and lifted down to ground level. The final section, which includes the tower legs will be cut at ground level and removed. All steelwork will be removed from site for recycling by licensed waste carriers. An excavator will be used to excavate around the existing foundations to facilitate their removal. New wooden polesets will then be installed, subject to the requirements of the detailed design.

The installation of the replacement wooden polesets will follow the same methodology as set out above under Section 2.2.

2.4 Replacement of Insulators and Hardware

There are a number of glass anti-fog type insulators exhibiting corrosion in addition to several cases of corrosion and wear to associated hardware. Vibration dampers were also found to be fatigued or missing at a number of sites. Four polesets require the replacement of insulators and hardware only (18, 54, 72 and 74).

The insulators and hardware holding the conductor are attached to steel crossarms linking the wooden poles. The replacement of the insulators and hardware will require the disconnection of the conductor from existing insulators and hardware. The weight of the conductors can be supported by a strap attached to the crossarm. The insulators and hardware are then accessed by a Mobile Elevated Work Platforms (MEWP) where the insulator is supported by straps as it is unbolted and removed. New insulators and hardware are fitted, conductors are re-attached and decommissioned insulators and hardware / equipment are removed. Replacement crossarms, if required, will be lifted into position with a lifting device such as a pulley system or telescopic handler. A typical Transmission Tower Structure for a 110 kV line is shown in Figure 3 below and included within Appendix 3 of the Section 5 Declaration Report.

The decommissioned equipment will be stored under appropriate conditions until it can be recycled or disposed of through licensed waste contractors and hauliers.

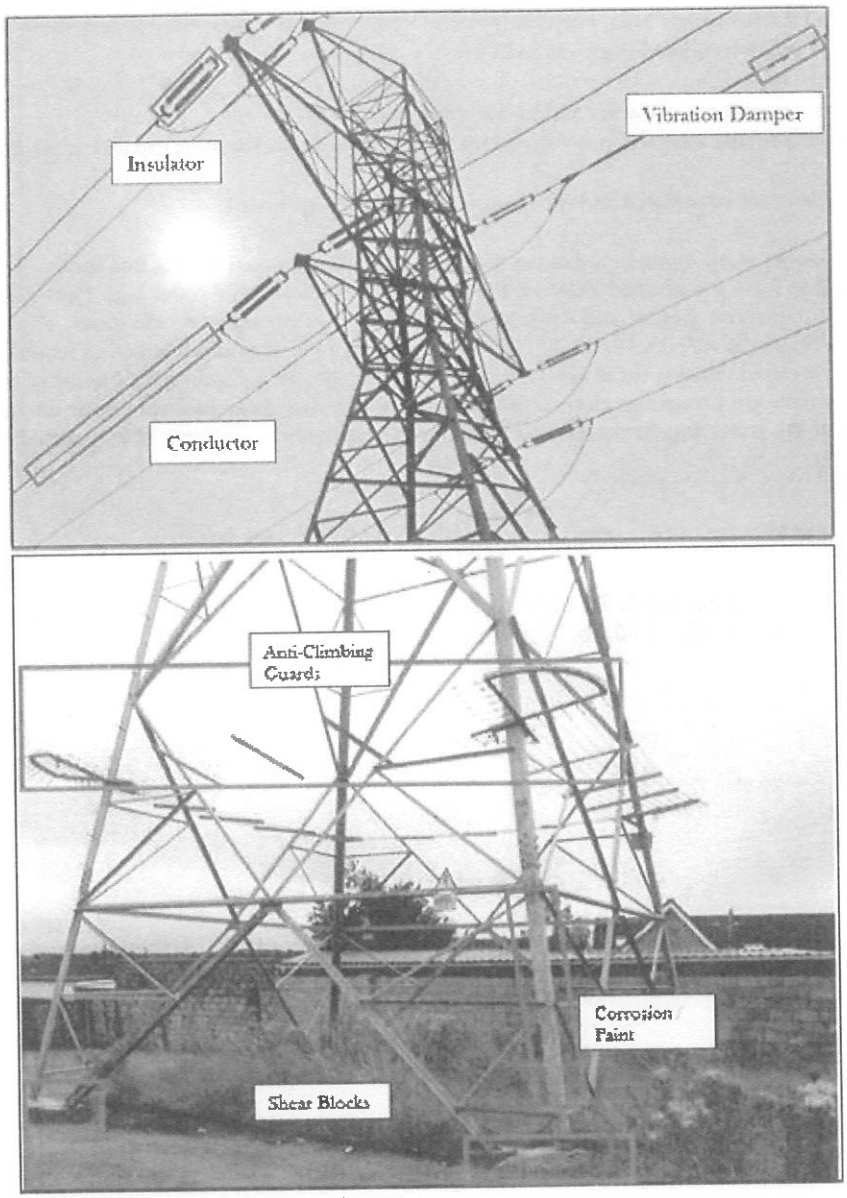

Figure 3. Example Transmission Tower Structure

2.5 Civil Works on Tower Shear Blocks

Site investigation works of the existing tower foundations were undertaken as part of the LCA to determine the foundation dimensions and conditions along with the ground conditions of the tower sites. In line with ESB specification, the tower foundations were assessed to determine whether they were of sufficient size to cater for the overall weight of the OHL. Concrete cores were also retrieved to determine the compressive strength of the concrete within the existing foundations. The following information was gathered from the site investigations:

- Foundation size;
- Foundation concrete strength and condition; and
- Soil Characteristics and bearing capacity

Typical steel angle masts have four legs each with their own individual and independent foundation block; specifically, 2 no. of the legs will be in compression with the remaining 2 no. legs being in tension. In order

to assess the stability of the steel angle mast, one compression leg foundation was exposed at each tower for investigation. The investigation methodology was as follows:

- Concrete cores were extracted and in-situ measurements recorded;
- Dynamic probing was carried out on all sites to establish the soil bearing capacity at the site; and
- Concrete cores were tested and the compression strength recorded.

The concrete shear blocks of all tower foundations were also visually examined during this survey. The shear blocks are used to form a watershed between the tower foundation and the tower legs. Part of the shear block will be visible above ground and work to it is considered maintenance to the tower. Fifteen tower structures (03, 04, 05, 06, 07, 09, 10, 20, 28, 32, 34, 35, 45, 63 and 75) were identified as requiring their shear blocks to be raised. Raising shear blocks consists of pouring concrete around the bottom of the tower leg. Concrete trucks are brought as close as possible to the exposed shear blocks to pour directly around the bottom of the tower leg. In the event of this not being possible, concrete is transported in dumpers.

2.6 Ancillary Works

A number of existing anti-climbing guards are to be replaced or repaired with addition of locks in some cases (in tower structures 01, 02, 03, 04, 05, 06, 07, 09, 10, 20, 32, 33, 34, 35, 45 and 63).

3. SCHEDULE 7 CRITERIA

Tables 3.1, 3.2 and 3.3 below set out the Schedule 7 considerations in relation to the criteria for determining whether development listed in Part 2 of Schedule 5 should be subject to an EIA.

3.1 Characteristics of the proposed development

Table 3.1 – Characteristics of the proposed development

Criteria	Analysis
Will the size and design of the whole project be considered significant?	No. The existing Kilbarry – Knockraha No. 2 110 kV overhead line (OHL) comprises 75 no. individual structures along its length; specifically, the 110 kV OHL is constructed of double wood polesets (55 no.) at intermediate locations, galvanised steel angle masts (18 no.) where the direction of the OHL changes and galvanised steel end masts (2 no.). These transmission structures range from 11m in height (i.e. Strain Intermediate (INT) Tower and Portal Intermediate Poleset (IMP) (Wooden)) to 32m in height (i.e. Double Current (DC) Intermediate Mast Tower). The intermediate wooden polesets are embedded in the soil typically to a depth of 2.3m whereas the steel angle masts have concrete foundations under each leg extending c. 2.5 x 2.5m and to a depth of 3m. The proposed works will not result in any material changes to the overall appearance or functionality of the line. The proposed scope of work within the Cork County Council functional area does not include the replacement of steel towers with wooden polesets or vice versa; specifically, where replacement of infrastructure is proposed, it is on a like for like basis. The proposed replacement of Intermediate Mast 08 and Strain INT Mast 33 towers with wooden polesets within the Cork City functional area will be of less visual significance from what is currently in-situ and will not give rise to any significant impacts on environmental media. Furthermore, the 110 kV OHL already includes 55 no. double wooden polesets, which is over half of the transmission structures comprising the line. The overall size and design of the project is therefore not considered significant in the context of EIA.
Will the project have a significant impact when considered in cumulation with other existing and/or approved projects?	No. The Cork County Council and Cork City Council planning databases were searched on the 9th September 2020 to determine if any nearby plans or projects within a 1km radius of the existing Kilbarry – Knockraha No. 2 110 kV OHL were likely to result in cumulative impacts. Due to the urban setting of the Cork City Council functional area, there is significant massing of development within the immediate vicinity of the 110 kV OHL line relating to transmission and telecommunication infrastructure, industrial and warehousing, residential (new build and alterations/extensions) and community infrastructure development. The Cork County Council functional area, in which the 110 kV OHL traverses for c. 5.4km, is less developed in comparison with pockets of commercial /warehousing infrastructure (Brooklodge East) near the City/County boundary. The majority of planning applications lodged in the immediate vicinity of the 110 kV line within the Cork County Council functional area relate to the provision and/or alteration of residential development and ancillary agricultural infrastructure.

<table>
<tr><th>Criteria</th><th>Analysis</th></tr>
<tr><td></td><td>A consolidated list of projects for both Cork City and Cork County functional areas include, but are not limited to:
<table>
<tr><th>Cork County Council Functional Area</th><th>Cork City Council Functional Area</th></tr>
<tr><td>Pl Ref. 13/6402 / PL04.244030: Extension of the existing 220 kV substation busbar in an easterly direction by approximately 109m including the installation of 2 no. 220 kV wing couplers, 2 no. sectionalising circuit breaker bays with associated equipment, 6 no. 24m lightning masts and 2 no. new line bays with associated equipment (Grant - 19/05/2015)</td><td>Pl Ref. 10/3448: Alterations to the existing ESB Kilbarry 110 kV Substation (Grant – 27/08/2010)</td></tr>
<tr><td>Pl Ref. 14/4361: Permission for the continued use of the existing 36 metre high, free standing communications structure (Grant – 01/10/2014)</td><td>Pl Ref. 13/4658: Construction of a two storey standalone extension to the north of the existing two storey and single storey school buildings (Grant – 02/09/2013)</td></tr>
<tr><td>Pl Ref. 15/6755: Construction of a dairy washings tank and an animal house (Grant – 18/03/2016)</td><td>Pl Ref. 15/36393: Alterations to existing ESB Kilbarry 110 kV Substation (Grant – 31/07/2015)</td></tr>
<tr><td>Pl Ref. 17/4964: Construction of a dwelling house and all associated site works (Grant – 20/07/2017)</td><td>Pl Ref. 15/6722: Construction of 54 no dwellings, all ancillary car parking, landscaping and site developments works (Grant – 30/06/2016)</td></tr>
<tr><td>Pl Ref. 17/5758: Extension of Duration - Warehouse building comprising of 2 no. units (site development works granted under Planning Reg. No: 10/5518) (Unconditional – 31/08/2017)</td><td>Pl Ref. 17/37392 / ABP-300653-18: Permission to the demolition of the existing industrial buildings on site and the construction of 81 no. residential units at a site which formed part of the former sunbeam factory complex (Grant – 10/04/2018)</td></tr>
<tr><td>Pl Ref. 17/6655: Construction of dwellinghouse (Grant - 29/06/2018)</td><td>Pl Ref. 17/7137 / ABP-301637-18: Construction of 25 no. dwelling units and all associated ancillary development works (Conditional Grant – 02/01/2018)</td></tr>
<tr><td>Pl Ref. 19/4197: Erect a 2 storey dwellinghouse (Grant – 27/03/2019)</td><td>Pl Ref. 18/6756: The construction of a two storey dwellinghouse domestic waste water treatment system, vehicular entrance and all associated site works (Grant – 3/05/2019)</td></tr>
<tr><td>Pl Ref. 20/4297: Construction of 2 no. detached dwellinghouses (Grant – 10/07/2020)</td><td>Pl Ref. 19/38211: Permission for the construction of a new 110kV Gas Insulated Switchgear (GIS) building, located entirely within the footprint of the existing Kilbarry 110 kV Substation (Grant – 16/07/20)</td></tr>
<tr><td></td><td>Pl Ref. 19/38922: Permission for demolition of existing shed and construction of 4 no dwelling houses and all associates site development works (Grant – 28/06/20)</td></tr>
</table></td></tr>
</table>

Criteria	Analysis
	Pl Ref. 19/38927: Retention of an existing 15m telecommunications structure with all associated equipment and cabin within a fenced compound (Grant – 20/03/2020)
	Pl Ref. 20/039410: Permission for change of use from manufacturing purposes, offices, distribution depot and storage to manufacturing purposes, offices, distribution depot and storage including electronic recycling (Decision Due)

Construction

The main potential for cumulative impacts is associated with construction phase is traffic in the event that select projects (i.e. Planning Refs. 19/38211, 20/4297 and 19/38922, as referenced above) are progressed within the same time periods due to their general proximities. As the proposed works to the 110 kV OHL will require access for equipment such as tracked excavators, concrete delivery vehicles, mobile cranes, mobile elevated work platforms etc, there will be an increase in construction / vehicle movement on the local road network. Notwithstanding, these renewal and alteration works have short construction durations (c. 2-3 days) with the replacement of Intermediate Mast 08 and Strain INT Mast 33 with wooden polesets requiring c. 7 days. As such, it is considered significantly unlikely to result in any discernible significant cumulative effects on general mobility / accessibility of the local road network with any other construction projects in the vicinity. As the proposed works will be confined to the development envelope of the existing 110 kV OHL (c. 10m buffer on either side of the transmission line), the potential for significant environmental emissions (e.g. noise, air, water and land/soils) with other projects is considered minimal. Furthermore, the nature of the proposed renewal and altering works (refurbishment / replacement of existing structures) are not inherently invasive, and where excavation and the de-construction of existing structures is required, these works will be undertaken in accordance with established best practice which will further control potential cumulative effects.

Operation

Due to the type and nature of technology utilised and ancillary structures comprising the 110 kV Kilbarry-Knockraha 110 kV No. 2 OHL, there are no discernible operational emissions arising from the development.

From a landscape perspective, the surrounding built environment has generally developed around the 110 kV OHL, and consequently, the line has become an established landscape structure. The replacement of the identified wooden polesets may result in an increase in height of up to 2m at certain points along the 110 kV OHL dependent on local topographical variation. However, any minor height increase of an intermediate wooden poleset as a consequence of the proposed works will still be in proportion relative to other structures along the alignment. Furthermore, the minor increase in height, if and where applicable, will largely be indiscernible to receptors given the scale and established nature of the development. The proposed replacement of Intermediate Mast 08 and Strain INT Mast 33 with wooden polesets, which are significantly reduced in scale and visual prominence, will result in lower visual impacts.

In conclusion, potential cumulative environmental impacts/emissions are not considered significant.

Criteria	Analysis
Will the project involve the use of natural resources, in particular land, soil, water and biodiversity? Is the use of these natural resources considered significant?	No, the use of natural resources is not considered significant. The project will involve only limited use of natural resources. All works associated with the renewal and alteration of the 110 kV OHL will be undertaken within the development envelope of the existing equipment, and furthermore, the proposed works are maintaining and renewing existing infrastructure insofar as practicable, the works do not result in the extension of the line. The replacement of wooden polesets will be located immediately adjacent to the locations of the in-situ structures on the same alignment and will not be materially different in the context of the overall alignment of the 110 kV OHL. As such, there will be a very minor requirement for additional land-take, and where required, these lands will be within the development envelope / corridor of the line. There are no raw / process water requirements associated with the proposed works. There are no ecological receptors of significance located within the proposed development site. The existing Kilbarry-Knockraha No. 2 110 kV Line passes over a number of different habitat types which are predominately comprised of residential areas and roadways classified as Buildings and Artificial Surfaces (BL3), Amenity Grassland (GA2), Improved Agricultural Grassland (GA1), Dry meadows and grassy verges (GS2) scattered areas of Scrub (WS1) and Hedgerows (WL1) which are often associated with Earthen banks (BL2) and stonewalls classified as Stonewalls and other stone work (BL1). There were no Qualifying Interests (Qis) of SACs, or Special Conservation Interests (SCIs) of SPAs recorded during the site visit. There are 3 no. European designated sites within the general setting of the 110 kV OHL: Great Island Channel Special Area of Conservation (SAC) (001058), c. 2.4km south-east, Blackwater River (Cork/Waterford) SAC (002170), c. 9.1km north; and Cork Harbour Special Protection Area (SPA) (004030), c. 433m south. The Appropriate Assessment Screening Report prepared by MKO concludes, it can be excluded on the basis of objective evidence, that there will be likely significant effects on European sites from the project alone, or in combination with other plans or projects. Overall, it is considered that the use natural resources is not considered significant.
Will the project produce a significant volume of wastes?	No. Due to the nature and scale of the proposed renewal and altering of the Kilbarry – Knockraha No. 2 110 kV overheard transmission line, the project will not produce a significant volume of waste. All proposed works will be managed and programmed in such a manner as to prevent/minimise waste production and maximise upper tier waste management (i.e. re-use, recycle, and recovery) where technically and economically feasible. The replacement of wooden polesets and the decommissioning / excavations required for replacement structures will be managed to ensure a 'cut-and-fill' balance will be adhered to during the proposed works which will maximise the re-use of material excavated from groundworks for land reinstatement whilst minimising the potential for waste production. The decommissioned equipment (insulators, hardware, wooden poles, steel structures and etc.) will be stored under appropriate conditions until it can be recycled or disposed of by licensed waste contractors and hauliers in a manner which will not adversely affect the environment.

Criteria	Analysis
Will the project result in significant pollution or nuisance?	No. The proposed works will be confined to the development envelope of the existing 110 kV OHL and does not provide for any extension of the line. Furthermore, due to the nature and scale of the proposed works, the duration of the works at any given structure will be short (c. 2-3 days and up to 7 no. days for the replacement of Intermediate Mast 08 and Strain INT Mast 33) thus potential construction impacts, e.g. noise, traffic, air, will be localised and temporary. The works will be undertaken in compliance with standardised best construction practice. As a number of structures are located on agricultural lands and in close proximity to residential dwellings, gaining access to these lands to carry out the proposed works will be coordinated with relevant stakeholders in accordance with the relevant *ESB/IEA Code of Practice* and relevant statutory provisions. The construction areas around the transmission structure assets will be reinstated as close as possible to their original condition in accordance with the relevant ESB Code of Practice for Survey and in consultation with the individual landowners. No significant pollution or nuisance impact at proximate residential receptors is envisaged providing that best design and construction practice is followed.
Will the project result in a 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?	No. The proposed corrective maintenance / renewal requirements for the Kilbarry – Knockraha No. 2 110 kV transmission line has been designed in accordance with EirGrid's standards for this type of development. The proposed works comply with the technical and operational requirements for set out in the appropriate National and International standards. On-going maintenance, e.g. the proposed works, as undertaken by the TAO, maintain, and ultimately safeguard, the operational functionality of the existing110 kV line. In relation to climate change, and particularly, the increased risk of flooding arising from same, the proposed works areas are not identified as being at risk of flooding. Potential flood risk for the 110 kV OHL has been considered in accordance with the *Planning System and Flood Risk Management - Guidelines for Planning Authorities (PSFRM Guidelines)* (Department of the Environment, Heritage and Local Government, [DOELG], November 2009). While the 110 kV line (conductor) traverses lands classified as having 10 % AEP Flood Extent (1 in 10 chance in any given year) associated with the Glashaboy River, between Portal IMP 37 and Portal 38, it is important to emphasise that there are no proposed works to Portal IMP 37 nor 38 as part of this proposal. Furthermore, there are no proposed works located within, or adjacent to, to this flood risk zone nor are there any further flood risk zones. The PSFRM Guidelines conclude that essential infrastructure, such as the existing 110 kV OHL, is considered appropriate for land classified as Flood Zone C due to the low vulnerability for flooding. There will be no change in the capacity within the development envelope of the 110 kV OHL to infiltrate rainwater as a result of the proposed renewal and alteration for the line. Any clean stormwater run-off from periods of heavy precipitation will continue to discharge the surrounding lands as currently occurring; thus, increased risk of flooding elsewhere from the proposed works is negligible.
Will the project result in any risks to human health (e.g. due to water contamination or air pollution)?	No. The proposed works will be confined to the development envelope of the existing 110 kV OHL and does not provide for the extension of the line. Furthermore, due to the nature and scale of the proposed works, the duration of the works at any given structure will be short in duration thus potential construction impacts, e.g. noise, water, air, will be localised and temporary. The works will be undertaken in compliance with standardised best practice and all relevant health and safety procedures. As a number of structures are located on

Criteria	Analysis
	agricultural lands and in close proximity to residential dwellings, gaining access to these lands to carry out the proposed works will be coordinated with relevant stakeholders in accordance with the relevant ESB/IFA Code of Practice and relevant statutory provisions. Compliance with these standardised practice parameters will ensure there is no risk to human health. The following measures will be implemented to reduce the risks to human health from air pollution and water contamination during the construction phase of development. There will be no discernible emissions to either air or water (including groundwater) during operation. <u>Air Pollution</u> ○ The pro-active control of fugitive dust will ensure that the prevention of significant air emissions, rather than an inefficient attempt to control them once they have been released, will contribute towards the satisfactory performance of the construction works with regard to proximate receptors; ○ All vehicles carrying materials which could result in emissions to air (e.g. dust, etc.) will be fully sheeted in order to prevent any adverse effects to residential receptors and air quality within the locality. It should be noted that the transportation of materials and equipment (e.g. wooden poles, hardware) and decommissioned transmission assets (steel structures and wooden poles) are not considered to pose a threat to air quality ; ○ Material handling systems and site stockpiling of materials will be designed and laid out to minimise exposure to wind; ○ Re-vegetate earthworks and exposed areas/ soil stockpiles to stabilise surfaces as soon as practicable; <u>Groundwater Contamination</u> ○ All decommissioned plant, equipment and machinery will be dismantled and stored under appropriate conditions until it can be recycled or disposed of through licensed waste contractors and hauliers; ○ Spill-kits and hydrocarbon absorbent packs will be stored in the cabin of each vehicle and operators will be fully trained in the use of this equipment; ○ Drip trays will be used where hydrocarbons are being used for vehicle maintenance/refuelling; ○ All plant will be inspected at the beginning and end of each shift and if leaks are evident, they are to be repaired immediately or removed from site and replaced; ○ No on-site concrete batching will be permitted within the site boundary. Concrete will instead be transported to the site within a concrete truck; and ○ Concrete works will be scheduled during dry weather conditions to reduce the elevated risk of runoff

3.2 Location of Proposed Development

Table 3.2 – Location of proposed development

Criteria	Analysis
What is the existing and approved land use?	The Kilbarry – Knockraha No. 2 110 kV line is located within the functional areas of Cork County Council and Cork City Council. The existing 5.4km of 110 kV OHL within the Cork County functional area was constructed between 1964 and 1974 and is not formally zoned for development by the Cork County Development Plan 2014 (as varied) (CDP). Current land-uses within the general setting of the line include for commercial/warehousing, residential development, agriculture and utility infrastructure, including electricity transmission. The renewal and alteration of the 110 kV OHL will not prevent, inhibit or alter these proximate land-uses as all proposed works are within the development envelope of the existing equipment and the proposed works do not include for the extension of the line. It is also important to highlight that, as set out within the Cobh Municipal District Local Area Plan 2017 (as varied), new development is required to comply with a maximum 40 metre wayleave along the route of the 110 kV OHL line, which further limits any potential effects on existing and permitted land uses. The CDP acknowledges that the provision of a '*secure and reliable electricity transmission infrastructure and transmission grid is essential to meet the growth in demand and ensure that a reliable electricity supply is available*'. The maintenance and safeguarding of the operational functionality of the existing Kilbarry – Knockraha No. 2 110 kV line through the successful implementation of the proposed works is therefore considered consistent with **CDP Objective ED 6-1 (Electricity Network)**:, *"Support and facilitate the sustainable development, upgrade and expansion of the electricity transmission grid, storage and distribution network infrastructure.* *Support the sustainable development of the grid including strategic energy corridors and distribution networks in the region to international standards."* The existing c. 7.1km of 110 kV OHL within the Cork City functional area was constructed between 1954 and 1974. As indicated by North-Central Suburbs Zoning Map (Map 4) within the Cork City Development Plan 2015-2021 (CCDP), the 110 kV OHL traverses lands zoned for '*Residential, Local Services and Institutional Services*' and '*Business and Technology*'. 'Residential, Local Services and Institutional Services' land-use zoning is characterised as: *To protect and provide for residential uses, local services, institutional uses, and civic uses, having regard to employment policies* 'Business and Technology' land-use zoning is characterised as: *To provide for high technology related office based industry*

Criteria	Analysis
	The CCDP (Section 12.25) states that ensuring adequate network capacity to carry power from new generation stations and ensuring a reliable supply to meet growing demand will require both the provision of new transmission infrastructure and the enhancement of existing transmission infrastructure in the South West Region, as exemplified by the proposed works. Specifically, the CCDP states that *'Regional and national policy promotes the protection and development of the Grid and development proposals in Cork City should not compromise plans for the grid; this will be accounted for in planning applications'.* As the overall footprint / alignment of the 110 kV OHL will not be modified as a result of these proposed works nor require any additional land-take from outside of the development envelope, it is considered that proposal does not conflict with adjacent land-uses nor relevant policy set out in the CCDP.
Has the project the potential to impact on the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground?	No. All works associated with the renewal and alteration of the 110 kV OHL will be undertaken within the development envelope of the existing equipment, and furthermore, the proposed works do not include for any extension of the line. The replacement of wooden polesets will be located immediately adjacent to the locations of the in-situ structures on the same alignment and will not be materially different in the context of the overall alignment of the 110 kV OHL. As such, there will be a very minor requirement for additional land-take, and where required, these lands will be within the development envelope / corridor of the line. These design elements will limit the disruption of undeveloped land. There are no raw / process water requirements associated with the proposed works. The proposed renewal and altering works to the existing 110 kV OHL will be undertaken in compliance with standardised best construction practice. <u>Biodiversity:</u> There are no ecological receptors of significance located within the zone of influence of significant effects from the Kilbarry-Knockraha No. 2 110 kV Line. The existing 110 kV OHL passes over a number of different habitat types which are predominately comprised of residential areas and roadways. As all of the proposed works are associated with existing infrastructure, there will be no significant loss of habitat and there will be no additional impacts outside of the proposed project footprint. Desk-based assessment and ecological field assessments, undertaken as part of the Appropriate Assessment Screening Process, concluded that, on the basis of the minor scale of the proposed works, their association with the maintenance/refurbishment of the existing 110 kV OHL infrastructure and the absence of any European designated sites within the proposed work's the zone of influence of significant effects, no potential for significant effects exist. <u>Water</u> Proposed excavations (earthworks) associated with the replacement of wooden polesets and the replacement of 2 no. existing steel tower structures are minor in nature and not significant, e.g. replacement poles will be installed to a minimum depth below ground of 2.3m. As

Criteria	Analysis
	such, it is not anticipated that there will be any groundwater impacted. The site will be kept clean as per standard protocol and any excavation activities will be managed in line with established best practice. Soils & Groundwater: All plant will be inspected at the beginning and end of each shift, and if leaks are evident, they will be repaired immediately or removed from site and replaced. Where hydrocarbons are being used for vehicle maintenance and/or where refuelling is to take place on site, drip trays will be used way from all drains. Concrete pouring will be fully controlled and supervised to ensure that any pollution risk is not presented. As such, the proposed works will not adversely impact the relative abundance, availability, quality and regenerative capacity of these natural resources.
Has the project the potential to impact on the absorption capacity of the natural environment, paying particular attention to wetlands, riparian areas, river mouths	No. The 110 kV OHL route crosses six watercourses, which from east to west, include the Glashaboy [EPA code: 19G01], Rowgarrane [EPA code: 19R39], Lackinroe [EPA code: 19L50], Glenmore [EPA code: 19G82], Lisheenroe [EPA code: 19L40] and the Goganstown [EPA code: 19G68]. In all instances, the existing line passes over the watercourses and there will be no bankside or instream works required as part of the proposed works. Furthermore, all of the transmission structures identified for the proposed works are located greater than 50m from the cited watercourses and their associated tributaries, as per the online EPA River Network GIS mapping. The majority of these structures benefit from intervening development (urban, residential and community) and natural buffers (field boundaries, natural vegetation (hedgerows, woodland) from the waterbodies. Consequently, there is limited to negligible potential for significant effect on wetland and riparian habitats via any hydrological pathway. Notwithstanding, the replacement of wooden polesets and any associated excavations will be undertaken in compliance with standardised best construction practice. There will be no change in the capacity within the development envelope of the 110 kV OHL to infiltrate rainwater as a result of the proposed renewal and alteration for the line.
Has the project the potential to impact on the absorption capacity of the natural environment, paying particular attention to coastal zones and the marine environment	No. The project has no potential to impact on these features of the natural environment having regard to its location and the nature of the proposed development works. Based on the nature and scale of the proposed works, the distance of c. 2km between the Kilbarry-Knockraha No. 2 110 kV Line and Cork Harbour (Lough Mahon) and the nature of the intervening buffer between the existing 110 kV OHL and the harbour (urban development, transportation infrastructure, forestry, bound agricultural fielding and etc.) there is no potential for significant impacts on the marine / coastal environment.
Has the project the potential to impact on the absorption capacity of the natural environment, paying particular	No. The project has no potential to impact on these features of the natural environment having regard to its location and the nature of the proposed development works.

Criteria	Analysis
attention to mountain and forest areas	
Has the project the potential to impact on the absorption capacity of the natural environment, paying particular attention to areas classified or protected under national legislation; Natura 2000 areas designated by Member States pursuant to Directive 92/43/EEC and Directive 2009/147/EC	In order to support the competent authorities in the carrying out of an Appropriate Assessment, an Appropriate Assessment Screening Report (AASR) was prepared by MKO which examined the potential effects of the proposed works on the integrity of the Great Island Channel Special Area of Conservation (SAC) (001058), c. 2.4km south-east, Blackwater River (Cork/Waterford) SAC (002170), c. 9.1km north; and Cork Harbour Special Protection Area (SPA) (004030), c. 433m south, with respect to the sites' conservation objectives. The proposed works are small scale in nature, fully associated with maintenance/refurbishment of the existing line infrastructure and there are no instream or bankside works required. There is also no direct hydrological connectivity between the proposed works and the SAC. Consequently, no potential for significant effect via any hydrological pathway exists. As such, no source-impact-pathway exists in relation to the habitats listed as QI's for the Great Island Channel SAC and Blackwater River (Cork/Waterford) SAC. In the context of Cork Harbour SPA, based on the nature and scale of the works, the nature of the habitats at the works areas and the intervening buffer between the existing line and the SPA; no potential for significant effect as a results or disturbance/displacement of any SCI species exists nor is there any no potential for significant effect on supporting wetland habitat for SCI species, via any hydrological pathway. The AASR concludes, it can be excluded on the basis of objective evidence, that there will be likely significant effects on European sites from the project alone, or in combination with other plans or projects.
Has the project the potential to impact on the absorption capacity of the natural environment, paying particular attention to areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure	No. The proposed works have no potential to impact on these features of the natural environment having regard to the Kilbarry – Knockraha No. 2 110 kV line's lack of connectivity and/or distance from any area in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure.
Has the project the potential to impact on the absorption capacity of the natural environment, paying particular attention to densely populated areas	No. The Kilbarry-Knockraha No. 2 110 kV transmission line was constructed over three phases with structures 1-7 built in 1954, structures 62-75 built in 1964 and structures 7-62 built in 1974. In this regard, it is important to highlight that the 110 kV OHL predates the majority of current development situated in the immediate proximity of the line, particularly the urban residential environment of north Cork City which has developed along the periphery of the transmission line over the last 50 no. years.

Criteria	Analysis
	Twenty-two (22 no.) transmission structures identified for corrective maintenance and renewal works are within the immediate vicinity (<100m) of residential dwellings and community infrastructure, as identified below: › *Cork City Council functional area (densely populated)*: DC Angle Mast 05, DC Angle Mast 06, DC Angle Mast 07 (54m north of St. Aidan's Community College), Intermediate Mast 08, Angle Mast 09, Portal IMP 17, Angle Mast 20, Portal IMP 21, Portal IMP 26, Portal IMP 29, Portal IMP 30, Portal IMP 31, Angle Mast 32, Strain INT Mast 33, Angle Mast 34, Angle Mast 35 and Angle Mast 45 › *Cork County Council functional area (semi-rural)*: Portal IMP 50, Portal IMP 51, Portal IMP 59, Portal IMP 60 and Portal IMP 66. Gaining access to these lands to carry out the proposed works will be coordinated with relevant stakeholders in accordance with the relevant ESB/IFA Code of Practice and relevant statutory provisions. Compliance with best practice construction methodologies will ensure that that there are no significant impacts, particularly noise, arise over the short-duration of the works. Noise from the operation of the Kilbarry-Knockraha No. 2 110 kV transmission line after the works will not result in any changes to the existing baseline levels at any noise sensitive receptors situated within the more densely populated north Cork City environs or any other residential properties within proximity of the 110 kV OHL. In general, the operation of the existing 110 kV OHL will not result in any discernible environmental emissions, e.g. noise, air, water etc.; therefore, there will be no new significant adverse impacts on any densely populated areas.
Has the project the potential to impact on the absorption capacity of the natural environment, paying particular attention to landscapes and sites of historical, cultural or archaeological significance	Historical, Cultural or Archaeological Heritage No. EirGrid operates in compliance with its '*Cultural Heritage Guidelines for Electricity Transmission Projects*' (2015) which sets out a standardised approach for cultural heritage consideration in the design, construction, and operation of high voltage electricity transmission projects. Adherence to these standards will ensure no direct impacts to archaeological or architectural heritage from either the construction or operational phases of development. › There are 15 no. Protected Structures identified within the Cork County and Cork City Development Plans within 500m of the Kilbarry – Knockraha No. 2 110 kV OHL with the most proximate, RPS ID – 00484 Cloth Mill & Mill Race, situated c. 117m north of the line. The remaining Protected Structures range from 210m to 495m in distance from the line. › There are 26 no. registered monuments (Record of Monuments and Places / Sites and Monuments Record) within 500m of the Kilbarry – Knockraha No. 2 110 kV OHL with CO074-132 Burnt Mound being the closest (measured from Zone of Notification [ZON]), c. 45m south-west, of Portal IMP 13. Nine (9 no.) registered monuments are situated <200m from the 110 kV OHL between c. 117m to c. 176m with the remaining monuments ranging from 202m to 476m in distance. › There are 28 no. registered structures from the National Inventory of Architectural Heritage (NIAH) within 500m of the Kilbarry – Knockraha No. 2 110 kV OHL with the most proximate, Delaney Brothers Monument - Reg. No. 20859001, situated c. 98m north

Criteria	Analysis
	of the line. Five (5 no.) 5 no. structures are situated <200m from the 110 kV OHL between c. 135m to c. 197m with the remaining monuments ranging from c. 254m to c. 476m in distance. It is important to highlight that all subject works are proposed within the development envelope of the existing equipment and the proposed works do not include for any extension of the line. The replacement of wooden polesets will be located immediately adjacent to the locations of the in-situ structures on the same alignment. Against this backdrop, there are no predicted direct impacts to archaeological or architectural heritage, nor potential visual impacts, within the general vicinity of the 110 kV OHL from either the construction or operational phases of development. As such, mitigation measures specifically designed for the protection of archaeology and cultural heritage are not considered relevant for this project. Landscape No. The Kilbarry-Knockraha No. 2 110 kV transmission line (End Mast 01 - Portal IMP 69) is located within the 'City Harbour and Estuary' Landscape Character Type (LCT), which comprises a mix of rural and intensely urban areas with rural areas around much of the greater harbour characterised by a prevalence of infrastructure such as roads, bridges and electricity power lines (e.g. the existing 110 kB OHL) and some urban sprawl. The LCT is classified by the Landscape Character Assessment as having 'Very High' Landscape Value and Landscape Sensitivity and 'National' Landscape Importance. LCTs which have a very high or high landscape value and high or very high landscape sensitivity and are of county or national importance are designated as High Value Landscapes (HVL). Transmission assets (Portal IMP 70 – End Mast 75) are located in the Fissured Fertile Middleground (10b) LCT which is characterised as both flatter fertile farmland type and the higher marginal hilly or rugged type. The LCT is classified by the Landscape Character Assessment as having 'Medium' Landscape Value, 'High' Landscape Sensitivity and 'County' Landscape Importance. The Fissured Fertile Middleground (10b) LCT is not classified as a High Value Landscape. The Scenic Route (Ref. No. S41) from Dunkettle to Glanmire and eastwards to Caherlag and Glounthane is c. 320m south of the existing 110 kV OHL at its closest point (e.g. Glanmire Bridge). Scenic Route (Ref. No. S42), from Cashnagarriffe, N.W. Carrigtwohill and Westwards to Caherla, is further south of the 110 kV OHL at c. 1.4km at its closest point. The surrounding built environment has generally developed around the 110 kV OHL, and consequently, the line has become an established landscape structure within the City Harbour and Estuary LCT, as noted in the Landscape Character Assessment. The renewal and alteration of the 110 kV OHL will not result in any material changes to the scale or siting of the line. While the replacement of the identified wooden polesets may result in a non-significant increase in height of up to 2m at certain points along the 110 kV OHL dependent on local topographical variation, any minor height increase of an intermediate wooden poleset as a consequence of the proposed works will still be in proportion relative to other structures along the alignment. Furthermore, the minor increase in height, if and where applicable, will largely be indiscernible to receptors given the scale and established nature of the development. The proposed replacement of Intermediate Mast 08 and Strain INT Mast 33 with wooden polesets, which are significantly reduced in scale and visual prominence, will result in lower visual impacts. As the OHL already includes 55 no. double wooden polesets, the visual presence of the renewed 110 kV OHL within the receiving environment will not be intensified nor materially different to what has historically been in-situ.

Criteria	Analysis
	No significant landscape or visual residual impacts arising from the proposed works have been identified on the recognised and sensitive aspects of the receiving landscape characters and associated scenic routes.

3.3 Type and Characteristics of Potential Impact

Table 3.3 – Type and Characteristics of Potential Impacts

Criteria	Screening Analysis
Outline the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected	The existing Kilbarry – Knockraha No. 2 110 kV overhead line (OHL) comprises 75 no. individual structures along its length (c.12.5km) within Cork County (c. 5.4km in length) and Cork City Council (c. 7.1km in length) functional areas. The proposed works do not include the extension of the line. The replacement of wooden polesets will be located immediately adjacent to the locations of the in-situ structures identified for replacement on the same alignment. As such, there will be a very minor requirement for additional land-take, and where required, these lands will be within the development envelope / corridor of the line. Twenty-two (22 no.) transmission structures identified for corrective maintenance and renewal works are within the immediate vicinity (<100m) of residential dwellings and community infrastructure. Typical construction works required will include excavation which will result in a short-term localised increase in environmental emissions (e.g. dust, noise etc.), typical of all construction projects. Compliance with standardised best practice will ensure that potential environmental impacts do not result in any nuisance at nearby sensitive receptors during the construction phase. The operation of the existing 110 kV OHL will not result in any discernible environmental emissions. The implementation of established best practice procedures will further restrict potential impact pathways to larger geographical areas which will limit and offset potential impacts on receptors outside of the development area.
Outline the nature of the impact	The proposed renewal and altering of the Kilbarry-Knockraha No. 2 110 kV transmission line comprises 6 no. broad categories of corrective maintenance / renewal requirements: paint / corrosion treatment of steel towers (14 no.), replacement of wooden polesets (85 no.), replacement of existing steel intermediate towers with wooden intermediate polesets (2 no.), replacement of insulators and hardware, civil works on tower shear blocks (15 no.) and ancillary works (repair/renewal of anti-climbing guards – 16 no.). Prior to the commencement of construction activities (e.g. replacement of wooden polesets, replacement of steel intermediate towers with wooden polesets and raising of tower shear blocks), the area for development will be fenced off. Mobilisation will include the putting in place of staff, temporary facilities, plant and equipment, materials and systems for construction, where required. Civil and plant construction works will include tracked excavators, concrete delivery vehicles, mobile cranes, mobile elevated work platforms. Works will include

Criteria	Screening Analysis
	excavation, stockpiling and management of construction and decommissioned materials until it can be recycled or disposed of by licensed waste contractors and hauliers in a manner which will not adversely affect the environment. Although not significantly invasive and of short duration, the proposed works have potential to result in adverse environmental impacts in the absence of standardised procedures and established best practice. The proposed works will be undertaken in compliance with established best practice and the ESB/IFI Code of Practice. The implementation of these measures will ensure that there are no adverse impacts on the relative abundance, availability, quality and regenerative capacity of these natural resources. Due to the type and nature of technology utilised and ancillary structures comprising the 110 kV Kilbarry-Knockraha 110 kV No. 2 OHL, there are no discernible operational emissions arising from the development. The construction areas around the transmission structure assets will be reinstated as close as possible to their original condition in accordance with the relevant ESB Code of Practice for Survey and in consultation with the individual landowners. There will be no change in the capacity within the development envelope of the 110 kV OHL to infiltrate rainwater as a result of the proposed renewal and alteration for the line. Any clean stormwater run-off from periods of heavy precipitation will continue to discharge the surrounding lands as currently occurring.
Outline the transboundary nature of the impact	The project will not result in transboundary impacts.
Outline the intensity and complexity of the impact	Potential construction impacts are not considered to be significantly complex when established best practice and internal standardised procedures are employed nor intense due to the nature of the development: › The proposed works to the existing Kilbarry-Knockraha No. 2 110 kV transmission line is consistent with the policies and objectives set out within the Cork County Development Plan 2014 (as varied) and the Cork City Development Plan 2015-2021 with regard to the upgrading of the electricity transmission grid. All works are within the development envelope of the existing equipment and the proposed works do not include for the extension of the line nor is it proposed to alter the overall functionality of the line in the context of the wider transmission system (e.g. no increase in the voltage of the line from the existing 110 kV). › Construction phase activities will include civil works - excavation, stockpiling of excavated management of construction and decommissioned material. These construction activities may temporarily affect proximate environmental receptors; however, selection and implementation established best practice and standardised procedures will prevent any potentially adverse effects generated from these activities. It should be noted that none of these measures are required to avoid or reduce harmful effects to European sites. › The renewal and alteration of the 110 kV OHL will not result in any material changes to the scale or siting of the line. While the replacement of the identified wooden polesets may result in minor increases in height of up to 2m at certain points along the 110 kV OHL dependent on local topographical variation, any minor height increase of an intermediate wooden poleset as a consequence of the proposed works will remain in proportion relative to other structures along the alignment. As the OHL already includes 55 no.

Criteria	Screening Analysis
	double wooden polesets, the replacement of steel intermediate towers (2 no.) with wooden polesets will not intensify or materially alter the visual presence of the renewed 110 kV OHL within the receiving environment in the context of what has historically been in-situ. · Due to the type and nature of technology utilised and ancillary structures comprising the 110 kV Kilbarry-Knockraha 110 kV No. 2 OHL, there are no discernible operational emissions arising from the development.
Outline the probability of the impact	Technical components of the renewed 110 kV OHL will be designed in accordance with EirGrid's standards for this type of development and operational requirements as set out in the appropriate National and International standards. Conventional construction and best environmental practice techniques will be proactively planned and implemented by ESB (TAO) during the undertaking of the proposed works. Best practice construction measures will be drawn from, at a minimum, relevant legal obligations for construction sites in Ireland and recommended best construction practice. The implementation of the above measures will ultimately reduce the probability that the undertaking of the proposed works will have the potential to result in adverse environmental impacts.
Outline the expected onset, duration, frequency and reversibility of the impact	The selection and implementation established best practice procedures and internal standardised procedures (ESB/IFA Code of Practice) will ensure potential impacts during the construction phase are temporary in nature and not significant. It is expected that the proposed works will commence in 2022 subject to the Project successfully securing a Section 5 Declaration of Exempted Development by Cork County and Cork City Councils with construction and commissioning activities lasting up to a maximum 4 months. Normal working hours during the construction period are expected to be Monday to Friday 08:00 to 18:00 (inclusive), and Saturday 08:00 to 14:00 (inclusive) and not at all on Sundays and public holidays. It should also be noted, however, that the undertaking of the proposed works is dependent on outage availability thus some works may have to be carried out outside of normal working hours. Cork County Council and Cork City Council will be notified in advance of any work commencing on the line. The Kilbarry – Knockraha No. 2 110 kV Transmission line has been completely operation since 1974, c. 46 years. The renewal and alteration of the 110 kV OHL will increase the design life of the transmission line by approximately another 30 - 50 years. Therefore, it is considered that the permanent impacts (e.g. land intake) are irreversible. Notwithstanding, the proposed development is considered critical within the wider transmission network and will remain a permanent asset. The maintenance and safeguarding of the operational functionality of the existing Kilbarry – Knockraha No. 2 110 kV line will contribute towards the sustainable development of the regional transmission grid to international standards in line with CDP Objective ED 6-1 (Electricity Network). The upgrade and expansion of the electricity transmission grid will ensure that a secure and reliable electricity supply is available to meet the future growth in demand within the Cork City and Cork County functional areas.

Criteria	Screening Analysis
Outline the cumulation of the impact with the impact of other existing and/or approved projects	The Cork County Council and Cork City Council planning databases was searched on the 9th September 2020 to determine if any nearby plans or projects within a 1km radius of the existing Kilbarry – Knockraha No. 2 110 kV OHL were likely to result in cumulative impacts. Due to the urban setting of the Cork City Council functional area, there is significant massing of development within the immediate vicinity of the 110 kV OHL line relating to transmission and telecommunication infrastructure, industrial and warehousing, residential (new build and alterations/extensions) and community infrastructure development. The Cork County Council functional area is less developed in comparison with pockets of commercial /warehousing infrastructure (Brooklodge East) near the boundary of the 2 no. functional areas. The majority of planning applications lodged in the immediate vicinity of the 110 kV line within the Cork County Council functional area relate to the provision and/or alteration of residential development and ancillary agricultural infrastructure. A consolidated list of projects for both Cork City and Cork County functional areas is provided for in Section 3.1. <u>Construction</u> The main potential for cumulative impacts is associated with the construction phase is traffic in the event that proximate construction / civil projects are progressed within the same time periods. As the proposed works to the 110 kV OHL will require access for equipment (e.g. tracked excavators, concrete delivery vehicles, mobile cranes, mobile elevated work platforms etc) there will be an increase in construction / vehicle movement on the local road network. Notwithstanding, the majority of the renewal and alteration works will have short construction durations (c. 2-3 days) with the replacement of Intermediate Mast 08 and Strain INT Mast 33 with wooden polesets requiring c. 7 days. As such, any discernible cumulative effects on general mobility / accessibility of the local road network with any other construction projects in the vicinity will be minor and temporary. As all of the proposed works will be confined to the development envelope of the existing 110 kV OHL (c. 10m buffer on either side of the transmission line), the potential for significant environmental emissions (e.g. noise, air, water and land/soils) with other projects is considered minimal. Furthermore, the nature of the proposed works (refurbishment / replacement of existing structures) are not inherently invasive, and where excavation and the de-construction of existing structures is required, these works will be undertaken in accordance with established best practice and standardised procedures which will further control for potential cumulative effects. <u>Operation</u> Due to the type and nature of technology utilised and ancillary structures comprising the 110 kV Kilbarry-Knockraha 110 kV No. 2 OHL, there are no discernible operational emissions arising from the development. As such, there is negligible potential for the refurbished line to result in any novel cumulative operational effects with other proximate development. From a landscape perspective, the surrounding built environment has generally developed around the 110 kV OHL, and consequently, the line has become an established landscape structure. The strengthening of the 110 kV OHL, in combination with other on-going improvements to the wider transmission network (Pl Ref. 10/3448, Pl Ref. 13/6402 / PL04.244030, Pl Ref. 15/36393 and Pl Ref. 19/38211)

Criteria	Screening Analysis
	will, however, ensure the sustainable development of enhanced electricity supplies, and associated networks, to serve the existing and future needs of Cork County and City.
Outline the possibility of effectively reducing the impact	The proposed corrective maintenance measures to maintain, and ultimately safeguard, the operational functionality of the existing Kilbarry – Knockraha No. 2 110 kV line have been carefully identified and selected to ensure that environmental impacts are minimised as much as possible. These impacts in the context of the discussed environmental media are not considered significant and do not result in a requirement for EIA. All works associated with the renewal and alteration of the 110 kV OHL will be undertaken within the development envelope of the existing equipment and will not be materially different in the context of the overall alignment of the 110 kV OHL. Compliance with standardised best practice will ensure that impacts associated with noise, air, water, etc. – do not result in any nuisance at nearby sensitive receptors during the construction phase. Technical components of the renewed 110 kV OHL will be designed in accordance with EirGrid's standards for this type of development and operational requirements as set out in the appropriate National and International standards. These design specifications will address environmental risks during the lifetime of the development.

4. CONCLUSION

It is concluded that impacts associated with the renewal and altering of the Kilbarry – Knockraha No. 2 110 kV line are not significant in the context of Schedule 7 of the Regulations to the extent that an EIA is not required. This conclusion is based on the findings of the analysis provided in the preceding sections of this report in relation to:

- Characteristics of Project;
- Location of Project; and
- Type and Characteristics of Potential Impact

As part of the above analysis, a broad range of environmental media have been assessed. No potential impacts of significance were identified during either the construction or operational phase of the Kilbarry – Knockraha No. 2 110 kV line's lifetime. The proposed works have also been assessed as part of the Appropriate Assessment Screening Report, having informed the preparation of this report, which concluded that that there will be no likelihood of significant effects on any European sites arising from the proposed works.

Although the recommendation of the EIA Screening is that an EIA is not required, it is acknowledged that it is Cork County Council and Cork City Council, as the competent authorities, who will decide on the necessity or otherwise on an EIA in this instance.

APPENDIX 1

SUMMARY OF PROPOSED WORKS

Structure	Local Authority	Townland	Proposed Works
01	Cork City Council	Cork City and suburbs	> Treat corrosion & paint > Replace Anti-Climbing Guards
02	Cork City Council	Cork City and suburbs	> Treat corrosion & paint > Replace single circuit insulators and hardware > Replace vibration dampers > Replace Anti-Climbing Guards
03	Cork City Council	Cork City and suburbs	> Treat corrosion & paint > Replace double circuit insulators and hardware > Replace vibration dampers > Civil works (reinforcement / reparation) to foundations > Replace Anti-Climbing Guards
04	Cork City Council	Cork City and suburbs	> Paint > Replace double circuit insulators and hardware > Replace U bolts > Replace vibration dampers > Civil works (reinforcement / reparation) to foundations > Replace Anti-Climbing Guards
05	Cork City Council	Ballincolly	> Paint > Replace double circuit insulators and hardware > Civil works (reinforcement / reparation) to foundations > Replace Anti-Climbing Guards
06	Cork City Council	Ballincolly	> Paint > Replace double circuit insulators and hardware > Replace U bolts > Replace vibration dampers > Civil works (reinforcement / reparation) to foundations > Replace Anti-Climbing Guards
07	Cork City Council	Ballincolly	> Paint > Replace double circuit insulators and hardware > Civil works (reinforcement / reparation) to foundations > Replace Anti-Climbing Guards
08	Cork City Council	Ballincolly	> Replace tower with 110 kV wooden poleset
09	Cork City Council	Ballincolly	> Paint > Replace single circuit hardware > Civil works (reinforcement / reparation) to foundations > Rewire Anti-Climbing Guards and fit locks
10	Cork City Council	Ballincolly	> Paint > Replace single circuit insulators and hardware

Structure	Local Authority	Townland	Proposed Works
			> Rewire Anti-Climbing Guards and fit locks
12	Cork City Council	Ballincolly	> Replace wooden poleset
13	Cork City Council	Ballyvolane	> Replace wooden poleset > Replace hardware
14	Cork City Council	Arderrow	> Replace wooden poleset > Replace hardware
15	Cork City Council	Arderrow	> Replace wooden poleset > Replace hardware
16	Cork City Council	Arderrow	> Replace wooden poleset > Replace hardware
17	Cork City Council	Arderrow	> Replace wooden poleset > Replace hardware
18	Cork City Council	Arderrow	> Replace hardware
20	Cork City Council	Banduff	> Replace J bolts > Civil works (reinforcement / reparation) to foundations > Replace barbwire Anti-Climbing Guards
21	Cork City Council	Banduff	> Replace wooden poleset
22	Cork City Council	Banduff	> Replace wooden poleset
24	Cork City Council	Banduff	> Replace wooden poleset > Replace hardware
25	Cork City Council	Banduff	> Replace wooden poleset
26	Cork City Council	Banduff	> Replace wooden poleset > Replace hardware
28	Cork City Council	Poulacurry North	> Paint > Civil works (reinforcement / reparation) to foundations
29	Cork City Council	Poulacurry North	> Replace wooden poleset
30	Cork City Council	Poulacurry South	> Replace wooden poleset
31	Cork City Council	Poulacurry South	> Replace wooden poleset
32	Cork City Council	Poulacurry South	> Civil works (reinforcement / reparation) to foundations > Rewire Anti-Climbing Guards and fit locks
33	Cork City Council	Poulacurry South	> Replace tower with 110 kV wooden poleset
34	Cork City Council	Poulacurry South	> Replace vibration dampers > Civil works (reinforcement / reparation) to foundations > Re-tension barbwire Anti-Climbing Guards
35	Cork City Council	Poulacurry South	> Replace vibration dampers > Civil works (reinforcement / reparation) to foundations > Re-tension barbwire Anti-Climbing Guards

Structure	Local Authority	Townland	Proposed Works
45	Cork City Council	Ballinglanna	> Paint > Replace single circuit insulators and hardware > Civil works (reinforcement / reparation) to foundations > Re-wire Anti-Climbing Guards
46	Cork County Council	Ballinglanna	> Treat corrosion & paint > Replace single circuit insulators and hardware > Civil works (reinforcement / reparation) to foundations
47	Cork County Council	Ballinglanna	> Replace wooden poleset > Replace hardware > Replace vibration dampers
48	Cork County Council	Corbally North	> Replace wooden poleset
49	Cork County Council	Corbally North	> Replace wooden poleset
50	Cork County Council	Corbally North	> Replace wooden poleset
51	Cork County Council	Corbally North	> Replace wooden poleset
53	Cork County Council	Ballynagarbragh	> Replace wooden poleset > Replace hardware
54	Cork County Council	Ballynagarbragh	> Replace hardware
55	Cork County Council	Ballynagarbragh	> Replace wooden poleset
56	Cork County Council	Ballynagarbragh	> Replace wooden poleset > Replace hardware
57	Cork County Council	Ballynagarbragh	> Replace wooden poleset
59	Cork County Council	Lackenroe	> Replace wooden poleset
60	Cork County Council	Lackenroe	> Replace wooden poleset
61	Cork County Council	Lackenroe	> Replace wooden poleset
63	Cork County Council	Lackenroe	> Treat corrosion & paint > Replace J bolts > Civil works (reinforcement / reparation) to foundations

Structure	Local Authority	Townland	Proposed Works
			> Re-tension barbwire Anti-Climbing Guards
64	Cork County Council	Ballycurreen	> Replace wooden poleset > Replace hardware
65	Cork County Council	Ballycurreen	> Replace wooden poleset > Replace hardware
66	Cork County Council	Ballycurreen	> Replace wooden poleset > Replace crossarms > Replace hardware
67	Cork County Council	Killeena	> Replace wooden poleset > Replace hardware
68	Cork County Council	Killeena	> Replace wooden poleset > Replace hardware
69	Cork County Council	Killeena	> Replace wooden poleset > Replace hardware
70	Cork County Council	Killeena	> Replace wooden poleset > Replace hardware
71	Cork County Council	Killeena	> Replace wooden poleset
72	Cork County Council	Killeena	> Replace hardware
73	Cork County Council	Killeena	> Replace wooden poleset > Replace crossarms > Replace hardware
74	Cork County Council	Killeena	> Replace hardware
75	Cork County Council	Killeena	> Paint > Civil works (reinforcement / reparation) to foundations

APPENDIX 3

TYPICAL HIGH VOLTAGE ENGINEERING PLANS

Typical High Voltage Engineering Plans	
Drawing Title	**Scale**
110 kV Suspension Wood Pole Set (Non-Shield Wire)	1:100
110 kV Suspension Wood Pole Set with Shield Wire	1:100
Typical Tower Type - Double Circuit 110 kV Angle Tower	1:100
Typical Tower Type - Single Circuit 110 kV Angle Tower (Earthwire)	1:100
Typical 110 kV End Mast Details	-
110 kV Type 1461E Tower - Type BC Foundation	-
110 kV Type 1461E Tower - Type CD Foundation	-