



APPENDIX 2-2

SCOPING RESPONSES

From: Phoebe Duvall <planning@antaisce.org>

Sent: 25 May 2023 10:56 **To:** Niamh McHugh

Subject: Thank you for your query Re: 210627 Proposed Laurclavagh Renewable Energy

Development, Co. Galway

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Thank you for your email. Please note that we receive a large volume of correspondence and resources are very limited. As such, we are unfortunately unable to respond to every query, and we ask that you review these <u>frequently asked questions</u>. If your message is a statutory referral to us per our role as a prescribed body, it will be processed as normal.

Queries from An Taisce members are prioritised. If you are a member, please reply to the original message with your member number (if you did not include it already). If you wish to become a member, please visit the membership page on our website.

Thank you very much.

--

Phoebe Duvall

Planning and Environmental Policy Officer An Taisce - The National Trust for Ireland The Tailors' Hall, Back Lane, Dublin 8, Ireland Phone: 01 454 1786 www.antaisce.org

Company Reg. No. 12469 | Charity Ref. No. CHY4741 | Charity Regulator No. 20006358 An Taisce is a membership-based charity Join at www.antaisce.org/membership

Please note that I work Monday through Thursday.

--

An Taisce - The National Trust for Ireland | www.antaisce.org
The Tailors' Hall, Back Lane, Dublin 8, Ireland
Company Reg. No. 12469 | Charity Ref. No. CHY4741 | Charity Regulator No. 20006358
An Taisce is a membership-based charity
Join at www.antaisce.org/membership

From: Roger Woods < rwoods@cnam.ie>

 Sent:
 25 May 2023 11:48

 To:
 Niamh McHugh

Subject: RE: Proposed Laurclavagh Renewable Energy Development, Co. Galway

You don't often get email from rwoods@cnam.ie. Learn why this is important

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Hi Niamh

Coimisiún na Meán does not perform an in-depth analysis of the effect of wind turbines on FM networks. However, we are not aware of any issues from existing windfarms into existing FM networks. Also, the proposed windfarms are not located close to any existing or planned FM transmission sites.

Regards

Roger

Senior Executive Engineer

My email address has now changed to rwoods@cnam.ie, please update your address book accordingly.

Tá mo sheoladh ríomhphoist athraithe anois go rwoods@cnam.ie, dá réir sin déan do leabhar seoltaí a uasdátú, le do thoil.

Coimisiún na Meán | 2-5 Plás Warrington, Baile Átha Cliath D02 XP29, Éire Coimisiún na Meán | 2-5 Warrington Place, Dublin D02 XP29, Ireland T: + 353 (0)1 644 1200 | rwoods@cnam.ie









Tá an ríomhphost seo agus aon iatán a ghabhann leis rúnda agus is leis an duine sin amháin a bhfuil siad seolta chuige/chuici a bhaineann siad. Muna duitse an ríomhphost seo, ní ceart é a léamh ná a scaoileadh chuig aon tríú páirtí. Iarrtar ort teachtaireacht a sheoladh chuig an seoltóir nó chuig <u>info@cnam.ie</u>, agus an ríomhphost seo a scrios.

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From: Niamh McHugh <nhmchugh@mkoireland.ie>

Sent: Thursday, May 25, 2023 11:04 AM **To:** Roger Woods <rwoods@cnam.ie>

Subject: Proposed Laurclavagh Renewable Energy Development, Co. Galway

Dear Mr. Woods,

Laurclavagh Ltd. is investigating the potential to construct a renewable energy development at Laurclavagh and adjacent townlands, Co. Galway, located approximately 9km southwest of Tuam. It is envisaged that the proposed renewable energy development will consist of 8 no. wind turbines, a 110kV substation and all associated infrastructure.

MKO have been engaged to prepare the planning application and associated Environmental Impact Assessment Report (EIAR). As part of the EIAR, we are issuing the attached scoping document and associated cover letter to all consultees. As part of this scoping exercise, we would welcome any feedback you may have regarding survey techniques, background information, etc.

If you could please return any comments or suggestions at your earliest convenience, it would be much appreciated. If you require any further information, please do not hesitate to contact me

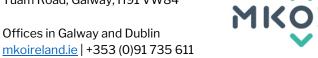
Kind regards, Niamh

Niamh McHugh BSc. (Env)

Environmental Scientist

MKO

Tuam Road, Galway, H91 VW84



mkoireland.ie | +353 (0)91 735 611

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MKO TUAM ROAD GALWAY H91VW84

Re: Proposed Laurclavagh Wind Farm Development near Tuam, Co. Galway.

Dear Sir/Madam,

The following are the comments from this Division in relation to the proposed development:

If the proposed development will involve the felling or removal of any trees, the developer must obtain a Felling License from this Department <u>before</u> trees are felled or removed. A Felling Licence application form can be obtained from **Felling Section**, **Department of Agriculture**, **Food and the Marine**, **Johnstown Castle Estate**, **Co. Wexford**. Tel: 076-1064459, Web https://www.agriculture.gov.ie/forestservice/treefelling/treefelling/

A Felling Licence granted by the Minister for Agriculture, Food and the Marine provides authority under the Forestry Act 2014 to fell or otherwise remove a tree or trees and/or to thin a forest for silvicultural reasons. The Act prescribes the functions of the Minister and details the requirements, rights and obligations in relation to felling licences. The principal set of regulations giving further effect to the Forestry Act 2014 are the Forestry Regulations 2017 (S.I. No. 191 of 2017).

The developer should take note of the contents of **Felling and Reforestation Policy** document which provide a consolidated source of information on the legal and regulatory framework relating to tree felling;

https://www.agriculture.gov.ie/media/migration/forestry/treefelling/FellingReforestationPolicy240517.pdf. As this development is within a forest lands particular attention should be paid to deforestation, turbulence felling and the requirement to afforest alternative lands.

In order to ensure regulated forestry operations in Ireland accord with the principles of sustainable forest management (SFM), as well fulfilling the requirements of other relevant environmental protection laws, the Department (acting through its Forest Service division) must undertake particular consultations and give certain matters full consideration during the assessment of individual Felling Licence applications. This includes consultation with relevant bodies, the application of various protocols and procedures (e.g. Forest Service Appropriate Assessment Procedure), and the requirement for applicants on occasion to provide further information (e.g. a Natura Impact Statement).

Consequently, when the Forest Service is considering an application to fell trees, the following applies:

1. The interaction of these proposed works with the environment locally and more widely, in addition to potential direct and indirect impacts on designated sites and

water, is assessed. Consultation with relevant environmental and planning authorities may be required where specific sensitivities arise (e.g. local authorities, National Parks & Wildlife Service, Inland Fisheries Ireland, and the National Monuments Service);

- 2. Where a tree Felling Licence application is received, the Department will publish a notice of the application before making a decision on the matter. The notice shall state that any person may make a submission to the Department within 30 days from the date of the notice. The notices for 2018 are published online at: https://www.agriculture.gov.ie/forestservice/publicconsultationforafforestationforestroadconstructionandfellinglicenses2018/
- 3. Third parties that make a submission or observation will be informed of the decision to grant or refuse the licence and on request details of the conditions attached to the licence, the main reasons and considerations on which the decision to grant or refuse the licence was based, and where conditions are attached to any licence, the reasons for the conditions. Both third parties and applicants will be also informed of their right to appeal any decision within 28 days to the Forestry Appeals Committee. Felling Licence decisions for 2018 are published online at: https://www.agriculture.gov.ie/forestservice/publicconsultation/environmentalimpactassessment-2018registerofdecisions/

It is important to note that when applying to a Local Authority or An Bord Pleanàla for planning permission where developments are:

- a) subject to an EIA procedure (including screening in the case of a sub-threshold development) and any resulting requirement to produce an EIAR; and/or
- b) subject to an Appropriate Assessment procedure (including screening) and any resulting requirement to a Natura Impact Statement (NIS); and
- the proposed development in its construction or operational phases, or any works ancillary thereto, would directly or indirectly involve the felling and replanting of trees, deforestation for the purposes of conversion to another type of land use, or replacement of broadleaf high forest by conifer species,
 - that there is a requirement inter alia under the EIA Directive for an overall
 assessment of the effects of the project or the alteration thereof on the environment
 to be undertaken, including the direct and indirect environmental impact of the
 project;

and

- 2. pursuant to Article 2(3) of the EIA Directive the Department of Agriculture, Food and the Marine strongly recommends that notwithstanding the fact that a parallel consent in the form of felling licence may also have to be applied for, any EIAR and/or NIS produced in connection with the application for planning permission to the Local Planning Authority or An Bord Pleanàla should include an assessment of the impact of and measures, as appropriate, to prevent, mitigate or compensate for any significant adverse effects direct or indirect identified on the environment arising from such felling and replanting of trees, deforestation for the purposes of conversion to another type of land use, or replacement of broadleaf high forest by conifer species.
- 3. Please note that there must be absolute spatial consistency between the felling licence areas submitted to DAFM (second authority) and all related planning documents submitted to the first authority in respect of the felling area(s)

Yours sincerely,

Catherine Boyce
HEO Felling Section
Department of Agriculture, Food and the Marine
Johnstown Castle
Co Wexford
e-mail: felling.forestservice@agriculture.gov.ie

From: Planning Notifications < PlanningNotifications@DECC.gov.ie>

Sent: 25 May 2023 11:08
To: Niamh McHugh
Subject: Auto-Reply

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We acknowledge receipt of your email.

The Planning Advisory Division acts on behalf of the Department of the Environment, Climate and Communications with respect to its function as a statutory consultee within the planning system.

The Department provides observations in relation to County Development Plans, Local Area Plans and Strategic Environmental Assessments.

The Department does not provide observations for individual projects and developments.

As such, the Department will not provide observations on individual planning applications, Environmental Impact Assessments or any notification relating to an individual development.

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Tá eolas sa teachtaireacht leictreonach seo (agus b'fhéidir sa chomhaid ceangailte leis) a d'fhéadfadh bheith príobháideach nó faoi rún. Is le h-aghaidh an duine/na ndaoine nó le h-aghaidh an aonáin atá ainmnithe thuas agus le haghaidh an duine/na ndaoine sin amháin atá an t-eolas. Murab ionann tusa agus an té a bhfuil an teachtaireacht ceaptha dó bíodh a fhios agat nach gceadaítear nochtadh, cóipeáil, scaipeadh nó úsáid an eolais agus/nó an chomhaid seo. Más trí earráid a fuair tú an teachtaireacht leictreonach seo cuir, más é do thoil é, an té ar sheol an teachtaireacht ar an eolas láithreach. Deimhnítear leis seo freisin nár aims odh víreas sa phost seo tar éis a scanadh.

From: Defence Property Management Planning

<PropertyManagementPlanning@defence.ie>

Sent: 26 May 2023 14:52 **To:** Niamh McHugh

Cc: Gareth O'Flaherty (Defence); Jason Kearney (Defence)

Subject: RE: Proposed Laurclavagh Renewable Energy Development, Co. Galway

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Dear Ms. McHugh,

We wish to acknowledge receipt of your e-mail below and the attached documentation.

We will consult with the relevant Military authorities and revert in due course.

Please get in contact if you have any queries.

Best regards Don

From: Niamh McHugh <nhmchugh@mkoireland.ie>

Sent: Thursday 25 May 2023 11:21

To: Don Watchorn (Defence) <Don.Watchorn@defence.ie>; Sarah Zacharia (Defence) <Sarah.Zacharia@defence.ie>; Defence Property Management Planning <PropertyManagementPlanning@defence.ie>; Gareth O'Flaherty (Defence)

<Gareth.OFlaherty@defence.ie>

Subject: Proposed Laurclavagh Renewable Energy Development, Co. Galway

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Dear Sir/ Madam,

Laurclavagh Ltd. is investigating the potential to construct a renewable energy development at Laurclavagh and adjacent townlands, Co. Galway, located approximately 9km southwest of Tuam. It is envisaged that the proposed renewable energy development will consist of 8 no. wind turbines, a 110kV substation and all associated infrastructure.

MKO have been engaged to prepare the planning application and associated Environmental Impact Assessment Report (EIAR). As part of the EIAR, we are issuing the attached scoping document and associated cover letter to all consultees. As part of this scoping exercise, we would welcome any feedback you may have regarding survey techniques, background information, etc.

If you could please return any comments or suggestions at your earliest convenience, it would be much appreciated. If you require any further information, please do not hesitate to contact me.

Kind regards, Niamh

Niamh McHugh BSc. (Env)

Environmental Scientist

MKO

Tuam Road, Galway, H91 VW84

Offices in Galway and Dublin mkoireland.ie | +353 (0)91 735 611



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An Roinn Cosanta Department of Defence



Niamh McHugh
Environmental Scientist
MKO Ltd.
Tuam Road
Galway
H91 VW84

15 June 2023

Without Prejudice

Dear Ms. McHugh,

I refer to your letter and e-mail dated 25 May 2023, relating to the proposed Laurclavagh Renewable Energy Development, consist of 8 no. wind turbines, located approximately 9km southwest of Tuam, Co Galway.

I wish to advise at the outset that any determination in relation to a planning consent is solely a matter for the planning authorities and/or ABP, as appropriate. Therefore, the following observations are made on a non-prejudicial basis, and are not intended to be used to rely on for a prospective planning application, nor are these observations to be relied on in the event of any commercial transaction pertaining to such lands and they are not to be relied on in the event of any contract exchange pertaining to same.

As a matter of practice, the Department of Defence does not provide observations or advice in the scoping process, except where the relevant parties have been directed by a planning authority to seek the Department's views. The following observations are based solely on the material provided by you and should be read in that context only. It should be noted that additional or supplemental observations may be made at the formal planning process.

Having consulted with the subject matter experts in the Irish Air Corps, the Department of Defence wishes to make the following observations:

- All turbines should be illuminated by Type C, Medium intensity, Fixed Red obstacle lighting with a minimum output of 2,000 candela to be visible in all directions of azimuth and to be operational H24/7 days a week.
- Obstacle lighting should be incandescent. If LED or other lighting types are used, should be a type visible to Night Vision equipment. Obstacle lighting must emit light at the near Infra-Red (IR) range of the electromagnetic spectrum, specifically at or near 850 nanometres (nm) of wavelength.



- Light intensity to be of similar value to that emitted in the visible spectrum of light.
- This scoping document appears to show that the proposed Laurclavagh Energy Development lays in proximity to the Irish Air Corps critical route N84, Castlebar to Galway.
- Any Irish Air Corps (IAC) requirements are separate to Irish Aviation Authority (IAA) requirements.

Nothing in the above observations shall be taken as a binding response by the Minister for Defence in the event that a planning application is made. The Minister reserves the right to comment on an actual planning application as and when it is submitted in accordance with the provisions of the planning regulatory code.

We would appreciate if you could keep us informed on any progress relating to this proposed development, in particular if this development was to progress to the planning stage.

Yours sincerely

Don Watchorn

Property Management Branch

Department of Defence

Station Road

Newbridge

Co. Kildare W12 AD93

From: Housing Manager DAU <Manager.DAU@npws.gov.ie>

Sent: 25 May 2023 12:22 **To:** Niamh McHugh

Subject: RE: Proposed Laurclavagh Renewable Energy Development, Co. Galway

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Our Ref: G Pre00102/2023 (Please quote in all related correspondence)

A Chara

I acknowledge receipt of your recent consultation.

In the event of observations, you will receive a co-ordinated heritage-related response by email from Development Applications Unit (DAU).

The normal target turnaround for pre-planning and other general consultations is six weeks from date of receipt. In relation to general consultations from public bodies under the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 to 2011, the Department endeavours to meet deadline dates, where requested.

If you have not heard from DAU and wish to receive an update, please email manager.dau@housing.gov.ie.

Regards

Edel Griffin

Executive Officer

An Roinn Tithíochta, Rialtais Áitiúil agus Oidhreachta Department of Housing, Local Government and Heritage

Aonad na nlarratas ar Fhorbairt

Development Applications Unit

Oifigí an Rialtais

Government Offices

Bóthar an Bhaile Nua, Loch Garman, Contae Loch Garman, Y35 AP90

Newtown Road, Wexford, County Wexford, Y35 AP90

From: Niamh McHugh < nhmchugh@mkoireland.ie>

Sent: Thursday 25 May 2023 11:22

To: Housing Manager DAU < Manager. DAU@npws.gov.ie>

Subject: Proposed Laurclavagh Renewable Energy Development, Co. Galway

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Dear Sir/Madam,

Laurclavagh Ltd. is investigating the potential to construct a renewable energy development at Laurclavagh and adjacent townlands, Co. Galway, located approximately 9km southwest of Tuam. It is envisaged that the proposed renewable energy development will consist of 8 no. wind turbines, a 110kV substation and all associated infrastructure.

MKO have been engaged to prepare the planning application and associated Environmental Impact Assessment Report (EIAR). As part of the EIAR, we are issuing the attached scoping document and associated cover letter to all consultees. As part of this scoping exercise, we would welcome any feedback you may have regarding survey techniques, background information, etc.

If you could please return any comments or suggestions at your earliest convenience, it would be much appreciated. If you require any further information, please do not hesitate to contact me.

Kind regards, Niamh

Niamh McHugh BSc. (Env)

Environmental Scientist

MKO

Tuam Road, Galway, H91 VW84

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From: Housing Manager DAU <Manager.DAU@npws.gov.ie>

Sent: 30 June 2023 11:12 **To:** Niamh McHugh

Subject: RE: Proposed Laurclavagh Renewable Energy Development, Co. Galway

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A Chara.

The Department is not in a position to make specific comments on this particular referral at this time. No inference should be drawn from this that the Department is satisfied or otherwise with the proposed activity. The Department may submit observations/recommendations at a later stage in the process.

Le meas

Edel Griffin

Executive Officer

An Roinn Tithíochta, Rialtais Áitiúil agus Oidhreachta Department of Housing, Local Government and Heritage

Aonad na nIarratas ar Fhorbairt

Development Applications Unit

Oifigí an Rialtais

Government Offices

Bóthar an Bhaile Nua, Loch Garman, Contae Loch Garman, Y35 AP90

Newtown Road, Wexford, County Wexford, Y35 AP90

From: Niamh McHugh < nhmchugh@mkoireland.ie>

Sent: Thursday 25 May 2023 11:22

To: Housing Manager DAU < Manager. DAU@npws.gov.ie>

Subject: Proposed Laurclavagh Renewable Energy Development, Co. Galway

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If you could please return any comments or suggestions at your earliest convenience, it would be much appreciated. If you require any further information, please do not hesitate to contact me.

Kind regards, Niamh

Niamh McHugh BSc. (Env)

Environmental Scientist

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An Roinn IompairDepartment of Transport



Niamh McHugh BSc (Env)
Environmental Scientist
MKO
Tuam Road
Galway
H91 VW84
14th June 2023

Re: EIA Scoping Document for the Proposed Laurclavagh Renewable Energy Development, near

Tuam, Co. Galway.

Dear Niamh,

The Department of Transport makes the following comments on the Laurclavagh Renewable Energy Development located in County Galway.

It should be noted that the Department considers the construction involved in providing this development and especially, the connection cables to the national grid may have effects on both the environment and the Regional and Local Road network.

Where the developer proposes the placement of any cables (or additional cables) in one or more trenches within the extents of the (regional and local) public road network, it is necessary to consider the following:

- Their presence within the public road could significantly restrict the Road Authority
 in carrying out its function to construct and maintain the public road and will likely
 add to the costs of those works.
- Their installation within the lands associated with the public road may affect the stability of the road. In particular where the road is a "legacy road" (where there is no designed road structure and the subgrade may be poor or poorly drained) the design needs to take account of all the variable conditions and not be based on a sample of the general conditions.



- The possible effect on the remaining available road space (noting that there may be need to accommodate other utilities within the road cross-section in the future).
- The necessity to have the power in the cables switched off where the Road
 Authority considers this necessary in order to carry out its function to construct and
 maintain the public road.

The Department consider it important that the examination of the proposal should include consideration of the following:

- Examination of options other than the routing of cables along the public road,
- Examination of options for connection to the national grid network at a point closer to the wind farm in order to reduce the adverse impact on public roads.
- Details of where within the road cross section cables are to be placed so as to minimise the effect on the Roads Authority in its role of construction and maintenance,
- Examination of details of any chambers proposed within the public road cross section so as to minimise the effect on the Roads Authority in its role of construction and maintenance,
- Examine the elimination of jointing bays and use of temporary removable jointing bays to protect the integrity of the road structure for the safety of those driving on the public road by eliminating hard spots and also preserve the road width for other utilities and,
- Rationalisation of the number of cables involved (including existing electric or
 possible future cables) and their diversion into one trench, in order to minimise the
 impacts on the road network and the environment along the road boundary
 (hedgerows).

The Department considers the following should be considered when applying conditions to any approval.

A condition requiring the specific approval of the local authority to the detail of the
final route of cables through the public road space. If during construction there is a
need to deviate from the detailed design then the approval of the local authority
would again be sought. This would assist in minimising the impact on the public
road.



- 2. A condition requiring the developer to comply with all appropriate standards and, inter alia the Guidelines for Managing Openings in Public Roads, 2017 in order to ensure orderly development.
- 3. A condition requiring that the location of the cables would be recorded as exactly as possible (maybe using BIM type technology) so as to facilitate the further use of road space for utilities and the maintenance/construction of the public road by the Roads authority. This record should be lodged with the local authority and with the ESB Networks for retention on their records.
- 4. A condition to require the elimination of jointing bays and the use of temporary removable jointing bays instead, to protect the integrity of the road structure, thereby improving safety for those driving on the public road by eliminating hard spots and preserving the road width for other utilities.
- 5. A condition requiring the developer to route cables away from bridge structures and specifically preventing the developer from attaching cables to road bridges. This would allow for the future maintenance of bridges without interruption of the electricity supply along the cables.
- 6. A condition requiring the developer to notify the Roads Authority of the owner of the cables (Owner) and the controller (Power Controller) of the power transmitted along the cables. In addition, the condition should require Owner and Power Controller to notify the Roads Authority of any change in ownership of the cables or change of Power Controller transmitting power along the cables. In all instances the Owner and Power Controller should be required to maintain an agreed contacts list with the Roads Authority.

Central Policy, Coordination and Reform

An Roinn Iompair

Department of Transport

Lána Líosain, Baile Átha Cliath, D02 TR60

Leeson Lane, Dublin, D02 TR60

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EIAR Guidelines for the Consideration of Tourism and Tourism Related Projects



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1. Introduction

Tourism is a growing sector and substantial part of the Irish Economy. It contributes to both urban and rural economies in every part of the country. The impact and interaction of tourism with the environment is complex and the assessment of environmental impacts is of utmost importance to creating a sustainable tourism economy and protecting the natural resources that are so often a tourism attraction.

The purpose of this report is to provide guidance for those conducting Environmental Impact Assessment and compiling an Environmental Impact Assessment Reports (EIAR), or those assessing EIARs, where the project involves tourism or may have an impact upon tourism. These guidelines are non-statutory and act as supplementary advice to the EPA EIAR Guidelines outlined in section 2.

This guidance document has been prepared by Cunnane Stratton Reynolds on behalf of Fáilte Ireland to update their EIA guidelines in line with changes in legislative requirements.

2. Background to this Document

Tourism is one of the largest and most important sectors of the economy, providing employment for approximately **260,000 people**, an economic contribution of **€8.4 billion**, and exchequer revenue of **€1.78 billion** in 2018, which helps fund other key public services.

In 2018 Ireland welcomed 10.6 million overseas visitors.

Fáilte Ireland is the National Tourism Development Authority. Fáilte Irelands role is to support the tourism industry and work to sustain Ireland as a high-quality and competitive tourism destination. They provide a range of practical business supports to help tourism businesses better manage and market their products and services.

Fáilte Ireland also work with other state agencies and representative bodies, at local and national levels, to implement and champion positive and practical strategies that will benefit Irish tourism and the Irish economy.

Fáilte Ireland promotes Ireland as a holiday destination through a domestic marketing campaign (DiscoverIreland.ie) and manage a network of nationwide tourist information centres that provide help and advice for visitors to Ireland.

Tourism related projects cover a broad range of plans, programmes and developments, from the Wild Atlantic Way to a single hotel conversion. These guidelines apply to projects involving or impacting upon tourism. A tourism plan, strategy or programme where it is part of the statutory plan making process under the Planning and Development Acts (as amended), may be more appropriately assessed by a Strategic Environmental Assessment (SEA) as discussed in the next section.

It should be borne in mind that EIA is required where there is anticipated to be a significant impact on the environment, where tourism projects are of a prescribed type or meet thresholds identified below.

Where Natura 2000 Designated Sites are potentially affected by tourism development Appropriate Assessment must be carried out by the appropriate authority in accordance with Article 6(3) of the EU Habitats Directive.

3. Legislation and Statutory Guidance

Environmental Impact Assessment is a procedure that ensures that the environmental implications of decisions are taken into account before planning based decisions are made. The assessment results in a report, called an Environmental Impact Assessment Report (EIAR).

Legislation

These guidelines are produced under current EIAR legislative requirements, having regard to Directive 2011/92/EU (known as 'Environmental Impact Assessment' – EIA Directive), as amended by Directive EU 2014/52 which came into effect in May of 2017. These requirements were transposed into Irish Law on 1 September 2018 as most of the provisions of the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018) came into effect. The principle of both Directives is to ensure that plans, programmes and projects likely to have significant effects on the environment are made subject to an environmental assessment, prior to their approval or authorisation.

Statutory Guidance

In response to the changes to the EIAR requirements under Directive EU 2014/52, the Environmental Protection Agency (EPA) developed Draft guidelines on the information to be contained in Environmental Impact Assessment Reports in August 2017. At the time of this document the guidelines have not been adopted from draft.

In addition to the EPA statutory guidance, the Department of Housing has produced Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment in August 2018.

The process of EIA is set out in the EPA EIAR Guidelines, which this document should be read in conjunction with and used as supplementary guidance to. The process for ascertaining whether an EIAR is required is known as 'screening' and the process to determine the breath and scope of an EIAR is known as 'scoping'. Guidance on this can be found in Section 3.2 of the EPA Guidelines.

Screening

Through EIAR Screening, developments are either considered as requiring an EIAR due to the project type or because they exceed a threshold level. The screening process begins by establishing whether the proposal is a 'project' as understood by the Directive (as amended).

The prescribed development types and thresholds are set out in Annex I and II of the EIA Directive as transposed into Schedule 5 of the Planning and Development Regulations 2010-2018 (as amended). Development which do not exceed these thresholds but may require an EIAR are called sub threshold. Sub-Threshold considerations are outlined in Schedule 7 of European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018) as transposed from Annex III of the Directive. The Guidelines on Environmental Impact Assessment Reports note that projects at first glance may not appear to come under the Schedule

but on closer examination when the process is further examined, they may do so because of the sensitivity or significance of the receiving environment etc. Sub threshold developments require an EIAR if they are likely to have significant environmental impacts and must undergo assessment for likely significant impacts through an EIAR screening report. The contents of a screening report for subthreshold development are contained in Annex III of the EIA Directive.

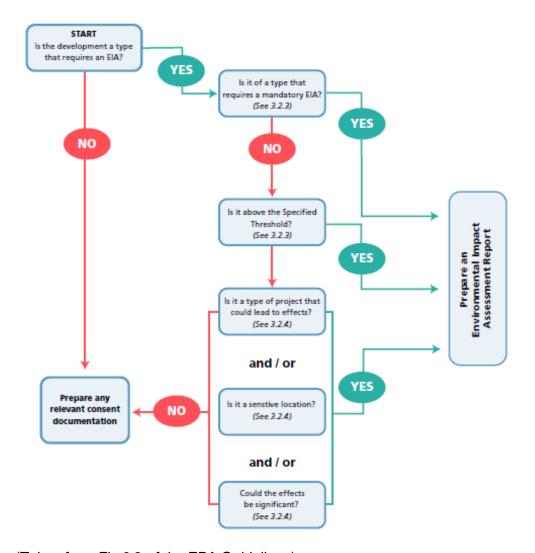


Figure 1: EIAR Screening Process

(Taken from Fig 3.2 of the EPA Guidelines)

Tourism locations should be identified as sensitive receptors in screening assessments for particular impacts, depending on scale and sensitivity, as they would in a full EIAR. Section 6 below can act as guidance for Screening Reports as well as for full EIAR.

The screening process for considering where an EIAR is necessary, is summarised below in Figure 1 (excerpted from Figure 3.2 of the EPA Guidelines).

Strategic Environmental Assessment (SEA) is a more strategic level of environmental assessment that examines plans, policies, objectives and programmes specifically rather than projects. For some tourism developments it may be more appropriate that they be examined through SEA, while individual projects or specific proposals are likely to be more assessed through EIAR. If a project is part of a plan, programme or policy/objective assessed by SEA there will still be a requirement for an EIAR for that development.

EIAR Scoping

Scoping an EIAR is an opportunity to look at the breadth of issues and ensure that any areas of possible significant impact are assessed. Identifying sensitivities and stakeholders should take account of tourism facilities and consider Fáilte Ireland in scoping requests where necessary.

4. Assessing Tourism

There is no legal definition of 'tourism' in Irish legislation. The UNWTO definition of sustainable tourism is "Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities". This is widely accepted as a key definition of tourism as we move to a more sustainable future.

Tourism assessments are frequently carried out by economic consultants and by specific tourism consultants. It is always advisable, particular for tourism projects, that suitably qualified and experienced personnel are used to determine the impact of tourism related projects or to assess the impact of more general proposals on a tourism asset identified in a particular location. There is a requirement for EIAR under current legislation to contain a statement of competency within all EIAR documents, including screening and scoping reports.

Projects which involve a tourism element

Tourism projects are wide ranging and diverse. While there are some projects which cater to tourism and are easily identified as such - Hotels, Museums, etc. there are other projects where tourism is a key service or element, but which may not be immediately obvious - forest trails, community facilities and others. EIAR conducted for developments containing tourist elements should be completed in accordance with the current guidance from the EPA.

Projects which include a tourism element have potential particular environmental effects which differ from a non-tourism development. These impacts can be intermittent, event related, inconsistent, dependent on weather, temporal, temporary or seasonal. This is considered within the prescribed environmental topics for EIAR outlined in Section 7 below.

Projects which may have an impact upon tourism

While tourism projects may be diverse, the projects which can impact tourism are considerably more wide ranging, from large infrastructural developments to local energy developments. Disruption to or suppression of a tourist resource or amenity can have very local or more strategic impacts, directly or indirectly- for example energy projects in a rural area can have both a negative and positive impact in different regards. There can be temporary, periodic or even seasonal impacts occurring during construction or operational periods.

According to the Fáilte Ireland Tourism Facts 2018 Report, the most important factors in determining the attractiveness of tourism destinations for visitors to Ireland are;

- Beautiful Scenery and Unspoiled Environment
- Hospitality
- Safetv
- Nature, Wildlife and Natural Attractions
- History and Culture
- · Pace of Life

These factors used for the promotion of tourism in Ireland are also barometers of sensitivity to change in tourism sensitive or dominant locations where development may have an impact upon the tourism asset. The potential for development to impact these sensitivities, and the environmental criteria under which they can be considered, are identified in section 7 of the guidelines.

5. Guiding Principles of EIAR

As outlined in the EPA Draft EIAR Guidelines, the fundamental principles to be followed when preparing an EIAR, including screening and scoping, are:

- Anticipating, avoiding and reducing significant effects
- Assessing and mitigating effects
- Maintaining objectivity
- Ensuring clarity and quality
- Providing relevant information to decision makers
- Facilitating better consultation.

Environmental assessment should be undertaken in accordance with the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018.

6. Consideration of Competency and Qualifications

As per Section 2.5 of the EPA Guidelines, EIAR is required to be completed by 'competent experts'.

Contributors to the preparation of environmental impact assessment reports, including screening and scoping assessments, should be qualified and competent. Sufficient expertise, in the relevant field of the project concerned, is required for the purpose of its examination by the competent authorities in order to ensure that the information provided by the developer is complete and of a high level of quality so that a full and proper assessment can be undertaken.

For tourism related projects, or projects likely to affect tourism assets, competent experts in the area of tourism should be utilised in the environmental assessment.

The competency of all involved in the production of an EIAR or any related report (eg. Screening and scoping) is required to be stated at the beginning of the EIAR report with further details as necessary in each following chapter.

Where tourism projects involve for example heritage or cultural components, input from heritage consultants, conservation architects, or historians may be required.

7. EIAR Requirements

The following are the key requirements for an EIAR under the current guidance. This is not a definitive list and should be read in conjunction with regulations.

- project description;
- · assessment of alternatives considered;

- baseline assessment;
- impact assessment;
- cumulative impact
- interaction of impacts
- mitigation.

Project Description

Project descriptions are required to describe the whole project including site, scale, design and key factors. It is important that the EIAR and design team have a consistent understanding of the development description in full. The key requirements are outlined in section 3.5 of the EPA Guidelines however they identify the following;

- the location of the project
- the physical characteristics of the whole project
- the main characteristics of the operational phase of the project
- an estimate, by type and quantity, of the expected residues and emissions

The location of the project should include identifying key sensitive receptors (including tourism receptors). In the operational phase of the project any tourism based, or potentially tourism related activity, should be identified.

Assessment of Alternatives

The assessment of alternatives is a requirement of EIAR

Where tourism projects are location dependent the assessment of alternatives should consider alternative methods and technologies, detail the key considerations culminating in the selection of the design, the reasoning for these and the environmental effect of these decisions. This is particularly important for tourism projects which are often location tied. The developer is expected to consider reasonable alternatives. What is considered reasonable my vary from case to case.

Baseline Assessment

Baseline descriptions are evidence based, current descriptions of environmental characteristics with consideration of likely changes to the baseline environment evidenced in planning histories, unimplemented permissions, and applications pending determination. Baseline assessments should identify any tourism sensitivities in the zone of influence of a development. This zone of influence of a development is highly dependant on its **Context**, **Character**, **Significance**, and **Sensitivity**, as outlined in the Draft Guidelines. These characteristics apply to both the development and the environment.

For example, in a tourism context;

The location of sensitive tourism resources that are likely to be directly affected should be highlighted, and other premises which although located elsewhere, may be the subject of in combination impacts such as alteration of traffic flows or increased urban development.

The character of an area from a tourism perspective should be described and the principal types of tourism in the area. Where relevant, the specific environmental resources or attributes in the existing environment which each group uses or values should be stated and where relevant, indicate the time, duration or seasonality of any of those activities.

The significance of the tourism assets or activities likely to be affected should be highlighted. Reference to any existing formal or published designation or

recognition of such significance should be. Where possible the value of the contribution of such tourism assets and activities to the local economy should be provided.

If there are any significant concerns or opposition to the development known to exist among tourism stakeholders and interest groups, this should be highlighted. Identify, where possible, the particular aspect of the development which is of concern, together with the part of the existing tourism resource which may be threatened or impacted.

In addition, the baseline should include any methodologies employed in the study to obtain information, if particular databases are used to locate sensitive receptors they should be acknowledged. In relation to tourism information, the suggested information sources at the end of this document are a non-exhaustive list which may be of assistance in identifying tourism receptors.

Impact Assessment

The topics for consideration of impact are prescribed in the EIA Directive and transcribed into Irish law by the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018). Impact assessment should contain the likely significant effects of a development arising from both construction and operation of a development. Advice on describing the effects is contained within the Draft Guidelines and includes the **quality, significance, extent, probability, type** and **duration** of the effect, with particular descriptors for each. In describing effects upon tourism receptors these descriptors should take account of the particular aspects and sensitivities of tourism, for example a temporary annual effect from a development may have different impacts upon tourism if it falls at peak season rather than off-peak.

Impact assessment should be carried out as per EPA guidelines and the best practice for that prescribed topic. It may be considered appropriate to consider impact on tourism assets under the 'material assets' topic below.

Population and Human Health

The consideration of tourism projects within the Population and Human Health is extensive, with impacts ranging from rural employment population impacts of seasonal tourism, to the health impact of air pollution from increased traffic in urban areas.

The impact upon tourism can be considered within this section through the sensitivities of Hospitality, Safety and Pace of Life. Changes in population can impact the perception of pace of life or safety in a particular location. Impacts upon these issues in areas which rely heavily on tourism or have a particular sensitive tourism generator should be considered in this section.

Biodiversity

Particular tourist activities can have a significant impact upon biodiversity. Landscapes which are 'unspoiled' can be attractors of tourism. However, the disturbance to ecology must be managed to minimise impact. Biodiversity is also a tourism asset and should be protected as such from other development and should be provided for in proposals where possible.

Land, Soils and Geology

A link between tourism and this prescribed environmental factor, beyond the normal development impacts, is rare, however particular activities or facilities which use geological features may have an impact upon soils and geology, such as mountain biking trails, recreational uses of old quarries etc. Indirect impacts such as material use for extensive landscaping and public realm should also be considered.

Water

Tourism uses can be water intense, depending on development type. Recreational use of a surface water feature, water-based leisure centres etc have different impacts to standard development.

Air Quality and Climate

Tourism impact upon air quality is dependent on activity proposed and sensitivity of the location.

Noise and Vibration

A link between tourism and this prescribed environmental factor, beyond the normal development impacts, is rare, however the impact upon tourism of issues of noise and vibration can be significant. Construction adjoining hotels for example should consider the sensitivity of the development and ensure mitigation is in place.

Material Assets; Traffic and Transport

The different transport patterns associated with tourism activities is a key impact of tourism and should be considered especially for tourism projects. These produce temporal and seasonal changes on the norm and specialist consideration and interpretation should be given. Tourism proposals should, where possible, be well served by public transport and should be accessible by modes other than the car. The impact of traffic on tourism assets can be substantial and can vary in severity according to season, the weather, etc. The impact of construction traffic can be a particular concern in tourism sensitive areas in terms of noise pollution and visual impact. The construction programme of developments should work to avoid peak tourism periods in tourism areas and should consider planned or anticipated tourism events and festivals.

Cultural Heritage

Cultural heritage can be a key component of tourism projects and the impact of tourism on the maintenance of cultural heritage should be given the utmost consideration, whether positive or negative. As a tourism attraction, cultural heritage should be strongly considered in non-tourism developments and the impact upon tourism considered as a potential impact.

Archaeology

Archaeology can be of tourism interest and can be an attractive or key component of tourism projects. Archaeology can be a tourism attractor but is generally not kept in situ except in key cases which could also be considered under cultural heritage.

Material Assets; Waste Management

Tourism is a resource heavy activity and can impact waste streams and waste segregation. Impacts here should be considered strongly and with knowledge of the variation that arises from the particular tourist activity. Waste and Waste disposal issues can also impact the perception of an unspoiled environment, effecting tourism, which should be considered.

Material Assets

Material assets are utilities and infrastructure. Tourism itself could be considered a material asset as its impact upon the economy and the infrastructure in place to support it is a material consideration in assessing economic impact.

Landscape

The visual impact of a tourism development, especially in locations which are visually sensitive or renowned for their scenic or landscape beauty, should be considered carefully. A

development intended to utilise or enjoy a particular vista or environment should minimise impact upon that environment.

Major Accident and Natural Disaster

There is a requirement for tourist developments to describe expected significant effects on the environment of the proposed development's vulnerability to major accidents and/or natural disasters relevant to it. Where appropriate measures should be identified to prevent or mitigate the significant adverse effects of such accidents or disasters, including resulting from climate change, on the environment and detail the preparedness for the proposed response.

Interaction of Effects

Where two or more environmental impacts combine or interact they should be considered under the prescribed topics. It is best practice to provide a table of interactions within an EIAR or EIAR Screening Report.

Mitigation

Mitigation should follow the hierarchy of minimisation in descending order of preference-Avoid, Reduce, Remedy

Avoid sensitive tourism resources- such as views, access and amenity areas including habitats as well as historical or cultural sites and structures.

Reduce the exposure of sensitive resources to excessive environmental impact

Reduce the adverse effects to tourism land uses and patterns of activities, especially through interactions arising from significant changes in the intensity of use or contrasts of character or appearance.

Remedy any unavoidable significant residual adverse effects on tourism resources or activities.

Mitigation measures must be measurable and achievable within the bounds of the project.

Cumulative Impact

The cumulative impact is that of the project combined with any known likely project which will interact or compound an environmental impact.

Transboundary Impact

Transboundary impacts should be included in EIAR. In the case of tourism, especially international travel, the transboundary impacts may not be proximate to the EIAR site.

8. Sources of information on Tourism

Information available online

Fáilte Ireland

Fáilte Ireland offers detailed research analysis and insights into the Irish Tourism Industry. The National Tourism Development Authority has a portfolio of research across a number of areas including facts an figures, briefing papers and reports and visitor feedback. The Fáilte Ireland website has a dedicated research library which can be accessed here

Tourism Ireland

Tourism Ireland is responsible for marketing the island of Ireland overseas as a holiday and business tourism destination. Tourism Ireland publishes a range of research documents including; visitor facts and figures, seasonal updates and industry insights which are accessible here

Local Authorities

Local Authorities are an invaluable source of information. They produce tourism strategies and audits of tourism assets within their jurisdiction. Local authorities will also produce landscape and seascape studies. Protected views and prospects as well as the record of protected structures and other designated protected buildings are contained within the Statutory Development Plans.

Regional Authorities

Regional Authorities can also be consulted on high level strategic tourism and potential Regional Spatial and Economic Strategies (RSESs) should be consulted.

Central Statistics Office

The Central Statistics Office (CSO) is Ireland's national statistical office and their purpose is to impartially collect, analyse and make available statistics about Ireland's people, society and economy. The Tourism and Travel Section of the Central Statistics Office is the major source for tourism statistics in Ireland and is updated regularly.

From: Customer Services < customerservices@galwaycoco.ie>

Sent:25 May 2023 13:56To:Niamh McHughCc:Customer Services

Subject: RE: FAO Heritage Department: Proposed Laurclavagh Renewable Energy

Development, Co. Galway

Caution: This is an external email and may be malicious. Please take care when clicking links or opening attachments.

A Chara,

Go raibh maith agat as ucht do theachtaireacht, thank you for your message. Your message has been forwarded to the Planning Section for their attention and direct reply.

Le gach dea-ghuí

Breda

Seirbhísí Custaiméara | Customer Services Comhairle Chontae na Gaillimhe | Galway County Council Áras an Chontae, Cnoc na Radharc, Gaillimh H91 H6KX

: 091-509000 | 🚟: customerservices@galwaycoco.ie | gaeilge@cocogaillimh.ie

From: Niamh McHugh < nhmchugh@mkoireland.ie>

Sent: Thursday 25 May 2023 11:37

To: Customer Services < customerservices@galwaycoco.ie>

Subject: FAO Heritage Department: Proposed Laurclavagh Renewable Energy Development, Co. Galway

Dear Sir/Madam,

Laurclavagh Ltd. is investigating the potential to construct a renewable energy development at Laurclavagh and adjacent townlands, Co. Galway, located approximately 9km southwest of Tuam. It is envisaged that the proposed renewable energy development will consist of 8 no. wind turbines, a 110kV substation and all associated infrastructure.

MKO have been engaged to prepare the planning application and associated Environmental Impact Assessment Report (EIAR). As part of the EIAR, we are issuing the attached scoping document and associated cover letter to all consultees. As part of this scoping exercise, we would welcome any feedback you may have regarding survey techniques, background information, etc.

If you could please return any comments or suggestions at your earliest convenience, it would be much appreciated. If you require any further information, please do not hesitate to contact me

Kind regards, Niamh

Niamh McHugh BSc. (Env)

Environmental Scientist

MKC

Tuam Road, Galway, H91 VW84

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From: Customer Services < customerservices@galwaycoco.ie>

Sent:26 May 2023 09:21To:Niamh McHughCc:Customer Services

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A Chara,

Go raibh maith agat as ucht do theachtaireacht, thank you for your message.

Your message has been forwarded to the Ms. Marie Mannion/Heritage Officer and Planning for their attention and direct reply.

Le gach dea-ghuí

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Niamh McHugh

From: Niall Galvin <niall.galvin@turnkeydev.com>

Sent: 27 November 2023 15:50

To: Niamh McHugh

Cc: Órla Murphy; William O'Connor

Subject: FW: Galway HP Pipeline

Attachments: 4969_17042023085746.pdf; GNI Code of Practice for Working in Vicinity of Tx

Network 2021.pdf; Safety Advice for working in the vicinity of Gas pipes 2021.pdf

Caution: This is an external email and may be malicious. Please take care when clicking links or opening attachments.

Niall,

In relation to the EIA Scoping document, Laurclavagh EIA SD F3 - 2023.05.19- 210627, see below GNI's commentary in relation to our gas pipeline assets in the area.

- 1. The closest wind turbine must be 2 times hub height away from the closest transmission pipeline.
- 2. Any ducts crossing the pipeline would have to be installed as per the GNI Code of Practice (attached) with 600mm separation between services. If you have more than 1 AC cable at the crossing, then these must also be laid in a trefoil formation. The trefoil arrangement is primarily used in situations where the three phases are carried by individual cables rather than a single three phase cable and the magnetic field produced by each phase is cancelled out which reduces interaction of stray currents on the pipeline CP system.
- 3. Any new access roads would need to be assessed to see if loadbearing slabbing is required. GNI can assess whether slabbing is required once you confirm that this road will not be trafficked by abnormal loads and would have the same max axel loads as per a standard national road.
- 4. All works must be carried out in compliance with the attached Code of Practice with the salient points during the construction phase being wayleave demarcation & installing temp construction traffic crossing points.
- 5. Electrical interference assessment may be required in line with ISO 21857 for cables crossing our gas transmission pipeline. This electrical assessment would need to be carried out by the developer following discussions with GNI. This is a specialised assessment carried out by companies such as Corroconsult (https://www.corroconsult.com/) & CPCL (https://www.cathodic.co.uk/) but others are available too. Costs for the electrical assessment & any works that may arise as the result of this assessment would have to be borne by the windfarm operator/owner. Same would apply to loadbearing slabbing should it be required.
- 6. The EIA Scoping document references Aurora Gas Pipelines on page 20. Please note that there are Aurora fibre cables attached to the gas transmission pipeline but the pipeline itself belongs to Gas Networks Ireland. Aurora is a sister company of GNI. The denoted buffer zone of 225m would not meet the requirements for 2 times hub height as it only has 112.5m either side of the pipeline. Turbine T05 is within that 2 times hub height assuming hub height greater than 55m.

Below is our standard response in relation to queries near our assets.

The Gas Transmission Pipeline in the general area of interest to you is shown, in RED, on the drawing attached. Please treat all Gas Networks Ireland Drawings as 'indicative' only.

To verify the in situ position of the Gas Transmission Pipeline please contact Chris Dillon,

chris.dillon@gasnetworks.ie. All work in the vicinity of a Gas Transmission Pipeline must be completed in compliance with the attached 'Code of Practice 2021'.

The Gas Transmission Pipelines exist within Gas Networks Ireland Wayleaves. No excavation may take place within any such Wayleave unless consent, in the form of a valid Excavation Permit, has been granted by Gas Networks Ireland. Chris Dillon will issue this permit once all conditions for excavations have been met.

Aurora Telecom Ducts, where present, are shown as MAUVE BROKEN LINES. Please contact Aurora Telecom, at Auroralink@gasnetworks.ie for advice where Aurora Telecom infrastructure is present. The Aurora Emergency Number is 1800-42 7399

Regards,

Dónal Ó Caoimh **Senior Pipeline Safety Engineer** donal.ocaoimh@gasnetworks.ie 0872841209 Gas Networks Ireland, P.O. Box 51, Gasworks Road, Cork, Ireland. T12 RX96.













Tá an fhaisnéis á seachadadh dírithe ar an duine nó ar an eintiteas chuig a bhfuil sí seolta amháin agus féadfar ábhar faoi rún, faoi phribhléid nó ábhar atá íogair ó thaobh tráchtála de a bheith mar chuid de. Tá aon athsheachadadh nó scaipeadh den fhaisnéis, aon athbhreithniú ar nó aon úsáid eile a bhaint as, nó aon ghníomh a dhéantar ag brath ar an bhfaisnéis seo ag daoine nó ag eintitis nach dóibh siúd an fhaisnéis seo, toirimiscthe agus féadfar é a bheith neamhdhleathach. Níl Líonraí Gáis Éireann faoi dhliteanas maidir le seachadadh iomlán agus ceart na faisnéise sa chumarsáid seo nó maidir le haon mhoill a bhaineann léi. Ní ghlacann Líonraí Gáis Éireann le haon dliteanas faoi ghnímh nó faoi iarmhairtí bunaithe ar úsáid thoirmiscthe na faisnéise seo. Níl Líonraí Gáis Éireann faoi dhliteanas maidir le seachadadh ceart agus iomlán na faisnéise sa chumarsáid seo nó maidir le haon mhoill a bhaineann léi. Má fuair tú an teachtaireacht seo in earráid, más é do thoil é, déan teagmháil leis an seoltóir agus scrios an t-ábhar ó gach aon ríomhaire.

Féadfar ríomhphost a bheith soghabhálach i leith truaillithe, idircheaptha agus i leith leasaithe neamhúdaraithe. Ní ghlacann Líonraí Gáis Éireann le haon fhreagracht as athruithe nó as idircheapadh a rinneadh ar an ríomhphost seo i ndiaidh é a sheoladh nó as aon dochar do chórais na bhfaighteoirí déanta ag an teachtaireacht seo nó ag a ceangaltáin. Más é do thoil é, tabhair faoi deara chomh maith go bhféadfar monatóireacht a dhéanamh ar theachtaireachtaí chuig nó ó Líonraí Gáis Éireann chun comhlíonadh le polasaithe agus le caighdeáin Líonraí Gáis Éireann a chinntiú agus chun ár ngnó a chosaint. Líonraí Gáis Éireann cuideachta ghníomhaíochta ainmnithe, faoi theorainn scaireanna, atá corpraithe in Éirinn leis an uimhir chláraithe 555744 agus a tá hoifig chláraithe ag Bóthar na nOibreacha Gáis, Corcaigh, T12 RX96.

Go raibh maith agat as d'aird a thabhairt.

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Thank you for your attention.



Safety advice

for working in the vicinity of natural gas pipelines



Important safety information



When planning any excavation works dial 1800 42 77 47

to obtain up to date gas network maps.

Monday to Friday 9am - 5.30pm

Or you can sign up to DBYD online at

gasnetworks.ie/dbyd

and have access to maps 24 hours, 7 days a week You can also contact us on

dig@gasnetworks.ie

If you have damaged a gas pipe call

1800 20 50 50

immediately, even if you do not suspect that gas is leaking

24 hours, 7 days a week

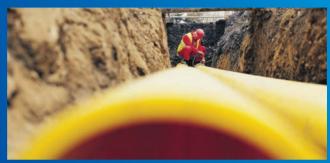
If you smell gas call

1800 20 50 50

24hr emergency service

Contents





This booklet contains important safety advice. Please read the following before you start work:

Natural gas characteristics and behaviour4
Risks of damaging a gas pipe5
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Natural gas characteristics and behaviour



Characteristics

Natural gas is:

- a highly flammable gas;
- lighter than air and will rise when released:
- non-toxic (but can suffocate in enclosed or confined spaces); and
- made up mostly of methane and has a smell added for safety purposes.

Behaviour

During an uncontrolled escape, natural gas will behave in the following ways:

- In open excavations, where there is a clear path to the atmosphere, natural gas will rise, dilute and disperse into the air.
- If the path to the atmosphere is blocked, the gas will travel through soil, ducts, drains, sewers and voids. It can also follow the line of other buried utility services. This can lead to gas entering a building or other confined spaces, and may lead to a fire or explosion.

Note: Never cover a damaged gas pipe; or attempt to carry out a repair. Call 1800 20 50 50 immediately.

Risks of damaging a gas pipe

The risks of damaging a gas pipe can be classified as:

Highest Risk



Mechanical excavators pose the highest risk and "should not be used within 500 mm of a gas distribution pipe."

(HSA Code of Practice)

Mechanical excavators must not be used within 3 metres of a Transmission pipeline.

(Refer to Code of Practice for Working in the Vicinity of the Transmission Network - AO/PR/127)

High Risk



Hand held power tools should not be used directly over the line of a gas pipe, unless the gas pipe has been positively located by hand and a safe working distance has been established.

Use of handheld power tools is not permitted within 1.5 m of a Transmission pipeline. (Refer to Code of Practice for Working in the Vicinity of the Transmission Network - AO/PR/127)

Damage to gas pipes from power tools presents a high risk to the operatives involved in the work.

Low Risk



Hand digging using shovels and spades presents the lowest risk of damaging a gas pipe.

This is the method that should be used where the presence of gas pipes is suspected or close to a known gas pipe.

Risks from a damaged gas pipe





- Remember when gas escapes, or is released in an uncontrolled way; it can fuel a fire, give rise to an explosive atmosphere or cause asphyxiation.
- If you suspect there is a gas leak, immediately call Gas Networks Ireland's 24hr Emergency Service on 1800 20 50 50.
- Gas can quickly fill underground cavities and travel into buildings through soil, or following the line of other buried utilities.
- Gas can only burn if exposed to an ignition source:
 - Do not turn electrical switches on or off
 - Do not operate any plant or equipment
 - Do not use naked flames, smoke or vape
 - Do not use mobile phones in the vicinity.
- Move people away from, and upwind of, the affected area.
- If gas has entered a confined space or building:
 - Open doors and windows
 - Turn off the gas supply at the meter
 - Do not expose to an ignition source.

Gas Networks Ireland transmission network



Gas Networks Ireland transports gas in Ireland through a network of steel and polyethylene (PE) pipes. The network operates at pressures between 20 mbar and 85 bar and is split between Transmission and Distribution pipelines.

The Transmission system is made up of steel pipes and operates from 7 bar to 85 bar.

The **Distribution** system is made up mostly of polyethylene pipes and operates from 20 mbar to 7 bar.

The **network**

The network is made up of three elements:

Transmission pipes

Distribution pipes

Pressure Regulating Installations



Transmission pipes

These are high pressure pipelines that transfer gas across the country. They are constructed from steel, with a black, white, cream, yellow or concrete coating, and may have marker posts at intervals along their length, particularly at field boundaries and road crossings.

If a transmission pipeline is identified near intended excavations then work must not proceed until Gas Networks Ireland Transmission has been consulted on 1800 42 77 47.



The **network**

Distribution pipes

These are medium or low pressure pipelines within urban areas. They are mainly constructed from Polyethylene (PE) and are predominantly yellow in colour, but may have brown or black stripes. There are two types – Mains and Services

Mains gas pipes usually run parallel to property in the footpath, grass verge or road and range in size from 63 mm to 400 mm diameter.

Service gas pipes are connected to mains and run to a meter position at the property, and range in size from 20 mm to 63 mm diameter.



There are still a small number of ductile and cast iron gas mains in use, ranging in size from 3 inch (75 mm) to 24 inch (600 mm) in diameter (these mains are similar in appearance to metal water mains). Steel and PE gas services are run from these metal mains to the meter location at each building.

These ductile and cast iron mains and services have been largely replaced with PE pipes. In urban areas a large number of redundant ductile or cast iron pipes are utilised as carrier pipes for new PE pipelines.

Some Distribution pipelines have been classified as strategic mains due to their pressure, diameter and/ or location and the elevated consequences if they are damaged.

If a Distribution strategic main is identified near an intended excavation then work must not proceed until Gas Networks Ireland has been consulted on 1800 42 77 47.





The **network**



District Regulating Installation (DRI)

Pressure Regulating Installations

There are two types: Above Ground and Under Ground

Above Ground Installations (AGI) / District Regulating Installations (DRI)

An AGI/DRI is a fenced area containing a visible arrangement of pipework and ancillary equipment and will be clearly marked with Gas Networks Ireland signage. Some DRI's can be housed in a steel unit with no fencing surround.

Under Ground Installations (UGI/DRlug)

Gas Networks Ireland also have underground pressure regulating installations which have metal or concrete cover plates. There will be no visible arrangement of pipework etc, as this will be contained within the chamber.

If an AGI/DRI or UGI/DRIug is identified near intended works, then work must not proceed until Gas Networks Ireland has been consulted on 1800 42 77 47.



Gas Networks Ireland construction methods

Gas Networks Ireland use three main construction methods:

'Dig' Technique



Open Cut – installing pipe using standard trenching techniques. Pipe is laid with a sand or pea gravel surround and gas marker tape is laid above the sand.

'No-Dig' Techniques



Insertion – utilising existing metal gas mains / services as a carrier for new PE pipes. Inserted PE may be a close or loose fit. The carrier pipe is broken out at connection points, i.e. at pipe joints or where a gas service pipe is connected.



Moling/Directional
Drilling – installing mains/
services where a 'moling'
machine drills from one
location to another pulling
the pipe behind it using
"no-dig" technology.

Note: Where pipe has been installed using "no-dig" techniques, the gas pipe will not have sand surround or marker tape.

Gas Networks Ireland construction - depth of cover



Typical service arrangement



Service Connection



Purge Point

New Mains – Normally 750 mm in roads and 600 mm in footpaths. (1.1 m in open fields)

New Services – 450 mm rising to 375 mm within 1.5 m of the building line. In some cases these depths are not achievable.

Note:

Older mains and services may have reduced cover.

Services and other connections are taken from the top of the main and will therefore have a reduced depth of cover.

Alteration since original installation – roads, footpaths and grass verges may have been altered since the gas main or service was laid and reduced the depth of cover.

Purge Points and Test Caps – Mains are laid with "purge points" and/or test caps at the ends. These may also rise above the top of the main.

Gas Valve Covers – Gas valves are a key safety component part of the gas network.

Some gas mains and services have valves installed below ground with valve covers marked "GAS".

Do not cover over or remove gas valve covers.

The risk of a gas valve cover being removed or covered over is particularly high during resurfacing or reinstatement works.

Even shallow excavation techniques such as road planing can damage gas pipelines with reduced cover.

Requesting Gas Networks Ireland maps

Gas Networks Ireland operates a **Dial Before You Dig** service to enable those involved in excavations to obtain natural gas network maps prior to starting work.

This service operates from 9am to 5.30pm, Monday to Friday.

Or you can sign up to DBYD online at **gasnetworks.ie/dbyd** and have access to maps 24 hours, 7 days a week.

You can also email your enquiry to:

dig@gasnetworks.ie

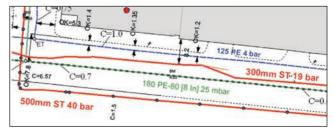


Maps will be sent out by post or by email where appropriate. When you contact Gas Networks Ireland to request a map, ensure you give the precise location of the intended works. You may be required to give some information regarding the nature of the planned work, i.e. start date, any high risk activity, etc.

Ensure you have allowed enough time for the maps to be obtained and to organise for the pipe location to be marked out if transmission pipelines are involved.

Note: Typical turnaround for maps is five working days when contact is made through phone or email, however using the online system will allow you instant access to up-to-date maps.

Organisers or planners of any work should ensure that the map is made available to personnel on-site.

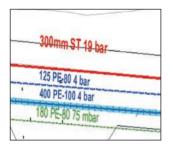


Excerpt from a Gas Networks Ireland map.

Reading Gas Networks Ireland maps

Note: Natural Gas Network maps will only show mains and not services.

See page 16 for more information on service pipe locations.



The colour coding is as follows:

Red = Transmission Main*

= 7 to 85 bar.

Blue = Distribution Medium Pressure

= 100 mbar to 7 bar.

Blue Buffer = Distribution strategic main*

= 100 mbar to 7 bar.

Green = Distribution Low Pressure

= up to 100 mbar.



Typical AGI

Pressure regulating installations are marked as:

DRI – District Regulating Installation (Above Ground).

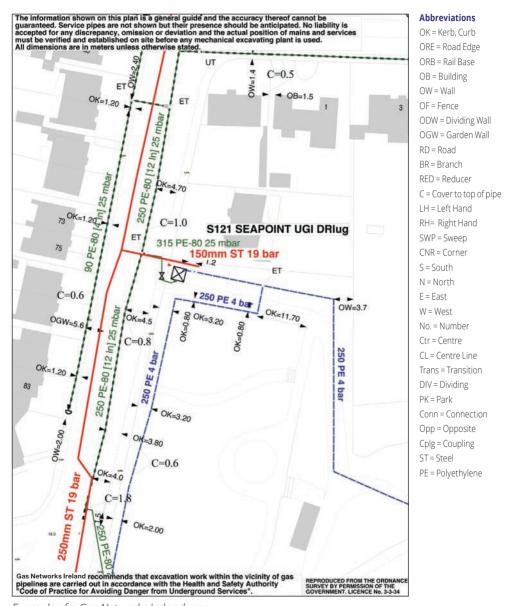
DRIug - District Regulating Installation (Under Ground).

UGI - Under Ground Installation.

AGI - Above Ground Installation.

^{*} If you obtain a natural gas network map that shows a **red**Transmission main in the area of the proposed works or a
distribution strategic main with a blue buffer, a consultation
with Gas Networks Ireland **must** take place **before** starting
works. Gas Networks Ireland will advise you on the safety
measures required and will arrange for the location of the pipe
to be marked out on site.

Reading Gas Networks Ireland maps



Example of a Gas Networks Ireland map

Gas services



Typical service arrangement



Service riser cover

Natural gas services are not normally identified on network maps, but their presence should be assumed. Services will normally, but not always, run at right angles from the main to the meter point.

To assist in determining the approximate position of gas services ensure you:

- Obtain a natural gas network map to identify the position of the gas main.
- Complete a site survey looking for gas meter boxes/cabinets, house entry points, service risers and gas valve covers.
- Older buildings may have no visible signs of a service, as the service may run directly into the building underground, with the meter fitted internally. In these cases a check should be made inside the building to identify the meter position.

Note: Ensure you utilise safe digging practices to locate the exact position of gas services.



Domestic meter box



Six meter cabinet



Purpose built multi-meter house (apartment complex).

Safe systems of work

Safe systems of work, as recommended by the Health and Safety Authority (HSA) should be employed on all projects.

Guidance on this can be found in the:

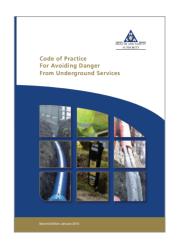
HSA: Code of Practice for Avoiding Danger from Underground Services.

Available from HSA website: www.hsa.ie

A safe system of work will include the following elements:

- Planning.
- Obtaining and using utility maps.
- Identifying pipes/services.
- Safe digging practices.
- Explosives must not be used within 30 m of any gas pipe (400 m for Transmission Pipelines), without prior consultation with Gas Networks Ireland.
- Piling, directional drilling or boring must not take place within 15 m of a gas pipe unless Gas Networks Ireland has been consulted.
- Extra care should be exercised when performing 'hot work' (such as welding)
 where a gaseous atmosphere could exist. If this potential exists Gas Networks
 Ireland must be consulted
- Extra care should also be taken when using welding equipment, burners, torches or other heat generating equipment near pipelines (even if there is no potential for a gaseous atmosphere to exist) to ensure that the heat or sparks generated do not lead to the melting of polyethylene pipes or damage to pipeline coatings.

Contact Gas Networks Ireland for general enquiries on: 1800 464 464.



Safe systems of work

Planning

- Early contact should be made with Gas Networks Ireland to obtain a Natural Gas Network map.
 Dial Before You Dig 1800 42 77 47 or visit gasnetworks.ie/dbyd
- Work involving piling, demolition, directional drilling, use of explosives or 'hot works' should be mentioned, as this may necessitate a site visit from Gas Networks Ireland personnel.
- Ensure you have allowed enough time to obtain the maps.

Maps

 Gas Networks Ireland will issue maps as outlined in this booklet. It is imperative that these maps are available for the operatives on-site for the duration of any works.
 The responsible person should ensure that operatives on-site understand the maps.

Identifying Pipes

- Steel, cast iron and ductile iron gas pipes can usually be traced using a conventional pipe/cable locating device set to "R" (Radio) mode.
- Polyethylene mains and services cannot be traced using conventional devices, so it is essential that maps are used and site surveys for meter boxes, valve covers, service risers, reinstatement scarring and other signs are completed.
- During the progress of works ensure no gas valve covers or markers are covered over.
- The position of gas mains and services should be marked out as they are located.

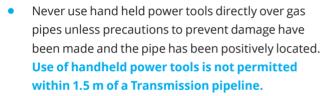
Note: Transmission pipelines pipelines and Distribution strategic mains must be marked out by a Gas Networks Ireland inspector.

Safe systems of work

Safe Digging Practices:

- As per the HSA Code of Practice, gas mains and services should be located by digging trial holes by hand. Mechanical excavators should not be used within 500 mm of any gas main.
 - Mechanical excavators MUST NOT be used within 3 m of a Transmission pipeline.

(Refer to Code of Practice for Working in the Vicinity of the Transmission Network - AO/PR/127)



(Refer to Code of Practice for Working in the Vicinity of the Transmission Network - AO/PR/127)

- Do not leave a polyethylene gas pipe exposed.
- Provide adequate support for any gas pipe uncovered during the work.
- Report any damage, no matter how minor it may appear, to 1800 20 50 50.
- If you have any concerns regarding safety around gas pipes contact Gas Networks Ireland for advice on 1800 464 464.



What to do if a gas pipeline is damaged

(or if you smell gas in the area)

- Do not turn any electrical switches on or off, e.g. ignition switches.
- Do not operate any plant or equipment.
- Move people away from, and upwind of, the affected area.
 Restrict employee and public access to the affected area.
- Prevent smoking, vaping, the use of naked flames, the use of mobile phones and other ignition sources in the vicinity of the leak.
- Report the leak/damage immediately to:
 Gas Networks Ireland 24hr Emergency Service on 1800 20 50 50.
- Provide accurate information on your location and the nature of the incident.
- Do not attempt to repair the damage.
- Do not cover up a damaged main or service, this may lead to the gas travelling through soil, ducts, sewers, chambers or voids and potentially building up inside a premises or confined space.
- Do not turn off any gas valves in the road or footpath (you may be causing further problems by doing so).
- Assist Gas Networks Ireland emergency personnel as required.
- Remember any damage to gas pipes, even if the pipe does not appear to be leaking, must be reported to Gas Networks Ireland.

1800 20 50 50 24hr emergency service

Gas Networks Ireland contacts

The main contact numbers for Gas Networks Ireland are

24hr Emergency Service 1800 20 50 50

24 hours, 7 days a week

Dial Before You Dig 1800 42 77 47

Monday to Friday 9am - 5.30pm

or sign up to DBYD online

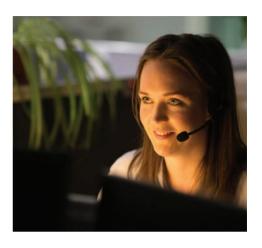
gasnetworks.ie/dbyd

General Enquiries 1800 464 464

Monday to Friday 8am – 8pm Saturday 9am – 5.30pm

gasnetworks.ie

For "Dial Before You Dig" posters or stickers for your workplace call: **1800 464 464**





Other useful publications

HSA: Code of Practice for Avoiding Danger from Underground Services

HSA: Guide to Safety in Excavations

both are available free of charge from:

Health and Safety Authority on 01 614 7000

www.hsa.ie

ESB Networks: How you can avoid hitting electrical cables when digging and drilling

available free of charge from: ESB Networks on 1800 372 757 esb.ie/esbnetworks



The main contact details for Gas Networks Ireland are:

General Enquiries 1800 464 464

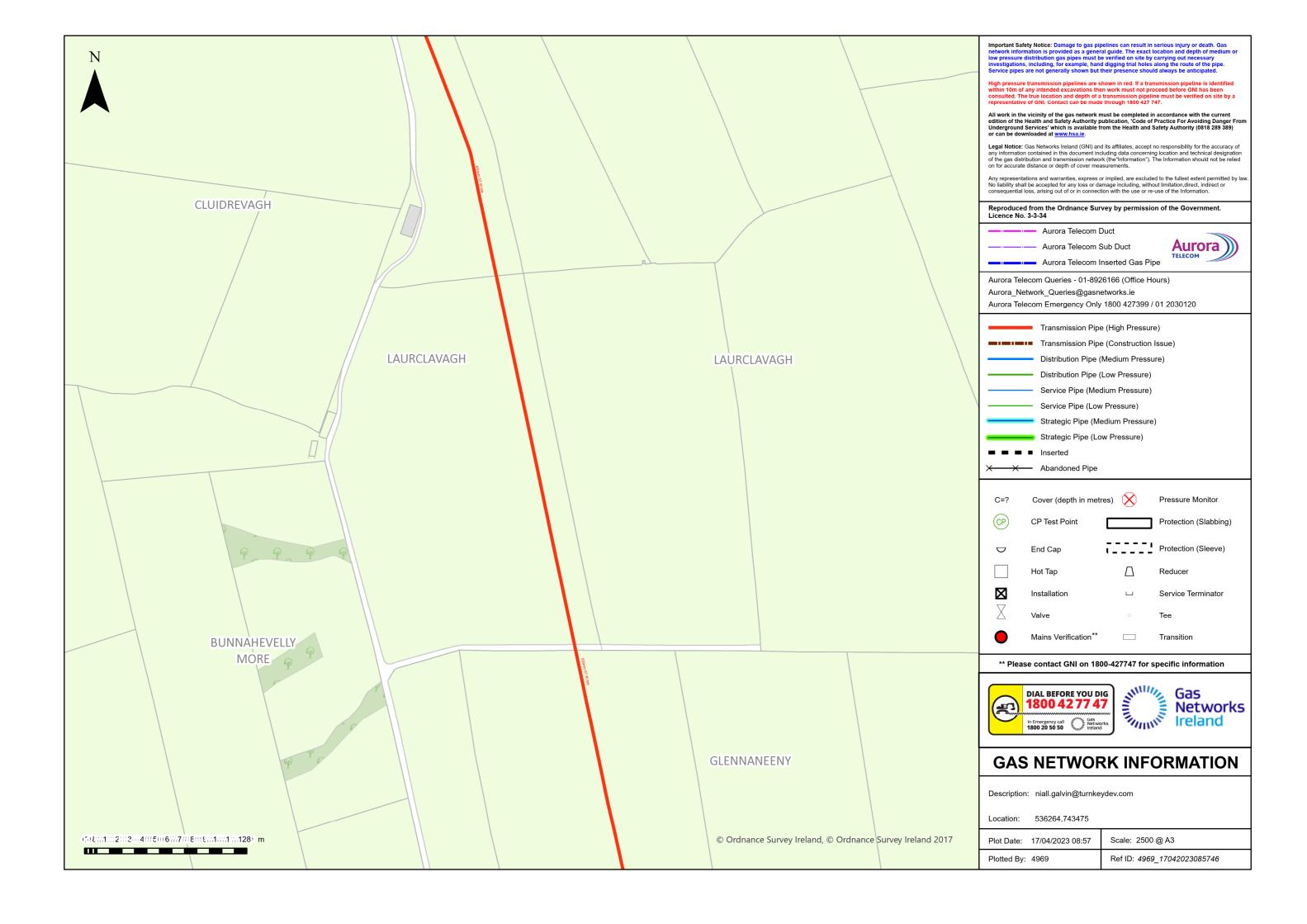
Dial Before You Dig 1800 42 77 47

24hr Emergency Service 1800 20 50 50

networksinfo@gasnetworks.ie

gasnetworks.ie

Guideline No: HSQE/GU/016 Rev 2 Date: November 2020





Code of Practice for Working in the Vicinity of the Transmission Network

Procedure No: AO/PR/127 Rev 3 Date: May 2021







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When carrying out work in the vicinity of the tranmsission network follow the following process

IMPORTANT:

Flowchart should be used in conjunction with this Code of Practice and not in isolation. If at any time during the works the transmission network is damaged, even slightly, then observe the precautions in Section 1 of this document.

DESIGN & PLANNING

Consider the requirements of this document and the impact on proposed works (Sections 8 & 9)

CONTACT GAS NETWORKS IRELAND

Contact Gas Networks Ireland to obtain formal consent (Section 5)

NOTICE TO COMMENCE

Having received formal consent, a minimum of 5 working days notice prior to commencement of the work is required

REQUEST MARKING OUT OF TRANSMISSION PIPELINE ROUTE

A minimum of 3 working days notice is required by GNI to mark out the transmission pipeline route

OBSERVE RESTRICTIONS

Observe GNI restrictions on the allowed proximity of mechanical excavators and other power tools and the measures to protect the transmission pipeline and associated installations during any works (Sections 10, 11, 12 & 13)

NOTE: GNI may wish to oversee the work. Such instances will be identified in the formal consent

BACKFILLING

Contact GNI prior to any backfilling over, alongside or under the transmission pipeline and obtain GNI's agreement to proceed. GNI require 2 working days notice prior to backfilling (Section 12)

SPECIFIC ACTIVITIES

If work involves any of the following activities:
 Trenchless Techniques, Piling,
 Surface Mineral Extraction, Land Filling, Demolition,
Blasting, Pressure Testing, Seismic Surveys, Wind Farms
 Comply with the requirements in Section 14

If in doubt contact Gas Networks Ireland



Foreword

Compliance with this Code of Practice does <u>NOT</u> confer immunity from prosecution for breach of statutory or other legal obligations.

This code of practice does **not** cover emergency work or normal agricultural work (as defined below), but it is recommended that in such cases the requirements of the code should be observed as far as possible.

Any damage to a transmission pipeline or its coating can affect its integrity and can result in failure of the transmission pipeline with potentially serious hazardous consequences for individuals located in the vicinity of the transmission pipeline. It is therefore essential that the procedures outlined in this document are complied with when working near the transmission network.

Failure to apply for consent and/or to comply fully with this Code of Practice to the satisfaction of GNI may result in the commencement of legal proceedings by Gas Networks Ireland to stop such works.

Activities associated with working in the vicinity of the transmission network may impact on the safety of the general public, site workers, GNI staff and contractors, and may affect the local environment. All Third Parties working close to the transmission network shall carry out suitable and adequate risk assessments prior to the commencement of work to ensure that all such issues are properly considered and risks mitigated.

Contractors and other users external to GNI should direct their requests for further copies of GNI engineering documents to Gas Networks Ireland.

1 Safety Procedure in the Case of Damage to the Transmission Network

If the GNI transmission network is damaged or leaking, the following precautionary measures shall be taken immediately:

- In the event of gas leakage do **not** switch any machinery on or off in the vicinity of the leak.
- Advise GNI or its representative if there are any safety features on the machine such as engine idling automatic shutoff facilities.
- Prohibit smoking, the use of naked flames, the use of electrical switches, the use of mobile phones and the use of all other ignition sources in the vicinity of the leak/damage.
- Evacuate all personnel away from and upwind of the affected area.
- Ensure that no one approaches the affected area without the consent of Gas Networks Ireland.
- Once clear of the area, report all damage or leakage, however minor it may appear, to the Gas Networks Ireland 24hr Emergency Service on 1800 205050
- Do **not** attempt to repair the damage or stop the leak.

Note: Any damage to the coating of a GNI transmission pipeline, no matter how apparently insignificant, shall be brought to the attention of GNI in order to carry out repairs. Minor damage to pipe coating and/or ancillary connections brought to the attention of GNI will be repaired *free of charge*.

1800 20 50 50 24hr emergency service

2 Definitions

For the purpose of this Code of Practice the following definitions shall apply:

GNI: Gas Networks Ireland.

GNI Inspector: The person appointed from time to time by GNI, to act as the GNI Representative on site, to ensure compliance with this Code of Practice.

Third Party: The promoter of New Works, the person or persons, firm, company or authority for whom new services or other works are being provided, including their servants, agents and contractors.

Wayleave: A strip of land, upon and over which GNI has, under the terms of Gas Act (1976 as amended), acquired the rights to lay, construct, inspect, maintain, protect, use, replace, remove or render unusable a main or pipe for the transmission or storage of gas or other materials connected with the exercise and performance of the functions of GNI and all necessary apparatus ancillary thereto. The wayleave can extend up to 9 metres either side of the transmission pipeline.

A GNI wayleave is a legal burden on the title of the property within which it exists and is noted as such on the relevant Land Registry Folio.

Normal Agricultural Works: For the purpose of this Code of Practice, 'Normal Agriculture Works' are such works which do **not** involve the use of

- a) Excavators (tracked or wheeled) irrespective of the proposed excavation depth, or
- Other mechanical soil penetrating machines such as fence post augers.

Installation: GNI transmission installations are primarily above ground (AGI) with a number below ground (UGI) comprising some or all of the following: Main stream pipework, control pipework, telemetry, instrumentation, boiler houses, analyser kiosks, generators and services.

Hot Works: Hot works is any tool, equipment and/or activity, which produces sparks, fire or has the potential to cause fires or explosions including, but not limited to, electric/battery powered tools, welding, cutting, brazing, soldering, grinding, etc.

Distribution Strategic Mains: Due to an increased gas safety risk the following Dx mains shall be designated as strategic:

- Single feeder mains to with in excess of 5000 customers
- PF400 mains.

3 Scope

This Code of Practice sets out the requirements and considerations for the design, construction and maintenance of services and/or structures and other works in the vicinity of existing Gas Networks Ireland (GNI) Gas transmission pipelines and associated Installations located in both Wayleaves and public roadways.

4 Purpose

The purpose of this Code of Practice is to:

- Set out considerations for the design, planning and execution of works.
- Advise on the GNI procedures associated with works.
- Identify the measures to be taken to ensure the integrity of the gas network,
 and
- Assist in ensuring the safety of persons involved in the works.

5 Formal Consent

Work shall not be undertaken within a wayleave, installation, or within 3 meters either side of a transmission pipeline or distribution strategic mains in a public roadway without the prior Formal Consent of Gas Networks Ireland.

- GNI shall be consulted if work is to be undertaken within 10 meters either side
 of a transmission pipeline or distribution strategic mains in a public roadway.
- Formal Consent may be issued by GNI following receipt of the following items.
- Written agreement to implement the terms and conditions of this Code of Practice and any site specific requirements as advised by GNI.
- A method statement detailing the work which will be undertaken and the means of ensuring the integrity of the gas network.
- An indemnity as outlined in Section 5.
- Evidence of insurance cover to the level required by GNI.
- Formal Consent may, in its simplest form, consist of a valid GNI Permit or a more comprehensive list of conditions.
- Where Formal Consent has been issued, the Third Party shall notify GNI,
 5 working days in advance of commencing the works.

6 Indemnity

It is an essential part of the granting of Formal Consent in the terms of this document that the Third Party shall indemnify GNI, its servants, agents and contractors against all loss, damage, expense, claims and actions incurred by or brought against GNI, its servants, agents and contractors in consequence of the provision of the new service and any works and activities associated therewith, or ancillary thereto.

7 Role of GNI Inspector

The primary role of the GNI inspector is to ensure the integrity of the gas network.

The GNI Inspector has the right to stop any work where in his/her opinion, the actions of the Third Party may adversely affect the integrity of the gas network.

The GNI Inspector shall inform the person in charge on site of his/her reason for stopping work and afford them the opportunity to address the issue to the satisfaction of the GNI Inspector.

A 'Corrective Action' shall be issued and recorded against the Third Party if the reason for stopping work is for non-conformance to any, some or all of the following:

- This Document,
- Conditions of the Formal Consent,
- Conditions of GNI Permits.

The GNI Inspector reserves the right to inspect any plant or equipment and/or any or all documentation/certification associated with plant, equipment and/or personnel associated with the work and not permit the use of any such plant, equipment and/or personnel in the works if found to be non-compliant.

8 Design Consideration for Proposed Works

8.1 Services Crossing Transmission Pipelines and Distribution Strategic Mains

Where a new service is to cross over the transmission pipeline or distribution strategic mains a clearance distance of 0.6 meters between the crown of the pipeline and underside of the service shall be maintained. If this cannot be achieved the service shall cross under the transmission pipeline with a minimum clearance distance of 0.6 meters.

8.2 Services Parallel to Transmission Pipelines and Distribution Strategic Mains

Pipelines within a wayleave

No new service shall be laid parallel to the transmission pipeline within a wayleave.

Pipelines within a roadway

- Any new service running parallel to a transmission pipeline in a roadway may, in consultation with GNI, be laid with a minimum horizontal clearance of 1m (5m for High Tension Cables) to the side of the pipeline and may not be above or below a transmission pipeline within that distance.
- Under certain circumstances consideration may be given to the relaxation
 of the above conditions on a case by case basis following prior consultation
 with GNI Asset Integrity, where the methods and safeguards to be employed
 have been considered and specified under a Safe System of Work Plan and
 where the work is supervised by GNI on site.

8.3 Cathodic Protection

Cathodic Protection is applied to GNI's transmission network and is a method of protecting pipelines from corrosion by maintaining an electrical potential difference between the pipeline and anodes placed at strategic points along the pipeline.

Where a new service is to be laid and is to be similarly protected, GNI will need to carry out interaction tests to determine whether its own system is adversely affected. The cost of any mutually agreed remedial action shall be borne by the Third Party.

Should any cathodic protection posts or associated apparatus need moving to facilitate construction operations, reasonable notice shall be given to GNI.

8 Design Consideration for Proposed Works (continued)

8.4 Installation of Electrical Equipment

Where electrical equipment is being installed close to the transmission network, the effects of a rise of earth potential under fault conditions shall be considered by the third party and a risk assessment shall be submitted to GNI for its approval as part of the Formal Consent process.

8.5 Slabbing and Other Protective Measures

Protective measures including the installation of concretes slab protection shall **not** be installed over or near to the transmission pipeline without the prior written consent of GNI.

Where consent has been given, a GNI Inspector must be present for the entire installation.

The material, composition, dimensions and method of installation of the proposed protective measure shall be agreed with GNI and shall form part of the submission for Formal Consent.

8.6 Changes to Depth of Cover

Any works, which will result in an increase or decrease in the cover of an existing Transmission Pipeline or distribution strategic mains on completion of those works, shall be agreed with GNI in advance.

9 General Consideration for Proposed Works

9.1 GNI Protective Measures

Where protective measures are required by GNI, work shall **not** commence until such time as the GNI Inspector is satisfied that those measures meet the requirements of GNI.

9.2 Gaseous Atmospheres

Third Parties shall be mindful of potentially gaseous atmospheres and the generation of sparks, particularly indoors or when a change in wind conditions/direction occurs.

9.3 Inductions

Personnel involved in the works may be required to attend a GNI induction. Such a requirement shall, if required, be identified in the Formal Consent.

9.4 Method Statements

Method statements, where required, shall include risk assessments and be submitted to GNI for review no fewer than 10 working days in advance of commencing works associated with that method statement.

9.5 Identification of Transmission Pipeline and Strategic Mains Routes

Before any work is carried out in the vicinity of existing transmission pipelines or distribution strategic mains, GNI shall, with 3 working days notice, mark/peg out the transmission pipeline route.

The Third Party shall confirm the position of the pipeline before work commences

A GNI Inspector shall be in attendance for the duration of the excavation of any trial holes necessary to confirm the position of the pipe.

9.6 Handheld Power Assisted Tools

Where the use of handheld power assisted tools is required in the vicinity of the live network, alternatives to electrically/battery powered tools should, in the first instance, be considered. These tools, as with others, by virtue of their makeup generate a spark when activated/run and as such are in themselves subject to 'Hot Work' permits and associated procedures.

9 General Consideration for Proposed Works (continued)

9.7 Hot Work

Hot works shall **not** take place within an installation, wayleave or within 3 metres either side of a transmission pipeline in a public roadway without the prior written consent of Gas Networks Ireland.

9.8 Induced Voltage

Where high voltage power lines run parallel to a transmission pipeline, there is potential to induce high voltages on the pipeline. To prevent injury, people working on exposed pipe in this area must have suitable protection against electric shock. GNI can provide advice in relation to suitable protection measures and a GNI Inspector must be present when any such work is being performed.

9.9 Construction Traffic

Construction traffic shall not be sited over or moved along or across a transmission pipeline without the prior written approval of GNI.

Construction traffic shall only cross a transmission pipeline at previously agreed and clearly marked crossing lanes.

All crossing lanes shall be fenced on both sides over a width to be specified by GNI. These fences shall be returned along the wayleave on both sides for a distance of 6m away from the crossing.

The crossing lane shall be protected by laying approved sleeper rafts or by protection made from other GNI approved materials, unless otherwise agreed in writing with GNI.

Construction traffic shall be operated at "dead slow" when using crossing lanes.

Suitable warning notices, drawing attention to the danger of not using the crossing, shall be erected and maintained in a clearly legible condition.

9.10 Lifting

Any plant and/or equipment involved in lifting shall be certified fit for purpose.

Slewing across an exposed pipe shall not be permitted. However, under certain circumstances consideration may be given to the relaxation of this rule on a case by case basis provided that the lifting methods and safeguards to be employed have been formally **risk assessed and the work is approved and**

9 General Considerations for Proposed Works (continued)

supervised by GNI or its representative on site. Reference can be made to the **GNI Lifting Procedure AO/PR/174.**

9.11 Storing Materials

Materials, including those excavated or stripped shall not be stored within a wayleave or Installation without the prior written approval of GNI.

Materials, including those excavated or stripped shall not be stored over a transmission pipeline.

9.12 Fires

Fires shall **not** be permitted within a wayleave or in the vicinity of an installation.

10 Preliminary Works

10.1 Demarcation

Where work is being carried out parallel to a transmission pipeline within or immediately adjoining a wayleave, a demarcation line shall be erected, to the satisfaction of GNI, so as to clearly delineate the boundary between the works site and the wayleave/pipeline.

10.2 Surface Stripping

Cultivated/Unmade Ground

 Where trial holes have established that sufficient depth of cover exists, light tracked vehicles may strip top soil to a depth of 0.25 metres using a toothless bucket.

Metalled Surfaces

- Bituminous or concrete surface layers may be stripped to a depth of 0.3 metres by mechanical means.
- Where the bituminous or concrete layer extends below 0.3m, only the
 use of handheld power assisted tools is permitted, and only in the
 presence of GNI.

11 Excavations

11.1 Plant/Equipment Limitations

The following limitations shall be observed when working in the vicinity of a transmission pipeline or distribution strategic mains.

- Hand dig within 1.5 meters of the pipeline.
- Handheld power assisted tools permitted beyond 1.5 meters of the pipeline.
- Mechanical excavators permitted beyond 3 meters of the pipeline.
- The use of 'chain trenchers' is not permitted within 3 meters of the pipeline.
- A mechanical excavator may **not** reach across a pipeline while working,
 i.e. cab at one side of pipeline with bucket (rock breaker, etc.) on opposite side of pipeline.
- A mechanical excavator shall **not** 'pull' towards the pipeline.

Under certain circumstances consideration may be given to the relaxation of the above conditions on a case by case basis provided that the excavation methods and safeguards to be employed have been considered and specified under a Safe System of Work Plan and the work is approved and supervised by GNI on site.

Factors that should be considered in this determination include, but are not limited to:

- Pipeline size, pressure, wall thickness and location.
- Excavator size (weight)
- Operator competency and experience
- Type and width of bucket/attachment
- Type and width of bucket/attachment (e.g. toothless)
- Ground conditions (e.g. rock, soft ground etc.)
- Weather conditions
- Visibility, particularly of the machine operator
- Machine orientation (e.g. working along the axis of the pipe)
- Supervision arrangements

Note: Mechanical excavators <u>must never be permitted</u> to work closer than 0.5 meters from the pipeline.

11 Excavations (continued)

11.2 Exposed Pipeline Protection

Once a pipeline has been exposed, it shall be immediately protected with timber or nylon batons at least 50mm wide and 25mm thick secured to each other with webbing at a distance of no greater than 10mm over the entire exposed area of the pipeline. The method of securing the webbing to batons should be such that any impact would not cause damage to the pipeline coating or other methods approved by GNI.

Where heavy gauge trench sheets are used in addition to batons to protect a pipeline, care should be taken while placing the trench sheets that buried stones, debris, etc. are not dislodged against the pipeline.

Depending on the type of work being carried out, ground conditions, etc., GNI may require additional measures.

11.3 Pipeline Support

Where it is necessary to excavate below a transmission pipeline, the pipeline shall, during stages of the operation, and for the duration of the works, be supported to the satisfaction of GNI, by means of ratchet straps secured to a steel beam (or GNI approved equivalent) across the pit/trench. On completion, permanent supports shall, if necessary, be constructed to avoid future settlement.

12 Backfilling

The Third Party shall give GNI at least 2 working days' notice of their intention to backfill below, above or adjacent to an existing transmission pipeline.

The Third Party shall afford GNI the opportunity and facility to inspect the coating on the pipeline and/or ancillary connections to the pipeline prior to backfilling.

A GNI Inspector shall be in attendance to monitor backfill around the pipeline during the whole of the backfilling operations.

Note: Any damage to the coating of a GNI transmission pipeline, no matter how apparently insignificant, shall be brought to the attention of GNI in order to carry out repairs. Minor damage to pipe coating and/or ancillary connections brought to the attention of GNI will be repaired *free of charge*.

13 Above Ground Installations

13.1 PPE Requirements

GNIs minimum PPE requirements for working in a live installation are hard hat, safety glasses, safety shoes/boots, gloves and Hi-Viz Jacket/vest. All clothing shall be anti-static and flame retardant. Contact GNI Safety Department for information on compliance of PPE.

13.2 Above Ground Pipework With Ancillary Connections

Where construction plant and machinery are used in an AGI, all above ground pipework with ancillary control pipework, telemetry and/or instrumentation adjacent to the work, shall be protected on all sides by timber/metal hoarding, secured in place, a minimum of 2 meters from any extremity and extending vertically to the uppermost point of any pipe/equipment. A suitable point of access shall be provided in the hoarding. Where this 2 meter separation distance cannot be physically achieved due to the layout and size an installation, the works may be allowed to proceed but only where suitable precautions have been agreed and implemented to protect all relevant pipework and personnel.

13 Above Ground Installations (continued)

The risks and associated mitigating measures shall be identified on the relevant risk assessment and method statement for the proposed works. The relevant details supporting any relaxation of this code of practice shall be recorded on the relevant general works permit or excavation permit by the permit issuer.

Heras type fencing may be used where a distance of 6m from any extremity can be achieved.

13.3 Above Ground Pipework Without Ancillary Connections

Where construction plant and machinery are used in an AGI, all above ground pipework which does **not** have ancillary connections adjacent to the work, shall be protected on all sides by heras type fencing a minimum of 2 meters from any extremity. A suitable point of access shall be provided in the fencing. Where this 2 meter separation distance cannot be physically achieved due to the layout and size an installation, the works may be allowed to proceed but only where suitable precautions have been agreed and implemented to protect all relevant pipework and personnel. The risks and associated mitigating measures shall be identified on the relevant risk assessment and method statement for the proposed works. The relevant details supporting any relaxation of this code of practice shall be recorded on the relevant general works permit or excavation permit by the permit issuer.

13.4 Vehicles, Plant and Machinery

Only diesel powered vehicles are permitted within the confines of an AGI. Petrol, Electric or compressed natural gas CNG vehicles are not permitted.

All plant and machinery used within an AGI shall be diesel powered.

Petrol or electrically powered equipment may be used under hot works permit system if a diesel alternative is not available. Any hot works permit for petrol powered equipment are issued at the discretion of GNI and to be supervised by GNI or its representatives.

13.5 General

This code of practice shall apply to all work carried out within an AGI.

14 Specific Activities

This section details the precautions that need to be taken when carrying out certain prescribed activities in the vicinity of the transmission network. Consult GNI if you are intending to undertake one of the listed prescribed activities and/or you require further advice on whether the work that you are intending to undertake has the potential to affect the transmission network.

The table below shows, for some specific activities, the prescribed distances within which GNI shall be consulted.

Activity	Distance within which GNI shall be consulted
Any Excavation Actions	10 m
Piling	15 m
Surface Mineral Extraction	100 m
Land filling	100 m
Demolition	150 m
Blasting	400 m
Wind Farm	2 times the turbine mast height from the nearest edge of a transmission pipeline
Trenchless Techniques	10 m
Pressure Testing	8 m

14.1 Trenchless Techniques

Trenchless techniques must **not** take place within 10m of the GNI Transmission Network without prior consultation with GNI.

14.2 Piling

Piling shall **not** be permitted within 15 metres of the transmission network without an assessment of the vibration levels at the pipeline. Contact GNI with regard to peak particle velocity criteria and other precautionary measures.

Where ground conditions are of submerged granular deposits of silt and sand, an assessment of the effect of vibration on settlement and liquefaction at the transmission pipeline shall be made.

14 Specific Activities (continued)

14.3 Surface Mineral Extraction

An assessment shall be carried out on the effect of surface mineral extraction activity within 100 meters of the transmission network.

Where the mineral extraction extends up to the transmission pipeline wayleave, a stable slope angle and stand-off distance between the transmission pipeline and slope crest shall be determined by GNI. The wayleave strip should be clearly marked by a suitable permanent boundary such as a post and wire fence, and where appropriate, slope indicator markers shall be erected to facilitate the verification of the recommended slope angle as the slope is formed, by the Third Party. The wayleave and slope needs to be inspected periodically to identify any signs of developing instability. This may include any change of slope profile including bulging, the development of tension cracks on the slope or wayleave, or any changes in drainage around the slope. The results of each inspection should be recorded.

Where surface mineral extraction activities are planned within 100 meters of the transmission pipeline but do not extend up to the pipeline wayleave boundary, an assessment, by GNI may be made on whether the planned activity could promote instability in the vicinity of the pipeline. This may occur where the transmission pipeline is routed across a natural slope or the excavation is deep. A significant cause of this problem is where the groundwater profile is affected by changes in drainage or the development of lagoons.

Where the extraction technique involves explosives the provisions of section 14.6 apply.

14.4 Land Filling

The creation of slopes outside of the wayleave may promote instability within the vicinity of the transmission pipeline. An assessment should therefore be carried out on the effect of any land filling activity within 100 meters of a transmission pipeline. The assessment is particularly important if land filling operations are taking place on a slope in which the pipeline is routed.

14.5 Demolition

Demolition shall **not** be permitted within 150 meters of a transmission network without an assessment of the vibration levels at the pipeline. Contact GNI with regard to peak particle velocity criteria and other precautionary measures.

Where ground conditions are submerged granular deposits of silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the transmission pipeline shall be made.

14 Specific Activities (continued)

14.6 Blasting

Blasting shall **not** be permitted within 400 meters of a transmission network without consulting GNI and making an assessment of the vibration levels at the pipeline. Contact GNI on **1800 42 77 47** with regard to peak particle velocity criteria and other precautionary measures.

Where ground conditions are of submerged granular deposits of silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the transmission pipeline shall be made.

14.7 Pressure Testing

Hydraulic or pneumatic testing shall **not** be permitted within 8m of the transmission network unless precautions have been taken against the effects of a possible burst. These precautions may include the use of pre installation tested pipe, sleeving, barriers, etc., as agreed with GNI.

14.8 Seismic Surveys

GNI shall be advised of any seismic surveying work in the vicinity of a transmission pipeline. Contact GNI with regard to peak particle velocity criteria and other precautionary measures.

14.9 Wind Farm Development

GNI should be consulted if wind turbines are to be sited any closer than 2 times the proposed height of the turbine mast away from the nearest edge of a transmission pipeline or associated installation.

14.10 Solar Farm and Battery Storage Facilities

GNI shall be consulted if Solar Farm or Battery Storage Facilities are to be sited in the vicinity of a transmission pipeline or associated installation.

15 Referenced External Documents

IS328: Code of Practice for Gas Transmission Pipelines & Pipeline Installations.

HSA Code of Practice for Avoiding Danger from Underground Services

HSA Guide to Safety in Excavations

Both are available free of charge from:

Health and Safety Authority on 1890 289 389/ www.hsa.ie

16 Referenced Gas Networks Ireland Documents

Categorizing & Processing of Dial Before You Dig Queries	AM/WI/072
Guide to Dealing with DBYD Online Queries	HSQE/GU/033
Dial Before You Dig Process (Map)	HSQE/BP/042
Safety Advice for Working in Vicinity of Natural Gas Pipelines	HSQE/GU/016
GNI Lifting Procedure	AO/PR/174

17 Safety Information

The online version of this code of practice is available at

https://www.gasnetworks.ie/home/safety/dial-before-you-dig/

Before starting any excavation work, it is essential to check for the location of gas pipes by calling **1800 42 77 47** or emailing **dig@gasnetworks.ie**

In an Emergency dial **1800 20 50 50**



1800 20 50 50 24hr emergency service



The main contact details for Gas Networks Ireland are:

General Enquiries 1800 464 464

Dial Before You Dig 1800 42 77 47

24hr Emergency Service 1800 20 50 50

networksinfo@gasnetworks.ie

₩ @GasNetIRL

gasnetworks.ie





Niamh McHugh MKO Tuam Road Galway, H91 VW84

08 June 2023

Re: EIA Scoping Document for the Proposed Laurclavagh Renewable Energy Development, near Tuam, Co. Galway

Your Ref: 210627 Our Ref: 23/126

Dear Niamh,

Geological Survey Ireland is the national earth science agency and is a division of the Department of the Environment, Climate and Communications. We provide independent geological information and gather various data for that purpose. Please see our <u>website</u> for data availability. We recommend using these various data sets, when conducting the EIAR, SEA, planning and scoping processes. Use of our data or maps should be attributed correctly to 'Geological Survey Ireland'.

The publicly available data referenced/presented here, should in no way be construed as Geological Survey Ireland support for or objection to the proposed development or plan. The data is made freely available to all and can be used as independent scientific data in assessments, plans or policies. It should be noted that in many cases this data is a baseline or starting point for further site-specific assessments.

With reference to your email received on the 25 May 2023, concerning the EIA Scoping Document for the Proposed Laurclavagh Renewable Energy Development, near Tuam, Co. Galway, Geological Survey Ireland would encourage use of and reference to our datasets. Please find attached a list of our publicly available datasets that may be useful to the environmental assessment and planning process. We recommend that you review this list and refer to any datasets you consider relevant to your assessment. The remainder of this letter and following sections provide more detail on some of these datasets.

Geoheritage

Geological Survey Ireland is in partnership with the National Parks and Wildlife Service (NPWS, Department of Housing, Local Government and Heritage), to identify and select important geological and geomorphological sites throughout the country for designation as geological NHAs (Natural Heritage Areas). This is addressed by the Geoheritage Programme of Geological Survey Ireland, under 16 different geological themes, in which the minimum number of scientifically significant sites that best represent the theme are rigorously selected by a panel of theme experts.

County Geological Sites (CGSs), as adopted under the National Heritage Plan, include additional sites that may also be of national importance, but which were not selected as the very best examples for NHA designation. All geological heritage sites identified by Geological Survey Ireland are categorised as CGS pending any further NHA designation by NPWS. CGSs are now routinely included in County Development Plans and in the GIS of planning departments, to ensure the recognition and appropriate protection of geological heritage within the planning system. CGSs can be viewed online under the Geological Heritage tab on the online Map Viewer.

The audit for Co. Galway was carried out in 2019. The full report details can be found here. Our records show that there are CGSs close to the proposed EIAR Site Boundary of the proposed Renewable Energy Development.

Knockmaa, Co. Galway (GR 134737, 247715), under IGH themes: IGH1 Karst, IGH3 Carboniferous to Pliocene Palaeontology, IGH7 Quaternary, IGH12 Mesozoic and Cenozoic. A large area of landscape between Headford and Tuam with thin glacial deposits which have only slightly modified a pre-Pleistocene karst landscape, developed on Carboniferous limestones, which contains late Pliocene sediments. The site is of international importance and is recommended to NPWS for Geological NHA status. Link to Site Report: GY082.

Pollnahallia, Co. Galway (GR 133735, 246895), under IGH themes: IGH7 Quaternary, IGH12 Mesozoic and Cenozoic. A deep, abandoned sand pit, on the southern footslopes of the hills west of Knockmaa Hill. Link to Site Report: GY116.





Knockmaa Quarries, Co. Galway (GR 136933, 248357), under IGH themes: IGH1 Karst, IGH8 Lower Carboniferous, IGH12 Mesozoic and Cenozoic. This site includes two large working quarries, side-by-side, on the southeastern slopes of Knockmaa Hill, about 7 km southwest of Tuam. These quarries provide a good representative site displaying the Carboniferous limestone bedrock geology of mid-Galway, with additional features of pre-glacial and karstic interest. Link to Site Report: <u>GY083</u>.

While it is recognised that wind energy developments are an important place in the development of Ireland's renewable energy industry, any future wind-farm development and associated infrastructure including drainage, transmission and access road construction in the surrounding areas could pose a threat to the integrity of the sites. These sites should be assessed as environmental constraints. Ideally, the sites should not be damaged or integrity impacted or reduced in any manner due to any proposed construction and/or modification of access roads, from traffic due to access road construction, turbine and hard stand installation. This would include impacts that may be related to altered drainage patterns, changes in soil profiles and structures etc. However, this is not always possible, and in this situation appropriate mitigation measures should be put in place to minimize or mitigate potential impacts.

Groundwater

Geological Survey Ireland's <u>Groundwater and Geothermal Unit</u>, provides advice, data and maps relating to groundwater distribution, quality and use, which is especially relevant for safe and secure drinking water supplies and healthy ecosystems.

Proposed developments need to consider any potential impact on specific groundwater abstractions and on groundwater resources in general. We recommend using the groundwater maps on our Map viewer which should include: wells; drinking water source protection areas; the national map suite - aquifer, groundwater vulnerability, groundwater recharge and subsoil permeability maps. For areas underlain by limestone, please refer to the karst specific data layers (karst features, tracer test database; turlough water levels (gwlevel.ie). Background information is also provided in the Groundwater Body Descriptions. Please read all disclaimers carefully when using Geological Survey Ireland data.

The Groundwater Karst Viewer indicates numerous karst landforms in the vicinity including a karst spring, enclosed depressions and caves.

The Groundwater Data Viewer indicates an aquifer classed as a 'Regionally Important Aquifer - Karstified (conduit)' underlies the proposed development. The Groundwater Vulnerability map indicates the range of groundwater vulnerabilities within the area covered is variable. We would therefore recommend use of the Groundwater Viewer to identify areas of High to Extreme Vulnerability and 'Rock at or near surface' in your assessments, as any groundwater-surface water interactions that might occur would be greatest in these areas.

Our records show that there are groundwater drinking water abstractions (Group Water Schemes) with source protection areas within and adjacent to the EIAR study area:

- Cluide Cahermorris GWS
- Cahermorris Glenreevagh GWS
- Caherlea GWS
- Rusheens GWS
- Anbally GWS

Key to groundwater protection in general, and protection of specific drinking water supplies, is preventing ingress of runoff to the aquifer. Design of drainage will need to be cognisant of the public water scheme and the interactions between surface water and groundwater as well as run-off. Appropriate design should be undertaken by qualified and competent persons to include mitigation measures as necessary, such as SUDs or other drainage mitigation measures.

Any excavation/cuttings required for realignment should ensure that groundwater flow within the zones of contribution to the groundwater abstraction points is not disrupted, resulting in diminished yields. Note that there could be other groundwater abstractions in the locality for which Geological Survey Ireland has not undertaken studies, and a robust assessment should be undertaken by qualified and competent persons including a survey of all current wells and water abstractions within the vicinity.





Given the nearby drinking water sources (Group Water Schemes), the effects of any potential contamination as a result of the project would need to be assessed.

<u>GWClimate</u> is a groundwater monitoring and modelling project that aims to investigate the impact of climate change on groundwater in Ireland. This is a follow on from a previous project (GWFlood) and the data may be useful in relation to Flood Risk Assessment (FRA) and management plans. Maps and data are available on the <u>Map viewer</u>.

Geological Survey Ireland has completed Groundwater Protection Schemes (GWPSs) in partnership with Local Authorities, and there is now national coverage of GWPS mapping. A Groundwater Protection Scheme provides guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater. The Groundwater Protection Response overview and link to the main reports is here: https://www.gsi.ie/en-ie/programmes-and-projects/groundwater/projects/protecting-drinking-water/what-is-drinking-water-protection/county-groundwater-protection-schemes/Pages/default.aspx

Geological Mapping

Geological Survey Ireland maintains online datasets of bedrock and subsoils geological mapping that are reliable and accessible. We would encourage you to use these data which can be found here, in your future assessments.

Please note we have recently launched QGIS compatible bedrock (100K) and Quaternary geology map data, with instructional manuals and videos. This makes our data more accessible to general public and external stakeholders. QGIS compatible data can be found in our downloadable bedrock 100k.zip file on the Data & Maps section of our website.

Geotechnical Database Resources

Geological Survey Ireland continues to populate and develop our national geotechnical database and viewer with site investigation data submitted voluntarily by industry. The current database holding is over 7500 reports with 134,000 boreholes; 31,000 of which are digitised which can be accessed through downloads from our Geotechnical Map Viewer. We would encourage the use of this database as part of any baseline geological assessment of the proposed development as it can provide invaluable baseline data for the region or vicinity of proposed development areas. This information may be beneficial and cost saving for any site-specific investigations that may be designed as part of the project.

Geohazards

Geohazards can cause widespread damage to landscapes, wildlife, human property and human life. In Ireland, landslides, flooding and coastal erosion are the most prevalent of these hazards. We recommend that geohazards be taken into consideration, especially when developing areas where these risks are prevalent, and we encourage the use of our data when doing so.

Geological Survey Ireland has information available on landslides in Ireland via the National Landslide Database and Landslide Susceptibility Map both of which are available for viewing on our dedicated Map Viewer. Associated guidance documentation relating to the National Landslide Susceptibility Map is also available.

Geological Survey Ireland also engaged in a national project on Groundwater Flooding. The data from this project may be useful in relation to Flood Risk Assessment (FRA) and management plans, and is described in more detail under 'Groundwater' above.

Natural Resources (Minerals/Aggregates)

Geological Survey Ireland provides data, maps, interpretations and advice on matters related to minerals, their use and their development in our <u>Minerals section</u> of the website. The Active Quarries, Mineral Localities and the Aggregate Potential maps are available on our <u>Map Viewer</u>.

We would recommend use of the Aggregate Potential Mapping viewer to identify areas of High to Very High source aggregate potential within the area. In keeping with a sustainable approach we would recommend use of our data and mapping viewers to identify and ensure that natural resources used in the proposed developement are sustainably sourced from properly recognised and licensed facilities, and that consideration of future resource sterilization is considered.





Geochemistry of soils, surface waters and sediments

Geological Survey Ireland provides baseline geochemistry data for Ireland as part of the Tellus programme. Baseline geochemistry data can be used to assess the chemical status of soil and water at a regional scale and to support the assessment of existing or potential impacts of human activity on environmental chemical quality. Tellus is a national-scale mapping programme which provides multi-element data for shallow soil, stream sediment and stream water in Ireland. At present, mapping consists of the border, western and midland regions. Data is available at https://www.gsi.ie/en-ie/data- and-maps/Pages/Geochemistry.aspx.

Geophysical data

Geological Survey Ireland produces high-resolution geophysical data (Magnetic field, electrical conductivity, natural gammaray radiation) of soils & rocks as part of the Tellus programme. These data currently cover approximately 75% of the country and provide supporting geological information on a regional scale useful for assessing environmental impact and risk.

Guidelines

The following guidelines may also be of assistance:

- Institute of Geologists of Ireland, 2013. Guidelines for the Preparation of the Soils, Geology and Hydrogeology Chapters of Geology in Environmental Impact Statements.
- EPA, 2022. Guidelines on the information to be contained in Environmental Impact Assessment Reports (EIAR)

Other Comments

Should development go ahead, all other factors considered, Geological Survey Ireland would much appreciate a copy of reports detailing any site investigations carried out. Should any significant bedrock cuttings or subsoil exposures be created, we would ask that they will be designed to remain visible as an exposure rather than covered with soil and vegetated, in accordance with safety guidelines and engineering constraints. In areas where natural exposures are few, or deeply weathered, this measure would permit on-going improvement of geological knowledge of the subsurface and could be included as additional sites of the geoheritage dataset, if appropriate. Alternatively, we ask that a digital photographic record of significant new excavations could be provided. Potential visits from Geological Survey Ireland to personally document exposures could also be arranged.

The data would be added to Geological Survey Ireland's national database of site investigation boreholes, implemented to provide a better service to the civil engineering sector. Data can be sent to the Geological Mapping Unit, at mailto:GeologicalMappingInfo@gsi.ie, 01-678 2795.

I hope that these comments are of assistance, and if we can be of any further help, please do not hesitate to contact me Clare Glanville, or my colleague Trish Smullen at GSIPlanning@gsi.ie.

Yours sincerely,

Dr. Clare Glanville

Senior Geologist

Geological Survey Ireland

Clarejille

Trish Smullen

Geoheritage and Planning Programme

Turi Smuller

Geological Survey Ireland

Enc: Table - Geological Survey Ireland's Publicly Available Datasets Relevant to Planning, EIA and SEA processes.





Geological Survey Ireland's Publicly Available Datasets Relevant to Planning, EIA and SEA processes following European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018)

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Notes:

- 1. The maps and data listed above are available on the Geological Survey Ireland map viewer https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx
- 2. Please read all disclaimers carefully when using Geological Survey Ireland data
- 3. Geological Survey Ireland and Irish Concrete Federation published guidelines for the treatment of geological heritage in the extractive industry in 2008.

Version No. 1 Geological Survey Ireland April 2021



An tSeirbhís Sláinte Comhshaoil

Feidhmeannacht na Seirbhíse Sláinte, Páirc Ghnó na Gaillimhe, An Daingean, Gaillimh. H91 EW40

T: (091) 737350 R: PEHO.galway@hse.ie

Environmental Health Service

Health Service Executive, Galway Business Park, Dangan, Galway H91 EW40

Tel: (091) 737350 Email: PEHO.galway@hse.ie

Date: 19/06/2023

Our reference: EHIS 3195

Report to: MKO Consultants, email: info@mkoireland.ie

Website: ww.mkoireland.ie Planning and Environmental Consultants MKO

Type of Consultation: EIA Scoping Application for the Proposed Laurclavagh Renewable

Energy Development, near Tuam, Co. Galway

Proposed development: Proposed Laurclavagh Renewable Energy Development, near Tuam, Co. Galway. The development will consist of 8 no. wind turbines, a 110kV substation and all associated infrastructure.

Details of the application were circulated to the following HSE stakeholders on the 25th May 2023.

- Emergency Planning Kay Kennington
- Estates Helen Maher/Stephen Murphy
- Director of National Health Protection Eamonn O' Moore
- CHO Breda Crehan-Roche

Please find enclosed the HSE submission re the above scoping request. If you have any queries regarding this report the initial point of contact is, Maria Horkan Principal Environmental Health Officer who will refer your query to the appropriate person.

Yours sincerely

pp

Maria Horkan

Principal Environmental Health Officer



An tSeirbhís Sláinte Comhshaoil

Feidhmeannacht na Seirbhíse Sláinte, Páirc Ghnó na Gaillimhe, An Daingean, Gaillimh. H91 EW40

> T: (091) 737350 R: PEHO.galway@hse.ie

Environmental Health Service

Health Service Executive, Galway Business Park, Dangan, Galway H91 EW40

Tel: (091) 737350 Email: PEHO.galway@hse.ie

HSE EIA Scoping Environmental Health Service Submission

Report Date: 19/06/223

Our reference: EHIS 3195

Report to: MKO Consultants, email: info@mkoireland.ie

Website: ww.mkoireland.ie Planning and Environmental Consultants MKO

Type of Consultation: EIA Scoping Application for the Proposed Laurclavagh Renewable

Energy Development, near Tuam, Co. Galway

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- Emergency Planning Kay Kennington
- Estates Helen Maher/Stephen Murphy
- Director of National Health Protection Eamonn O' Moore
- CHO Breda Crehan-Roche

General Introduction

The following documents should be taken into consideration when preparing the Environmental Impact Assessment Report:

- Guidelines on the information to be contained in EIS (2002), 187kb
- Advice Notes on Current Practice in the preparation of EIS (2003), 435kb
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment

https://www.housing.gov.ie/sites/default/files/publications/files/guidelines_for_planning_auth or ities and an bord pleanala on carrying out eia - august 2018.pdf

EU publication: Environmental Impact Assessment of Projects - Guidance on the preparation of the Environmental Impact Assessment Report, EU, 2017 http://ec.europa.eu/environment/eia/pdf/EIA_quidance_EIA_report_final.pdf Adoption of the Directive (2014/52/EU) in April 2014 initiated a review of the above quidelines.

The draft new guidelines can be seen at:

https://www.epa.ie/news-releases/news-releases-2022/epa-publishes-guidelines-on-the-information-to-be-contained-in-environmental-impact-assessment-reports.php

Generally, the Environmental Impact Assessment should examine all likely significant impacts and provide the following information for each:

- a. Description of the receiving environment
- b. The nature and scale of the impact
- c. An assessment of the significance of the impact
- d. Proposed mitigation measures
- e. Residual impacts

Directive 2014/52/EU has an enhanced requirement to assess likely significant impacts on Population and Human Health. It is the experience of the Environmental Health Service (EHS) that impacts on human health are often inadequately assessed in EIAs in Ireland. It is recommended that the wider determinants of health and wellbeing are considered in a proportionate manner when considering the EIA. Guidance on wider determinants of health can be found at www.publichealth.ie

In addition to any likely significant negative impacts from the proposed development, any positive likely significant impacts should also be assessed.

The applicant should also consider the findings of the High Court judgement issued in the judicial review of the Derryadd Wind Farm. (2021 IEHC 390 [20202 No. 557 JR] P. Sweetman v An Bord Pleanála).

The HSE will consider the **final EIAR accompanying the planning application** and will make comments to the planning authority on the methodology used for assessing the likely significant impacts and the evaluation criteria used in assessing the significance of the impact. This report only comments on Environmental Health Impacts of the proposed development. It is based on an assessment of the correspondence submitted to this office dated 25th May 2023.

The Environmental Health Service (EHS) recommends that the following matters are included and assessed in the EIAR:

- Public Consultation
- Population and Human Health
- Water (Hydrology and Hydrogeology)
- Land and Soils
- Air, Dust and Odour
- Climate Change and Opportunity for Health Gain
- Noise and Vibration
- Waste Management
- Ancillary Facilities
- Cumulative Impacts

Public Consultation

The applicant should consider the appointment of a community liaison officer. Early and meaningful public consultation with the local community should be carried out to ensure all potentially significant impacts have been adequately addressed. All parties affected by the proposed development, including those who may benefit financially from the project, must be fully informed of what the proposal entails especially with regard to potential impacts on surrounding areas. Sensitive receptors and other stake-holders should be identified to ensure all necessary and appropriate mitigation measures are put in place to avoid any complaints about the proposed wind farm development in the future.

With the lifting of restrictions around public gatherings as a result of Covid 19 prevention measures there should be no barrier to holding public consultation events albeit within current government guidance at the time. Meaningful public consultation, where the local community is fully informed of the proposed development must be undertaken. Members of the public should be given sufficient opportunities to express their views on the proposed development.

The Environmental Impact Assessment Report (EIAR) should clearly demonstrate the link between public consultations and how those consultations have influenced the decision-making process in the EIA. To assist with the consultation and planning process it is recommended that the applicant develops a dedicated website for the proposed development. All correspondence, maps, project updates and documentation including the EIAR should be uploaded to the website. The EIAR should state the period of planning permission sought, the length of time construction is estimated to take, and if it is anticipated that the renewable energy development will be decommissioned and removed or will continue to operate (following any further planning consent) at the end of this period of planning permission (should permission be granted).

Decommissioning

The EIAR should detail the eventual fate of wind turbines, substation, and energy storage batteries and associated material, i.e. will the material be recycled or how will it be disposed of. Information should also be provided regarding the proposed methodology to be used for the disposal of the materials forming the foundations of the wind turbines. The EIAR should indicate the proposed future use of the development site at the end of the planning permission period.

Siting, Location and details of Turbines/Energy Storage Batteries

The EIAR should include a map and a description of the proposed location of each of the proposed wind turbines, substation, energy storage locations and associated developments. For example- The details (height and model) of the turbines to be installed should be available at the time planning permission is sought and included in the EIAR. Details of the foundations for the wind turbine including depth, quantity and material to be used should be included in the EIAR.

Assessment of Consideration of Alternatives

The EIAR should consider an assessment of alternatives. The EHS recommends that alternative renewable energy options to on- shore wind farms should be assessed as part of the EIAR.

Noise & Vibration

The potential impacts for noise and vibration from the proposed development on all noise sensitive locations must be clearly identified in the EIAR. The EIAR must also consider the appropriateness and effectiveness of all proposed mitigation measures to minimise noise and vibration. A baseline noise monitoring survey should be undertaken to establish the existing background noise levels.

Noise from any existing turbines in the area should not be included as part of the back ground levels. In addition, an assessment of the predicted noise impacts during the construction phase and the operational phase of the proposed renewable energy development must be undertaken which details the change in the noise environment resulting from the proposed development. The Draft Revised Wind Energy Development Guidelines were published in December 2019. Whilst these have yet to be adopted, any proposed wind farm development should have consideration of the draft Guidelines.

https://www.housing.gov.ie/sites/default/files/publicconsultation/files/draft_revised_wind_energy development_quidelines_december_2019.pdf

Shadow Flicker

It is recommended that a shadow flicker assessment is undertaken to identify any dwellings and sensitive receptors which may be impacted by shadow flicker. The assessment must include all proposed mitigation measures. Dwellings should include all occupied properties and any existing or proposed properties for which planning consent has been granted for construction or refurbishment. It is recommended that turbine selection will be based on the most advanced available technology that permits shut down during times when residents are exposed to shadow flicker. As a result, no dwelling should be exposed to shadow flicker.

Air Quality

Due to the nature of the proposed construction works, generation of airborne dust has the potential to have significant impacts on sensitive receptors. A **Construction Environmental Management Plan** (CEMP) should be included in the EIAR which details dust control and mitigation measures.

Measures should include:

- Sweeping of hard road surfaces
- Provision of a water bowser on site, regular spraying of haul roads
- Wheel washing facilities at site exit
- Restrict speed on site

- Provide covers to all delivery trucks to minimise dust generation
- Inspect and clean public roads in the vicinity if necessary
- Material stockpiling provided with adequate protection from the wind
- Dust monitoring at the site boundary
- Truck inspection and maintenance plan
- Details of a road maintenance agreement between the operator and the Local Roads Authority to clarify responsibility for the upkeep and repair of access roads during the construction phase of the project.

Surface and Ground Water Quality

The proposed development has the potential to have a significant impact on the quality of both surface and ground water. All drinking water sources, both surface and ground water, must be identified. Public and Group Water Scheme sources and supplies should be identified in addition to any private wells supplying potable water to houses in the vicinity of the proposed development. Measures to ensure that all sources and supplies are protected should be described.

The Environmental Health Service recommends that a walk-over survey of the site is undertaken in addition to a desktop analysis of Geological Survey of Ireland data in order to identify the location of private wells used for drinking water purposes. Any potential significant impacts to drinking water sources should be assessed. Details of bedrock, overburden, vulnerability, groundwater flows, aquifers and catchment areas should be considered when assessing potential impacts and any proposed mitigation measures. Any impacts on surface water as a result of the construction of the underground cables should be identified and addressed in the EIAR.

Geotechnical and Peat Stability Assessment

A detailed assessment of the current ground stability of the site for the proposed renewable energy development and all proposed mitigation measures should be detailed in the EIAR. The assessment should include the impact construction work may have on the future stability of ground conditions, taking into consideration extreme weather events, site drainage and the potential for soil erosion. Information should be provided on the make and model of the turbines and on construction details for the turbine foundations, including the depth and volume of concrete required. An accurate assessment of the potential impacts of the foundations on water quality and peat stability cannot be undertaken without this information.

The Environmental Health Service recommends that a detailed Peat Stability/Geotechnical Assessment of the proposed site should be undertaken to assess the suitability of the soil for the proposed development. The EIAR should include provision for a peat stability monitoring programme to identify early signs of potential bog slides ('pre-failure indicators' see the Scottish Government's 'Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Developments 2017)

https://www.gov.scot/binaries/content/documents/govscot/publications/adviceandguidance/2 017/04/peat-landslide-hazard-risk-assessments-best-practiceguideproposedelectricity/documents/00517176pdf/00517176pdf/govscot%3Adocument/00517176.pdf

Ancillary Facilities

The EIAR should include details of the location of all site office, construction compound, fuel storage depot, sanitary accommodation and canteen, First Aid facilities, disposal of wastewater and the provision of a potable water supply to the site canteen.

Cumulative Impacts

All existing or proposed wind farm developments in the vicinity should be clearly identified in the EIAR. The impact on sensitive receptors of the proposed development combined with any other wind farm/renewable energy developments in the vicinity should be considered. The EIAR should include a detailed assessment of any likely significant cumulative impacts of the proposed renewable energy development.

Niamh Kelly

Senior Environmental Health Officer

Arlene Ward

Whene word.

Environmental Health Officer

Niamh McHugh

From: MKO-Admin
Sent: 07 June 2023 11:19
To: Niamh McHugh

Subject: FW: Proposed Laurclavagh Renewable Energy Development near Tuam Co. Galway -

your ref 210627

Attachments: [Untitled].pdf

From: Colin Hedderly <Colin.Hedderly@irishrail.ie>

Sent: Wednesday, June 7, 2023 10:15 AM **To:** MKO-Admin <info@mkoireland.ie> **Cc:** James Lally <James.Lally@irishrail.ie>

Subject: Proposed Laurclavagh Renewable Energy Development near Tuam Co. Galway - your ref 210627

Caution: This is an external email and may be malicious. Please take care when clicking links or opening attachments.

FAO Niamh McHugh

Dear Niamh,

I reply to your attached letter of 25 May 2023. This proposed development is remote from the larnród Éireann railway network and therefore does not concern larnród Éireann.

Please bear in mind that should the grid connection for the proposed development be planned to cross railway property then the developer must enter into a wayleave agreement with lanród Éireann and CIÉ for the crossings. It is unclear from the documents submitted what route is planned for the grid connection.

Regards,

Colin Hedderly

Senior Track & Structures Engineer, Iarnród Éireann/Irish Rail, CCE Dept, Old Railway Station, Grace Road, Athlone, Co. Westmeath, N37 C573.

Mobile: 087 9681735 E-mail: colin.hedderly@irishrail.ie



















Iarnród Éireann Irish Rail, cuideachta ghníomhaíochta ainmnithe, faoi theorainn scaireanna, cláraithe in Éirinn ag Stáisiún Uí Chonghaile, Baile Átha Cliath 1, Ur. 119571 Ur. CBL: IE 4812851 O,

Iannród Éireann Irish Rail, a designated activity company, limited by shares, registered in Ireland at Connolly Station, Dublin 1, No. 119571 VAT No. IE 4812851 O

In Iarnród Éireann, creideann muid in obair sholúbtha a éascú, agus mar sin, cé go n-oireann sé dom ríomhphost a sheoladh anois, níl mé ag súil le freagra ná gníomh lasmuigh de d'uaireanta oibre.

At Iarnród Éireann we believe in facilitating flexible working, so while it suits me to email now, I do not expect a response or action outside of your own working hours.

Niamh McHugh

From: Christophe O'BRIEN < Christophe.O'BRIEN@IAA.ie> on behalf of Planning

<planning@iaa.ie>

 Sent:
 07 June 2023 14:43

 To:
 Niamh McHugh

Subject: RE: Proposed Laurclavagh Renewable Energy Development, Co. Galway

Caution: This is an external email and may be malicious. Please take care when clicking links or opening attachments.

Good afternoon Niamh,

Thank you for your email. The Authority has no specific requirements in relation to the completion of the EIAR.

Based on the preliminary information provided, should a formal planning application be submitted, the Irish Aviation Authority will likely offer the following general observations:

"In the event of planning consent being granted, the applicant should be conditioned to contact the Irish Aviation Authority to: (1) agree an aeronautical obstacle warning light scheme for the wind turbine development, (2) provide as-constructed coordinates in WGS84 format together with ground and tip height elevations at each wind turbine location and (3) notify the Authority of intention to commence crane operations with at least 30 days prior notification of their erection."

Following the separation of the Irish Aviation Authority and Air Navigation Ireland (the IAA ANSP) from the 30th April 2023, Air Navigation Ireland has responsibility for the maintenance and safeguarding of en route communications and navigation surveillance equipment in Ireland. Please forward the report for their review to: planning@airnav.ie

Best Regards,

Christophe

Christophe O'Brien

Aerodromes Inspector M: +353 (0) 86 33 22022 | E: obrienc@iaa.ie | www.iaa.ie

The Times Building, 11-12 D'Olier Street, Dublin 2, D02 T449



From: Niamh McHugh < nhmchugh@mkoireland.ie>

Sent: Thursday, May 25, 2023 11:41 AM
To: IAA INFORMATION < iaainfo@IAA.ie >

Subject: Proposed Laurclavagh Renewable Energy Development, Co. Galway

* This message originated from outside the Irish Aviation Authority. Please treat hyperlinks, attachments and instructions in this email with caution. *

Dear Sir/Madam,

Laurclavagh Ltd. is investigating the potential to construct a renewable energy development at Laurclavagh and adjacent townlands, Co. Galway, located approximately 9km southwest of Tuam. It is envisaged that the proposed renewable energy development will consist of 8 no. wind turbines, a 110kV substation and all associated infrastructure.

MKO have been engaged to prepare the planning application and associated Environmental Impact Assessment Report (EIAR). As part of the EIAR, we are issuing the attached scoping document and associated cover letter to all consultees. As part of this scoping exercise, we would welcome any feedback you may have regarding survey techniques, background information, etc.

If you could please return any comments or suggestions at your earliest convenience, it would be much appreciated. If you require any further information, please do not hesitate to contact me.

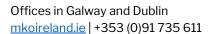
Kind regards, Niamh

Niamh McHugh BSc. (Env)

Environmental Scientist

MKO

Tuam Road, Galway, H91 VW84





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Niamh McHugh

From: Sent: To: Subject: Attachments:	IWT Info <info@iwt.ie> 25 May 2023 11:55 Niamh McHugh Re: Proposed Laurclavagh Renewable Energy Development, Co. Galway IWT Scoping Letter - 2023.05.25 - 210627.pdf; Laurclavagh EIA SD F3 - 2023.05.19- 210627 Reduced.pdf</info@iwt.ie>			
Caution: This is an external eattachments.	email and may be malicious. Please take care when clicking links or opening			
Dear Niamh,				
Thank you for contacting us. We we will endeavour to respond if	e do not have the staff capacity to respond to this consultation at the moment but possible.			
Kind regards, Fabiola Vieira				
On Thu, 25 May 2023 at 11:44, Niamh McHugh < nhmchugh@mkoireland.ie > wrote:				
Dear Sir/Madam,				
adjacent townlands, Co. Galwa	g the potential to construct a renewable energy development at Laurclavagh and y, located approximately 9km southwest of Tuam. It is envisaged that the proposed at will consist of 8 no. wind turbines, a 110kV substation and all associated			
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If you could please return any comments or suggestions at your earliest convenience, it would be much appreciated. If you require any further information, please do not hesitate to contact me.				
Kind regards,				
Niamh				
Niamh McHugh BSc. (Env)				

Environmental Scientist

MKO

Tuam Road, Galway, H91 VW84



Offices in Galway and Dublin

mkoireland.ie | +353 (0)91 735 611

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Irish Wildlife Trust, 8 Cabra Road, Dublin 7, D07T1W2

Registered Charity (CRA) Number: 20010966

Facebook: IrishWildlifeTrust Twitter: @irishwildlife

Phone: 01 445 7259 (landline available Wednesday-Thursday 9:30 to 5pm)

Niamh McHugh

From: Alison Harvey <aharvey@heritagecouncil.ie>

Sent: 25 May 2023 12:57 **To:** Niamh McHugh

Subject: RE: [External] Proposed Laurclavagh Renewable Energy Development, Co. Galway

Caution: This is an external email and may be malicious. Please take care when clicking links or opening attachments.

Hello Niamh,

Thank you for your planning referral in relation to the above proposal. Due to a lack of resources, the Heritage Council is unable to respond or prepare a planning observation. I would be grateful if you would place this correspondence on the project file.

Best

Alison Harvey MIPI AILI

From: Niamh McHugh <nhmchugh@mkoireland.ie>

Sent: Thursday, May 25, 2023 11:48 AM

To: Alison Harvey <aharvey@heritagecouncil.ie>

Subject: [External] Proposed Laurclavagh Renewable Energy Development, Co. Galway

Caution:

This email originated outside of the organisation. Do not click on links or open attachments unless you recognise the sender's email address and know the content is safe. If for any reason you are suspicious, please contact IT.

Dear Ms. Harvey,

Laurclavagh Ltd. is investigating the potential to construct a renewable energy development at Laurclavagh and adjacent townlands, Co. Galway, located approximately 9km southwest of Tuam. It is envisaged that the proposed renewable energy development will consist of 8 no. wind turbines, a 110kV substation and all associated infrastructure.

MKO have been engaged to prepare the planning application and associated Environmental Impact Assessment Report (EIAR). As part of the EIAR, we are issuing the attached scoping document and associated cover letter to all consultees. As part of this scoping exercise, we would welcome any feedback you may have regarding survey techniques, background information, etc.

If you could please return any comments or suggestions at your earliest convenience, it would be much appreciated. If you require any further information, please do not hesitate to contact me.

Kind regards, Niamh

Niamh McHugh BSc. (Env)

Environmental Scientist

MKO

Tuam Road, Galway, H91 VW84

Offices in Galway and Dublin mkoireland.ie | +353 (0)91 735 611



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Niamh McHugh

From: INFO <Information@tii.ie>
Sent: 14 June 2023 15:26
To: Niamh McHugh

Subject: TII Ref: TII23-123103 - EIAR Scoping - Proposed Laurclavagh Renewable Energy

Development, Co. Galway.

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Dear Ms McHugh,

Thank you for your correspondence of 25 May 2023 regarding the above. The position in relation to your enquiry is as follows.

Transport Infrastructure Ireland (TII) will endeavour to consider and respond to planning applications referred to it, given its status and duties as a statutory consultee under the Planning Acts. The approach to be adopted by TII in making such submissions or comments will seek to uphold official policy and guidelines, as outlined in the Section 28 Ministerial Guidelines 'Spatial Planning and National Roads Guidelines for Planning Authorities' (DoECLG, 2012). Regard should also be had to other relevant guidance available at www.TII.ie.

The issuing of this correspondence is provided as best practice guidance only and does not prejudice TII's statutory right to make any observations, requests for further information, objections or appeals, following the examination of any valid planning application referred.

National Strategic Outcome 2 of the 'National Planning Framework' includes the objective to maintain the strategic capacity and safety of the national roads network. In addition, Chapter 7 'Enhanced Regional Accessibility' of the' National Development Plan, 2021 – 2030', sets out the key sectoral priority of maintaining Ireland's existing national road network to a robust and safe standard for users. This requirement is further reflected in the publication of the 'National Investment Framework for Transport in Ireland' and also the existing Statutory Section 28 'Spatial Planning and National Roads Guidelines for Planning Authorities'.

With respect to EIAR scoping issues, the recommendations indicated below provide only general guidance for the preparation of an EIAR, which may affect the national road network.

The developer/scheme promoter should have regard, inter alia, to the following:

- Consultations should be had with the relevant Local Authority/National Roads Design Office, with regard to the locations of existing and future national road schemes.
- TII would be specifically concerned as to potential significant impacts the development would have on the national road network (and junctions with national roads) in the proximity of the proposed development, including the potential haul route.
- The developer should assess visual impacts from existing national roads.
- The developer should have regard to any EIAR/EIS and all conditions and/or modifications imposed by An Bord Pleanála regarding road schemes in the area. The developer should, in particular, have regard to any potential cumulative impacts.
- The developer, in preparing EIAR, should have regard to TII Publications (formerly DMRB and the Manual of Contract Documents for Road Works).

- The developer, in preparing EIAR, should have regard to TII's Environmental Assessment and Construction Guidelines, including the 'Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes' (National Roads Authority (NRA), 2006).
- The EIAR/EIS should consider the 'Environmental Noise Regulations 2006' (SI 140 of 2006) and, in particular, how the development will affect future action plans by the relevant competent authority. The developer may need to consider the incorporation of noise barriers to reduce noise impacts (see 'Guidelines for the Treatment of Noise and Vibration in National Road Schemes' (1st Rev., NRA, 2004)).
- It would be important that, where appropriate, subject to meeting the appropriate thresholds and criteria and having regard to best practice, a Traffic and Transport Assessment (TTA) be carried out in accordance with relevant guidelines, noting traffic volumes attending the site and traffic routes to/from the site, with reference to impacts on the national road network and junctions of lower category roads with national roads. In relation to national roads, TII's 'Traffic and Transport Assessment Guidelines' (2014) should be referred to in relation to proposed development, with potential impacts on the national road network. The scheme promoter is also advised to have regard to Section 2.2 of TII's TTA Guidelines, which addresses requirements for sub-threshold TTA. Any improvements required to facilitate development should be identified. It will be the responsibility of the developer to pay for the costs of any improvements to national roads to facilitate the private development proposed, as TII will not be responsible for such costs.
- The designers are asked to consult TII Publications to determine whether a Road Safety Audit is required.
- In the interests of maintaining the safety and standard of the national road network, the EIAR should identify the methods/techniques proposed for any works traversing/in proximity to the national road network.
- TII recommends that that applicant/developer should clearly identify haul routes proposed and fully assess the
 network to be traversed. Where abnormal 'weight' loads are proposed, separate structure approvals/permits
 and other licences may be required in connection with the proposed haul route. All national road structures on
 the haul route through all the relevant County Council administrative areas should be checked by the
 applicant/developer, to confirm their capacity to accommodate any abnormal 'weight' load proposed.

In addition, the haul route should be assessed to confirm capacity to accommodate abnormal 'length' loads and any temporary works required are identified.

The national road network is managed by a combination of PPP Concessions, Motorway Maintenance and Renewal Contracts (MMaRC) and local road authorities in association with TII.

The applicant/developer should also consult with all PPP Companies, MMaRC Contractors and road authorities over which the haul route traverses, to ascertain any operational requirements, including delivery timetabling, etc., to ensure that the strategic function of the national road network is safeguarded.

Where temporary works within any MMaRC Contract Boundary are required to facilitate the transport of turbine components to site, the applicant/developer shall contact thirdpartyworks@tii.ie in advance, as a works specific Deed of Indemnity will be needed by TII before the works can take place.

Additionally, any damage caused to the pavement on the existing national road arising from any temporary works due to the turning movement of abnormal loads (e.g. tearing of the surface course, etc.) shall be rectified in accordance with TII Pavement Standards and details in this regard shall be agreed with the Road Authority prior to the commencement of any development on site.

• It is noted that the grid connection proposals are not outlined in the EIAR Scoping Report. Please note, any grid connection and cable routing proposals should be developed to safeguard proposed road schemes, as TII will not be responsible for costs associated with future relocation of cable routing, where proposals are catered for in an area of a proposed national road scheme. In that regard, consideration should be given to routing options, use of existing crossings, depth of cable laying, etc.

In the context of the existing national roads network, in accordance with the 'National Planning Framework' National Strategic Outcome no. 2 'Enhanced Regional Accessibility', there is a requirement to maintain the strategic capacity and safety of the network. This requirement is further reflected in the 'National Development Plan', the 'National Investment Framework for Transport in Ireland' and also the existing Statutory Section 28 'Spatial Planning and National Roads Guidelines for Planning Authorities'.

There is around 99,000km of roads in Ireland, the national road network which caters for strategic inter-urban travel consists of only approx. 5.4% of this. There is a critical requirement to ensure the strategic capacity and safety of this national road network is maintained and significant Government investment already made in the national road network is safeguarded.

The provision of cabling along the national road network represents a number of significant implications for TII and road authorities in the management and maintenance of the strategic national road network and TII is of the opinion that grid connection cable routing should reflect the foregoing provisions of official policy and therefore, avoid grid connection routing proposals along national roads.

Other consents or licences may be required from the road authority for any trenching or cabling proposals crossing the national road. TII requests referral of all proposals agreed and licensed between the road authority and the applicant, which affect the national road network.

Cable routing should avoid all impacts to existing TII infrastructure such as traffic counters, weather stations, etc. and works required to such infrastructure shall only be undertaken in consultation with and subject to the agreement of TII, any costs attributable shall be borne by the applicant/developer. The developer should also be aware that separate approvals may be required for works traversing the national road network.

Notwithstanding any of the above, the developer should be aware that this list is non-exhaustive, thus site and development specific issues should be addressed in accordance with best practise.

I hope that this information is of assistance to you.

Yours sincerely,

Andrew Moore

Senior Regulatory and Administration Executive



From: Niamh McHugh <nhmchugh@mkoireland.ie>

Sent: Thursday 25 May 2023 11:49

To: Landuse Planning <LandUsePlanning@tii.ie>

Subject: Proposed Laurclavagh Renewable Energy Development, Co. Galway

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Dear Sir/Madam,

Laurclavagh Ltd. is investigating the potential to construct a renewable energy development at Laurclavagh and adjacent townlands, Co. Galway, located approximately 9km southwest of Tuam. It is envisaged that the proposed renewable energy development will consist of 8 no. wind turbines, a 110kV substation and all associated infrastructure.

MKO have been engaged to prepare the planning application and associated Environmental Impact Assessment Report (EIAR). As part of the EIAR, we are issuing the attached scoping document and associated cover letter to all consultees. As part of this scoping exercise, we would welcome any feedback you may have regarding survey techniques, background information, etc.

If you could please return any comments or suggestions at your earliest convenience, it would be much appreciated. If you require any further information, please do not hesitate to contact me.

Kind regards, Niamh

Niamh McHugh BSc. (Env)

Environmental Scientist

MKC

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