Appendix 5.1: Cultural Heritage Baseline Assessment

Mullaghclogher Wind Farm, Aughabrack, Plumbridge, Northern Ireland Cultural Heritage Baseline Assessment



Mullaghclogher Wind Farm, Aughabrack, Plumbridge, Northern Ireland

Cultural Heritage Baseline Assessment

LANDGAGE HERITAGE LIMITED

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Mullaghclogher Wind Farm, Aughabrack, Plumbridge, Northern Ireland – Cultural Heritage Baseline Assessment

Table of Contents

Non-teo	hnical summary	3
1.0	Introduction	6
2.0	Legislative, Planning and Development Plan Framework	8
3.0	Assessment Methodology	. 19
4.0	Heritage Baseline and Indirect Effects	. 28
5.0	Archaeological Baseline and Predicted Physical Effects	.48
6.0	Summary and Conclusions	. 57
7.0	Bibliography	. 59
Append	ix 1 – Assessment of indirect effects to heritage assets	.61
Append	ix 2 – Heritage assets that do not required detailed assessment	124

List of Plates

- Plate 1 Current proposed Turbine location, exclusion zone and study site boundary
- Plate 2 Giant's Grave TYR 011:018 Entrance (35mm)
- Plate 3 Looking east towards Court Tomb TYR 006:006 facing the study site (24mm)
- Plate 4 Views from Court Tomb TYR 006:006
- Plate 5 Looking west from TYR 006:006 facing Balix Hill (50mm)
- Plate 6 Monument TYR 006:030 facing east to towards the proposed development (24mm)
- Plate 7 Cashel TYR 006:004 (70mm)
- Plate 8 Looking east across the Cashel TYR 006:004 toward development (47mm)
- Plate 9 Prehistoric Landscape TYR 006:047 looking south to the study site (47mm)
- Plate 10 Prehistoric Landscape TYR 006:046 Field Wall (47mm)
- Plate 11 Monument TYR 026:005 looking northwest, some stones are just visible through the vegetation (50mm)
- Plate 12 Looking towards Stone Circle TYR 006:022 from Longland Road (50mm)
- Plate 13 Rath TYR 011:004 looking to northwest towards the study site (70mm)
- Plate 14 St. Mary's Roman Catholic Church (24mm)
- Plate 15 Looking S from Tornage Road towards St Mary's Church (70mm)
- Plate 16 Looking southwest towards TYR 011:032 located in the east of the study site (24mm)
- Plate 17 Cairn TYR 011:033 located in the southeast of the study site (24mm)
- Plate 18 Megalithic Tomb TYR 011:014 located in the study site (35mm)
- Plate 19 Beacon TYR 011:006 looking north near the centre of the study site (24mm)
- Plate 20 Portal Tomb TYR 012:005



List of Figures

- Figure 1 Site Location
- Figure 2 Designated Heritage Assets and ZTV (10km)
- Figure 3 Higher Designated Heritage Assets and ZTV (10km)
- Figure 4 Northern Ireland Sites and Monuments Records and ZTV (10km)
- Figure 5 Key Heritage Assets
- Figure 6 Tyrone County Series 1st Edition 6 inch Sheet 6 (1832 1846)
- Figure 7 Tyrone County Series 3rd Edition 6-inch Sheet 6 (1900 1907)
- Figure 8 Tyrone County Series 4th Edition 6-inch Sheet 6 (1916 1957)
- Figure 9 1:10,000 Metric Irish Grid Sheet 74 (1957 1986)



Non-technical summary

This report has been prepared in relation to land at Mullaghclogher Wind Farm, Aughabrack, Plumbridge, Northern Ireland on behalf of Renewable Energy Systems to provide a comprehensive assessment of the potential impacts the proposed development could have on the significance of heritage assets in the wider area through both physical impacts and indirect effects due to changes to their settings. This land is proposed for a wind farm, with 11 turbines together with associated infrastructure.

The assessment of designated heritage assets provided in Appendix 1 highlighted a number of assets that required more detailed assessment due either to their proximity to the proposed development, their sensitivity, or the complexity of the issues surrounding their assessment which meant that they would benefit from fuller assessment.

A total of fifteen such assets were identified, as follows:

- TYR 011:018 Giants Grave Scheduled Monument
- TYR 006:006 Court Tomb: The White Rocks Scheduled Monument
- TYR 006:030 Two Stone Circles and Stone Alignment Scheduled Monument
- TYR 006:004 Cashel Scheduled Monument
- TYR 006:047 Field Walls and Cairns Scheduled Monument
- TYR 006:044 / 006:045 Stone Circle, Cairns and Alignments Scheduled Monument
- TYR 006:046 Field Walls, Cairns and Standing Stones Scheduled Monument
- TYR 026:005 Stone Circle and Alignment Scheduled Monument
- TYR 011:016 Castledamph Circle: Two Stone Circles, Cairns with Cists and Two Alignments Scheduled Monument
- TYR 011:015 Bronze Age Ceremonial Landscape Scheduled Monument
- TYR 006:022 Two Stone Circles and Possible Alignment Scheduled Monument
- TYR 011:004 Castledamph Rath Scheduled Monument
- HB10/09/006 St Marys Roman Catholic Church, Grade B1
- HB10/05/019 141 Glenelly Road, Grade B2

This process has found that in most cases the degree of impact which would result from the proposed development would be no more than minor adverse, and in no instance would the proposed development result in a significance of effect higher than **minor adverse**.

It has therefore been found that the impacts of the proposed development are unlikely to result in significant environmental effects due to indirect effects to the setting of heritage assets. In all cases, the effects are medium term and reversible, and in no instance would the proposed development directly affect a key aspect of the significance of any of the designated heritage assets assessed. However, due to the sensitivity of the assets in question, it is recommended that all 15 of the assets assessed in full detail in the main body of this report should be assessed within the ES cultural heritage chapter in Volume 2 of the ES. The remaining assets already assessed in detail in Appendix do not require additional assessment within ES, as it is clear that the effect of the proposed development on them would not lead to any significant effects.



The potential for the study site to contain buried archaeological remains of interest has also been assessed, and it has been found that the study site has a low potential for prehistoric remains associated with ceremonial and symbolic activity due to likely disturbance caused by the adaptation of TYR 011:006 into a beacon and a moderate potential for the presence of yet unknown prehistoric remains. There is also a low potential for remains associated with the Early Christian / Medieval period. Finally, there is a known potential for the Post-Medieval / Modern period and a low potential for the presence of yet unknown Post-Medieval / Modern period associated with agricultural processes.

The presence of the prehistoric remains within the study site are only of low interest as defined in Table 1, as such they make meaningful contribution to local research objectives. As such there is no evidence of well-preserved prehistoric remains of high significance within the study site and it is considered that any unknown remains present within the study site are likely to also be of low interest.

The proposed development comprises a wind farm, with up to 11 turbines measuring to a maximum of 180m in height, to be placed across the study site, together with a BESS and associated access an infrastructure. These turbines will be set on foundations, and will be accessed using a modest track, which will make use of existing routes where possible. There will also be additional construction phase impacts during the erection of the turbines, to stabilise them, and transport the turbine parts to the study site and put them into place, any compound which is constructed. The development would be sparsely distributed throughout the study site, with a low below ground impact relative to the area.

These activities have the potential to result in the localised removal of any archaeological remains which may be present where any impact is planned. Given the potential for the presence of as yet undiscovered buried remains of local/low interest, these impacts could result in a minor adverse to a moderate adverse significance of effect, depending on the nature of the remains in question (see Table 4). In response to this risk, the proposed turbine locations, access road routes, construction activities and cable route have been placed to avoid all known archaeological heritage assets, and their immediate vicinity. In this way, there would be no physical loss or harm to known buried archaeological remains within the study site.

It is possible that additional, as yet unknown remains may be present within the planned areas of impact, which could be impacted. In response to this potential effect, a programme of archaeological works can be implemented ahead of the development to detect and record any remains prior to any impact. The recording of archaeological remains serves to realise the research value of those remains, and enhance understanding and appreciation of the more significant remains in the wider area which would not be affected. While this benefit does not undo or fully outweigh the loss of any remains, it would serve to partially compensate for the loss, and would reduce any residual significance of effect to minor adverse.

As such with the benefit of a programme of archaeological works to mitigate the effect of the proposed development no significant environmental effects would result from the proposed development due to impacts on buried archaeological remains. This programme of works could be secured as a condition to planning consent and implemented ahead of the construction of the proposed development.

In conclusion, the potential effects of the proposed development on the setting of heritage assets have been minimised by the design of the proposed development, and any archaeological impacts could be mitigated by a programme of archaeological works secured via planning condition. It would

therefore be possible to implement the proposed development in accordance with the requirements set out in policies BH2 - 4 of PPS 6, paragraph 6.224 of the SPPS and policy HE1 in the LDP 2035.



1.0 Introduction

1.1 The Study Site

- 1.1.1 This cultural heritage baseline assessment considers land at Mullaghclogher Wind Farm, Aughabrack, Plumbridge, Northern Ireland (Figure 1). It has been researched and prepared by Landgage Heritage on behalf of Renewable Energy Systems to provide a comprehensive assessment of the potential indirect impacts the proposed development could have on the significance of designated heritage assets in the wider area due to changes to their settings.
- 1.1.2 The site (hereinafter referred to as the "Study Site") is located at grid reference NV 67026 58400.

Location, Geology and Topography

- 1.1.3 The study site is located at Mullaghcarbatagh Mountain, approximately 3.1km to the northeast of Plumbridge at the nearest point (see Fig. 1). The topography of the study site is complex, with a number of hills and high points in the centre and east, and dropping in the southern, western and northern parts of the study site.
- 1.1.4 The highest point is a hill along the eastern boundary with a height above ordnance datum (aOD) of approximately 570m, with the lowest point at 170m aOD at the western edge of the study site.
- 1.1.5 The underlying geology in the north and east of the study site comprises Dart Formation Psammite and Semipelite of the Neoproterozoic Period between 1 billion and 538.8 million years ago, which is overlain by superficial deposits of Glacial sand and gravel and peat. The underlying geology in the south of the study site consists a mix of Dart Formation Psammite and Semipelite and Dart Formation- Metalava and Metatuff, both of which formed during the Neoproterozoic Period and are overlain by superficial deposit of Diamiction Till and peat. The underlying geology in the west of the study site is a mix of Unnamed Igneous Intrusian, Pre-Caledonian- Metabasaltic Rock and Dungiven Formation-Limestone, which both formed between the Archaean Eon to the Silurian Period between 419.2 million years ago, these are overlain by superficial deposits of peat (GSNI GeoIndex 2017).

1.2 The Proposed Development

- 1.2.1 The proposed development comprises a wind farm, with 11 turbines measuring to a maximum height of 180m, to be placed across the study site, together with a BESS, access roads and associated infrastructure (see plate 1 overleaf).
- 1.2.2 The turbines will be accessed using a modest track, which will make use of existing routes where possible. There will also be additional construction phase impacts during the erection of the turbines, to stabilise them, and transport the turbine parts to the study site and put them into place, any compound which is constructed.
- 1.2.3 The development would be sparsely distributed throughout the study site, with a low below ground impact relative to the area, however the layout has the potential to change if significant impacts to heritage assets or their settings are encountered as well as the incorporation of exclusion zones to protect known historic assets.





Plate 1 Current proposed Turbine location, exclusion zone and study site boundary

1.3 Purpose and Scope of Assessment

- 1.3.1 This report assesses the effect the proposed development would have on the significance of heritage assets, both through any direct physical effects and also through changes to their setting.
- 1.3.2 It has been prepared to provide:
 - A baseline appraisal of the archaeological and cultural heritage resources located within the study site, and in the surrounding area, which may be affected by the proposed development,
 - An assessment of the potential effect the proposed development would have on the significance of the identified cultural heritage resources, and
 - A consideration of any required mitigation measures and residual effects.
- 1.3.3 This assessment will form the baseline for a forthcoming Environmental Statement (ES) Chapter on the historic environment, in support of the proposed development, and will identify any significant environmental effects that should be assessed with the ES.
- 1.3.4 This assessment is made in the context of the statutory and policy framework set out in section 2. It follows best practice, and the approach to the assessment is set out in section 3. It has also been produced in accordance with the Chartered Institute for Archaeologists (CIfA) standard and guidance for historic environment desk-based assessment (CIfA 2017).



2.0 Legislative, Planning and Development Plan Framework

2.1 Legislation

- 2.1.1 The Historic Monuments and Archaeological Objects (Northern Ireland) Order 1995 protects the fabric of Scheduled Monuments, but does not afford statutory protection to their settings. Relevant policies relating to the protection of the setting of scheduled monuments are contained within national and local development plans and are set out below.
- 2.1.2 The Planning (Northern Ireland) Order 1991 sets out provisions relevant to the protection of listed buildings and conservation areas and their setting. The following sections are relevant to the study site.

2.1.3 Section 45 states that:

In considering whether to grant planning permission for development which affects a listed building or its setting, and in considering whether to grant listed building consent for any works, the Department shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

2.2 Regional Planning Policy

Regional Development Strategy 2035

2.2.1 In 2010 the Strategic Planning and Co-ordination Division (an agency within the department of Regional Development) published Regional Development Strategy 2035. Regional Development Strategy set out an overarching strategic planning framework to facilitate and guide the public and private sectors. Section 3 refers to the environment and provides guidance on for property owners, developers, their professional advisors and others on the preservation and investigation of built heritage. The Department's relevant policy on this topic is set out below:

Policy RG11 – Conserve, protect and where possible, enhance our built heritage and our natural environment

The environment, both in terms of natural and built heritage, is one of Northern Ireland's most important assets. Effective care of the environment provides very real benefits in terms of improving health and wellbeing, promoting economic development and addressing social problems which result from a poor quality environment. It is a basic premise of the environmental justice agenda that everyone should have the right to, and be able to live in, a healthy environment, with access to sufficient and appropriate environmental resources for a healthy life. However, the importance of the environment goes far beyond the immediate benefits it can provide. Northern Ireland's environment is a unique asset; sustaining its landscape and biological diversity also makes a small but significant contribution to protecting a much wider ecosystem which sustains life on earth. We therefore have a responsibility to protect and enhance this asset for the benefit of future generations.

Built Heritage

3.30 The Region has a rich and diverse built heritage which contributes to our sense of place and history. It is a key tourism and recreational asset, and sustainable management of the built heritage makes a valuable contribution to the

environment, economy and society. The built heritage embraces many sites of local and international interest which once lost cannot be fully replaced.

- Identify, protect, and conserve the built heritage, including archaeological sites and monuments and historic buildings. Northern Ireland's archaeological sites and monuments provide a tangible link to the distant past, as well as more modern remains. For example, the suite of historic monuments in State Care in the Region ranges from the earliest known dwelling-sites and burial monuments through to twentieth-century fortifications. New discoveries are made every year that contribute to our understanding of the past and its place in the future landscape. Continuing work to identify these built heritage assets, on land, along the coast and within coastal waters helps inform future decisions about development and land-use change.
- Identify, protect and conserve the character and built heritage assets within cities towns and villages. Historic buildings and monuments are key elements of our historic townscape, Conservation Areas, key civic and publicly accessible buildings, as well as everyday dwellings and shops. If these assets are recognised and managed, they can make a positive contribution to regeneration. This will allow the maintenance of craft skills, and the development of a sense of place that can be respected by future development.
- Maintain the integrity of built heritage assets, including historic landscapes. Historic sites, buildings and landscapes do not exist in isolation. Their appropriate management and wider integration with their surroundings will help contribute to local character and ensure that these assets continue to make a valuable contribution to our tourism economy.

Planning Policy Statements (PPS)

- 2.2.2 In March 2015 the Planning Service (an agency within the Department of the Environment for Northern Ireland) updated the Planning Policy Statement 6 (PPS 6), 'Planning, Archaeology and the Built Heritage'.
- 2.2.3 Planning Policy Statements set out the policies of the DoE on particular aspects of land use planning and apply to the whole of Northern Ireland. Their contents will be taken into account in preparing development plans and are a material consideration in determining individual planning applications and appeals.
- 2.2.4 PPS 6 sets out the DoE's planning policies for the protection and conservation of archaeological remains and built heritage.
- 2.2.5 Section 3 of PPS 6 relates to archaeological sites and monuments and provides guidance for property owners, developers, their professional advisors and others on the preservation and investigation of archaeological remains.
- 2.2.6 The Department's relevant policies on this topic are set out below:

Policy BH1 – The preservation of archaeological remains of regional importance and their settings.

The department will operate a presumption in favour of the physical preservation in situ of archaeological remains of regional importance and their settings. These comprise monuments in state care, scheduled monuments and other important sites and monuments which would merit scheduling. Development which would adversely affect such sites of regional importance or the integrity of their settings will not be permitted unless there are exceptional circumstances.

Policy BH2 – The protection of archaeological remains of local importance and their settings.

Development proposals which would adversely affect archaeological sites or monuments which are of local importance or their settings will only be permitted where the department considers the importance of the proposed development or other material considerations outweigh the value of the remains in question.

Policy BH3 – Archaeological Assessment and Evaluation

Where the impact of a development proposal on important archaeological remains is unclear, or the relative importance of such remains is uncertain, the department will normally require developers to provide further information in the form of an archaeological assessment or an archaeological evaluation. Where such information is requested but not made available the department will normally refuse planning permission.

Policy BH4 – Archaeological Mitigation

Where it is decided to grant planning permission for development which will affect sites known to contain archaeological remains, the department will impose conditions to ensure that appropriate measures are taken for the identification and mitigation of the archaeological impacts of the development, including where appropriate the completion of a licensed excavation and recording of remains before development commences.

Policy BH6 - The Protection of Parks, Gardens and Demesnes of Special Historic Interest

The department will not normally permit development which would lead to the loss of, or cause harm to, the character, principal components or setting of parks, gardens and demesnes of special historic interest. Where planning permission is granted this will normally be conditional on the recording of any features of interest which will be lost before development commences.

Policy BH11 - Development Affecting the Setting of a Listed Building

The department will not normally permit development which would adversely affect the setting of a listed building. Development proposals will normally only be considered appropriate where all the following criteria are met:

- a) The detailed design respects the listed building in terms of scale, height, massing and alignment;
- b) The works proposed make use of traditional or sympathetic building materials and techniques which respect those found on the building; and
- c) The nature of the use proposed respects the character of the setting of the building.
- 2.2.7 PPS 6 also includes policy statements on Northern Ireland's World Heritage Sites. However, this topic is not relevant to the scope of this particular assessment.
- 2.2.8 Planning policy relating to renewable energy is set out in PPS 18: Renewable Energy. The relevant policies are presented below.

2.2.9 Policy RE 1: Renewable Energy Development states:

Development that generates energy from renewable resources will be permitted provided the proposal, and any associated buildings and infrastructure, will not result in an unacceptable adverse impact on:

[...]

(c) Biodiversity, nature conservation or built heritage interests;

[...]

Where any project is likely to result in unavoidable damage during its installation, operation or decommissioning, the application will need to indicate how this will be minimised and mitigated, including details of any proposed compensatory measures, such as a habitat management plan or the creation of a new habitat. This matter will need to be agreed before planning permission is granted.

The wider environmental, economic and social benefits of all proposals for renewable energy projects are material considerations that will be given significant weight in determining whether planning permission should be granted.

The publication best practice guidance to planning policy statement 18 'renewable energy' will be taken into account in assessing proposals.

Strategic Planning Policy Statement for Northern Ireland (SPPS)

- 2.2.10 The SPPS is a statement of the Department's policy on important planning matters that should be addressed across Northern Ireland (SPPS paragraph 1.3). Paragraph 1.5 of the SPPS notes that the provisions within the SPPS apply to the whole of Northern Ireland and must be taken into account in the preparation of Local Development Plans, and are also a material consideration in all planning applications and appeals.
- 2.2.11 All local councils in Northern Ireland are in the process of developing new local plans which conform with the SPPS. Once these are all completed and adopted, they, together with the SPPS, will replace the Planning Policy Statements, which will be cancelled (SPPS paragraph 1.9).
- 2.2.12 Paragraphs 1.10 to 1.12 of the SPPS set out that until the adoption of the new local plans by the eleven local councils in Northern Ireland, the existing adopted local plans and Planning Policy Statements will continue to apply alongside the SPPS. However, where a policy within an existing local plan or PPS conflicts with that set out in the SPPS, the policy in the SPPS Should be accorded greater weight in the decision-making process (SPPS paragraph 1.12).
- 2.2.13 SPPS policy in relation to archaeology and built heritage is set out in paragraphs 6.1 to 6.30 of the SPPS. It sets out the aim of the SPPS in relation to archaeology and built heritage in paragraph 6.3:

The planning system has a key role in the stewardship of our archaeological and built heritage. The aim of the SPPS in relation to Archaeology and Built Heritage is to manage change in positive ways so as to safeguard that which society regards as significant whilst facilitating development that will contribute to the ongoing preservation, conservation and enhancement of these assets.

2.2.14 Paragraph 6.4 sets out the regional strategic objectives for archaeology and built heritage as to:

- secure the protection, conservation and, where possible, the enhancement of our built and archaeological heritage;
- promote sustainable development and environmental stewardship with regard to our built and archaeological heritage; and
- deliver economic and community benefit through conservation that facilitates productive use of built heritage assets and opportunities for investment, whilst safeguarding their historic or architectural integrity.
- 2.2.15 The SPPS goes on to set out policy in relation to the determination of planning applications in relation to different types of archaeological and built heritage assets in paragraphs 6.6 through 6.25. Key elements of the policies set out in this section are reproduced below for ease of reference:

World Heritage Sites

6.6 Development that would adversely affect the Outstanding Universal Value of a World Heritage Site (WHS) or the integrity of its setting must not be permitted unless there are overriding exceptional circumstances.

Archaeology

- 6.8 Archaeological remains of regional importance include monuments in State Care, scheduled monuments and Areas of Significant Archaeological Interest (ASAIs). Such sites (or constituent parts of them) benefit from statutory protection. Development which would adversely affect such sites or the integrity of their settings must only be permitted in exceptional circumstances. The scheduling programme is an ongoing process and there are archaeological remains of regional importance yet to be scheduled. In order to make sure that the most up to date information is taken into account when determining applications, this policy approach should also apply to such sites which, whilst not scheduled presently, would otherwise merit such statutory protection.
- 6.9 Development proposals which would adversely affect archaeological remains of local importance or their settings should only be permitted where the planning authority considers that the need for the proposed development or other material considerations outweigh the value of the remains and/or their settings.
- 6.10 Planning authorities should seek all necessary information from applicants in making well informed planning judgements, particularly where the impact of a development proposal on archaeological remains is unclear, or the relative significance of such remains is uncertain. Should an applicant fail to provide a suitable assessment or evaluation on request, the planning authority should adopt a precautionary approach and refuse planning permission.
- 6.11 Where a planning authority is minded to grant planning permission for development which will affect sites known or likely to contain archaeological remains, it should ensure that appropriate measures are taken for the identification and mitigation of the archaeological impacts of the development. Where appropriate, this may involve the preservation of remains in situ, or a licensed excavation, recording examination and archiving of the archaeology by way of planning conditions.



Listed Buildings

- 6.12 Listed Buildings of special architectural or historic interest are key elements of our built heritage and are often important for their intrinsic value and for their contribution to the character and quality of settlements and the countryside. It is important therefore that development proposals impacting upon such buildings and their settings are assessed, paying due regard to these considerations, as well as the rarity of the type of structure and any features of special architectural or historic interest which it possesses.
- 6.13 Development involving a change of use and / or works of extension / alteration may be permitted, particularly where this will secure the ongoing viability and upkeep of the building. It is important that such development respects the essential character and architectural or historic interest of the building and its setting, and that features of special interest remain intact and unimpaired. Proposals should be based on a clear understanding of the importance of the building/place/heritage asset, and should support the best viable use that is compatible with the fabric, setting and character of the building. Applicants should justify their proposals, and show why alteration or demolition of a listed building is desirable or necessary.

Historic Parks, Gardens and Demesnes

6.16 Planning permission should not be granted for development that would lead to the loss of, or cause harm to, the overall character, principal components or setting of Historic Parks, Gardens and Demesnes.

Conservation Areas

6.18 In managing development within a designated Conservation Area the guiding principle is to afford special regard to the desirability of enhancing its character or appearance where an opportunity to do so exists, or to preserve its character or appearance where an opportunity to enhance does not arise. Accordingly, there will be a general presumption against the grant of planning permission for development or conservation area consent for demolition of unlisted buildings, where proposals would conflict with this principle. This general presumption should only be relaxed in exceptional circumstances where it is considered to be outweighed by other material considerations grounded in the public interest. In the interests of protecting the setting of designated Conservation Areas, new development in proximity needs to be carefully managed so as to ensure it respects its overall character and appearance. Important views in and out of the Conservation Area should be retained.

Areas of Townscape Character (ATC)

6.21 In managing development within ATCs designated through the LDPs process, the council should only permit new development where this will maintain or enhance the overall character of the area and respect its built form.

Non-Designated Heritage Assets

6.24 The effect of an application on the significance of a non-designated heritage asset such as an unlisted vernacular building, or historic building of local importance should be taken into account in determining the application. In

weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset. Councils may wish to bring forward bespoke local policies for such buildings.

Enabling Development

- 6.25 Enabling Development is a development proposal that is contrary to established planning policy and in its own right would not be permitted. Such a proposal may however be allowed where it will secure the long term future of a significant place and will not materially harm its heritage value or setting. Enabling development typically seeks to subsidise the cost of maintenance, major repair, conversion to the optimum viable use of a significant place where this is greater than its value to its owner or market value.
- 2.2.16 The SPPS also provides policy in relation to renewable energy developments in paragraphs 6.214 through 6.234. Paragraph 6.224 makes specific reference to how effects of renewable energy developments to the historic environment should be weighed (emphasis added for clarity):
 - 6.224 Development that generates energy from renewable resources will be permitted where the proposal and any associated buildings and infrastructure, will not result in an unacceptable adverse impact on the following planning considerations:
 - public safety, human health, or residential amenity;
 - visual amenity and landscape character;
 - biodiversity, nature conservation or built heritage interests;
 - local natural resources, such as air quality, water quality or quantity; and,
 - public access to the countryside.

2.3 Local Planning Policy

2.3.1 Local planning policy is provided by the Derry City and Strabane District Council Local Development Plan to 2032. The Local Development Plan 2032 contains the following policy relating to archaeology and cultural heritage:

GDP 8 Development Principles: Preserving and Enhancing the Historic Environment

Development affecting the historic environment should:

- *I.* promote sustainable development and environmental stewardship with regard to our historic environment;
- II. secure the preservation, conservation and where possible, the enhancement of buildings and areas of cultural, historic or archaeological interest including conservation areas, historic parks, gardens, areas of archaeological interest and listed buildings and their settings;
- III. promote the enhancement of the historic environment through the use of high standards of design and careful choice of sustainable materials for all development;

- *IV.* promote economic and community development through the sympathetic and appropriate reuse of existing buildings, especially those which make a contribution to the special character of their locality;
- V. promote design that ensures a safe and secure environment; vi maximise opportunities for the use of sustainable construction techniques such as the reuse of building materials, sustainable drainage systems, renewable energy generation, water and energy efficiency, recycling and reuse to minimise waste in new developments;
- VI. incorporate high quality design which results in usable, durable and adaptable places which reflect local distinctiveness.
- VII. promote improvements in accessibility of the historic environment for all people regardless of age, gender, religious belief, political opinion or ethnicity

Policy HE1 Archaeology and Upstanding Remains

Archaeological Remains of Regional Importance

Planning permission will not be permitted where a development proposal would adversely affect archaeological remains of Regional importance such as Monuments in State Care, Scheduled Monuments, and Areas of Significant Archaeological Interest (ASAI). Development which would adversely affect such sites or the integrity of their settings must only be permitted in exceptional circumstances.

Archaeological Remains of Local Importance

Planning permission will not be granted for a development proposal which would adversely affect archaeological remains of local importance or their settings. Planning permission will only be granted where Council considers that the need for the proposed development or other material considerations outweigh the value of the remains and or their setting.

Policy HE2 Archaeological Assessment, Evaluation and Mitigation

Planning Permission will not be granted where the impact of a development on important archaeological remains are unclear, or the relative importance of the remains is uncertain. The Council will require developers to provide further information in the form of an archaeological assessment or an archaeological evaluation. Where such information is requested but not provided, a precautionary approach will be adopted and Planning Permission will be refused; Where Planning Permission is granted for development which will affect sites known or likely to contain archaeological remains, the Council will impose conditions to ensure preservation in situ, and archiving of the archaeology before development commences.

Policy HE4 Listed Buildings and their Settings

Change of use of a Listed Building

Planning Permission will be granted, in consultation with the relevant statutory authority, where the change of use secures its upkeep and survival, and the character and architectural or historic interest of the building would be preserved or enhanced. Proposals for a change of use should incorporate details of all intended alterations to the building and its curtilage to demonstrate their effect on its appearance, character and setting.



[...]

Demolition of Listed Building

There will be a presumption in favour of retaining Listed Buildings. The Council, in consultation with the relevant statutory authority, will not permit the total demolition or any significant part of a listed building unless there are exceptional reasons why the building cannot be retained in its original or a reasonably modified form. Where, exceptionally, Listed Building Consent is granted for demolition, this will normally be conditional on prior agreement for the redevelopment of the site and appropriate arrangements for recording before its demolition.

Development Affecting the Setting of a Listed Building

Planning Permission will only be granted, for a development proposal which would not adversely affect the setting of a listed building. Development proposals will normally only be considered appropriate where all the following criteria is met:

- The detailed design respects the listed building in terms of scale, height, massing and alignment.
- The works proposed make use of traditional or sympathetic building materials and techniques which respect those found on the building; and
- The nature of the use proposed respects the character of the setting of the building.

Policy HE5 Conservation Areas

- New development within or affecting the setting of a Conservation Area Planning Permission will be granted for a proposal that enhances the character or appearance where the opportunity to do so exists or to preserve its character or appearance where an opportunity to enhance does not arise. Any proposal for new development in or adjacent to a Conservation Area should:
 - be sympathetic to the characteristic built form of the area;
 - respect the characteristics of adjoining buildings in the area by way of its scale, form materials and detailing;
 - not result in environmental problems such as noise, nuisance or disturbance;
 - protect important views within, into and out of an area;
 - protect trees and other landscape features contributing to the character or appearance of the area;
 - protect the Conservation Area public realm including street furniture, light fixtures and traditional paving surfaces and patterns;
 - conform with the guidance set out in the Conservation Area design guides; and
 - only consider the demolition of an unlisted building where Council deems that the building makes no material contribution to the character or appearance of the areas and subject to appropriate arrangements for the redevelopment of the site.

2) Demolition in a Conservation Area

The Council will normally only permit the demolition of an unlisted building in a Conservation Area where the building makes no material contribution to the character or appearance of the area. Where Conservation Area consent for demolition is granted this will normally be conditional on prior agreement for the redevelopment of the site and appropriate arrangements for recording the building before its demolition.

HE6 Area of Townscapes / Village Character (ATCs / AVTs)

Demolition in an Area of Townscape or Village Character

The Council will operate a presumption in favour of retaining any building which makes a positive contribution to the character of an Area of Townscape Character (ATC) and its setting. The Council will normally only permit the demolition of an unlisted building within an ATC where the building makes no material contribution to the distinctive character of the area. Where permission for demolition is granted, this will normally be conditional on prior agreement for the redevelopment of the site.

New Development in an Area of Townscape or Village Character

The Council will permit development proposals in an Area of Townscape Character where the development maintains or enhances its overall character and respects the built form of the area. The Council will require that any trees, archaeological or other landscape features which contribute to the distinctive character of the area are protected and integrated in a suitable manner into the design and layout of the development.

HE7 Historic Parks, Gardens, Demesnes and their Setting

The Council will not normally permit development which would lead to the loss of, or cause harm to, the character, principal components or setting of parks, gardens and demesnes of special historic interest. Where Planning Permission is granted, this will normally be conditional on the recording of any features of interest which will be lost before development commences.

RED1 Renewable and Low Carbon Energy Development – General Criteria

All Renewable and Low Carbon Energy Developments

In the first instance, proposals for renewable energy must accord with the relevant LDP landscape designations (Refer also to Chapter 21 Natural Environment):

- Wind Energy Capacity Area (WECA)
- Special Countryside Area (SCA)
- Area of High Landscape Importance (AHLI)
- Area of Outstanding Natural Beauty (AONB)

Subsequent to meeting the above, development proposals that generate energy from renewable resources will be permitted where the proposal, and any associated buildings and infrastructure, will not result in an unacceptable adverse impact on:

[...]

c) biodiversity, natural and / or historic assets;

[...]

Where any project is likely to result in unavoidable damage to the site / area during its installation, operation or decommissioning, the application will need to indicate how this will be minimised and mitigated, including details of any proposed compensatory measures, such as a habitat management plan or the creation of a new habitat. This matter will need to be agreed before planning permission is granted.

[...]

The potential for significant adverse impacts from renewable and low carbon energy development proposals on designated sites across the District, including Special Countryside Areas (SCA), Areas of High Landscape Importance (AHLIs) and Areas of Outstanding Natural Beauty (AONB) will be a priority consideration. The impact of proposals on designated natural and historic environment assets will also be a priority consideration.

[...]

Wind Energy Development

Proposals for wind energy development, including proposals for repowering of existing developments, will also be required to meet all of the following criteria:

1) the development will not have an unacceptable impact on visual amenity or landscape character through: the number, scale, size and siting of turbines;

[...]

3.0 Assessment Methodology

3.1 Scope of Study

For the Assessment of Archaeological Potential

- 3.1.1 The archaeological potential of the study site will be assessed by reviewing available relevant evidence, both from within the study site, and also from the surrounding area, and using this to assess the potential the study site has to contain buried archaeological remains. The evidence will be drawn from the following resources, where relevant and available:
 - Data from the Historic Environment Record of Northern Ireland (HERoNI);
 - The results of previous archaeological investigations (if available and relevant);
 - Consultation of the scheduled ancient monuments and lists of listed buildings and other designated heritage assets held by the Historic Environment Division of the Department for Communities of Northern Ireland;
 - Local studies and record office research;
 - Satellite imagery (if available and relevant);
 - A site walk over (where possible and appropriate); and
 - Review of historic mapping.
- 3.1.2 In addition, information about the topography and geology of the study site will also be collated and considered alongside the archaeological evidence. These records and resources will be examined in relation to the study site, and a suitable buffer zone (the study area) around the study site. This is to ensure that the baseline information used to inform the assessment of potential for the study site includes sufficient information with which to understand the context of the evidence discussed. The extent of the study area needed to inform the assessment will depend on the quantity and quality of the evidence available, as well as the size of the study site among other factors.
- 3.1.3 The standard extent of the study area is usually 1km from the study site's boundary. However, this may be varied depending on the nature of the evidence available; for example in some urban settings there may be a high quantity of evidence in the immediate vicinity of the study site, meaning that the extent of the study area can be reduced and more focussed on the study site and the immediately surrounding area. On this occasion, a 1km search radius from the study site boundary is considered appropriate for the study area.

For the Assessment of Setting Impacts

- 3.1.4 This assessment will also consider the potential effects of development within the study site on the significance of heritage assets, through effects to their settings. This will include any heritage assets within the study site, and those in the surrounding area, whose setting may be affected. The heritage assets which require assessment have been selected with reference to the Northern Ireland Sites and Monuments Record and the Northern Ireland Buildings Record, as well as information held by the LPA on conservation areas and heritage assets.
- 3.1.5 A basic search radius of 10km from the study site boundary was used to establish which heritage assets required assessment for impacts. This is normally sufficient to ensure all



assets which require consideration are properly assessed, as beyond this distance the residential development is rarely discernible to the degree that it would affect the heritage value of a view.

- 3.1.6 Designated heritage assets of the high significance, comprising listed buildings and registered parks and gardens graded A and B+, scheduled ancient monuments, world heritage sites and conservation areas within the whole 10km search radius are assessed for potential impacts from the proposed development. This is because such assets tend to either be prominent or have heightened sensitivity to change before their significance is affected.
- 3.1.7 Other designated heritage assets, such as grade B listed buildings and registered parks and gardens and conservation areas are assessed for impacts within a 5km search radius from the study site boundary. This is because assets at this level of designation tend to have a lower sensitivity to change than higher graded assets.

3.2 Methodology for assessment of archaeological potential

- 3.2.1 The available evidence will be reviewed and used to determine what potential the study site has to contain buried archaeological remains. Regard must be had to the reliability of the evidence reviewed, any limitations inherent in the methods used to generate that evidence, and to the relevance of the evidence in informing the assessment of archaeological potential of the study site. The assessment will consider the available archaeological evidence by historical period.
- 3.2.2 It is not necessary to describe all available evidence available for each period exhaustively; the assessment of potential should focus on the evidence which helps to clarify the archaeological potential of the study site.
- 3.2.3 The historical periods referred to in this assessment are set out below:

Prehistoric period

Mesolithic	8,000 BC to 4,000 BC
Neolithic	4,000 BC to 2,500 BC
Bronze Age	2,500 BC to 500 BC
Iron Age	500 BC to AD 400

Historic period

Early Medieval	AD 400 to AD 1100
Medieval	AD 1100 to AD 1600
Post-Medieval	AD 1600 to AD 1901
Modern	AD 1901 to present

- 3.2.4 The potential for the study site to contain buried remains will be categorised as either known, moderate, general, low, limited, no potential or unknown potential, based on the criteria set out below.
 - **Known potential**: where a site is known to have archaeological remains, for example from evidence provided by archaeological investigations.
 - **Moderate potential**: where the available evidence suggests there is a strong possibility for a site to contain archaeological remains, but it is not conclusive or certain. For example, an adjacent field to that being assessed has been subject to archaeological field investigations and is known to have evidence of occupation remains. But there is

no clear evidence in the results of the investigations that these remains continue into the site being assessed.

- **General potential**: where the available evidence suggests that archaeological remains may be present in the study site, but the evidence is not clear enough to determine whether the study site is likely or unlikely to contain associated buried remains. For example there may be a general potential for archaeology, evidenced by residual finds in nearby investigations and other evidence in the wider area, but no clear evidence close to the study site, which would help to determine whether their presence within the study site is likely or unlikely.
- **Low potential**: where the available evidence suggests that the presence of archaeological remains within a site is unlikely, but this is not certain or conclusive.
- **No potential**: where a site is known to have no archaeological remains, for example due to past mineral extraction, or when previous archaeological works demonstrate that no remains are present.
- **Unknown potential**: where there is insufficient information to provide any assessment of the archaeological potential of a site.
- 3.2.5 The assessments of potential set out above can refer to the potential across the whole of the study site, or to only part of it. For example, potential for evidence from a particular period may be focussed in a specific part of the study site, or there may be evidence of localised mineral extraction.

3.3 Methodology for Assessment of the Setting of Heritage Assets

3.3.1 This assessment will consider the potential effects of development within the study site on the significance of heritage assets, through effects to their settings. This will include any heritage assets within the study site, and those in the surrounding area, whose setting may be affected. Heritage assets and potential impacts will be assessed using best practice, including that set out in the Historic Environment Division's Guidance on Setting and the Historic Environment (2018 HED). This defines setting as:

The term 'setting' applies to the physical space that is part of - and contributes to - the significance and distinctive character of a heritage asset, and through which the asset may be seen, experienced, understood and enjoyed.

- 3.3.2 In order to assess potential effects on the setting of heritage assets, it is necessary to define the integrity of the setting, due to the wording of policies provided in the SPPS, which restricts developments which would adversely affect either the physical remains of scheduled archaeological monuments and other assets, or the integrity of their setting, unless there are exceptional circumstances.
- 3.3.3 In this context, and given how the term setting is defined, the term integrity must refer to the ability of physical space in which the heritage asset is located to:
 - Form part of the physical remains of the asset
 - Contribute to its significance and distinctive character; and
 - To be a means through which it can be seen, experienced, understood and enjoyed.
- 3.3.4 If the physical space is able to do these three things, it must follow that the integrity of the setting has been preserved. This is distinct from change, as the setting may change but may



still be able to contribute to the physical remains, its significance and distinctive character and provide appreciation despite a change to the setting.

- 3.3.5 The guidance goes on to set out a three-stage process for the assessment of the setting of heritage assets, and of development impacts to the significance of heritage assets through changes to their setting:
 - Stage 1: identify the heritage assets that might be affected.
 - Stage 2: define the setting by establishing how the surroundings contribute to the significance of the heritage assets in the ways they are understood, appreciated and experienced.
 - Stage 3: assess how any change would impact upon that setting.
- 3.3.6 As part of stage 1, set out above, the heritage assets which require assessment have been selected with reference to the heritage data for the study site and surrounding area provided by the HED and held by the Northern Ireland Environment Agency. A search radius of 10km from the study site boundary was used to establish which heritage assets required assessment for impacts, which is usually sufficient to ensure all assets which require consideration are properly assessed.
- 3.3.7 Section 4 of this assessment will describe the heritage assets which may be affected by the proposed development and will assess the relationship of the study site to those assets. Not all designated heritage assets within this radius will require full assessment for impacts; where a designated heritage asset has been excluded, a clear justification will be provided, for example if the asset is sufficiently far, and well screened from the study site. Also, not all assets will require the same level of assessment; more complex and/or significant assets which may be subject to a higher level of impact will require more detailed consideration than those of less significance, or which are not highly affected by the proposed development.
- 3.3.8 The scope of study and assessment of impacts will also be informed by a Zone of Theoretical Visibility (ZTV) for the proposed development. The ZTV models the potential visibility of the wind turbines in the wider landscape, taking account of local topography, which may prevent intervisibility in some areas. The proposed development would be a wind farm, which would not produce noise or light pollution, or generate increased traffic, or other effects which could adversely affect these assets in a way unrelated to visibility. Therefore, where heritage assets fall outside the ZTV it is considered that the proposed development would not affect their significance.

3.4 Photography

- 3.4.1 Photographs taken to illustrate the scale of a heritage asset from a particular viewpoint have been taken with a Canon EOS 6D camera with a 24-105mm lens. The camera has a 20.2 megapixel full-frame CMOS sensor.
- 3.4.2 Research has found that images taken with a focal length of between 70mm and 80mm provide the most realistic representation of landscape features in terms of their scale within the photograph, with shorter focal lengths (i.e. 50mm or 60mm) found to exaggerate the distance of the object (Hunter 2012). While this chapter does not consider landscape impacts, it does consider views of heritage assets within their setting, including distant key views, in which similar considerations to those studied by Hunter's research apply (for instance, one of the receptors considered in the 2012 study was Urquhart Castle, a scheduled monument in Scotland).

Mullaghclogher Wind Farm, Aughabrack, Plumbridge, Northern Ireland

- 3.4.3 Therefore, photographs of heritage assets within this assessment, such as a church tower seen from a specific viewpoint, will be taken at focal lengths of between 70mm to 80mm, to provide an accurate representation of the scale of the heritage asset within any view presented. Lower focal lengths (which provide a more wide-angle view) may be used in certain circumstances, for example in urban contexts or for general site or location photographs, to provide better context for a view, or understanding of the setting of a heritage asset, if appropriate. The focal length of the image will be provided with all photographs.
- 3.4.4 Care has also been taken to ensure that the images presented are of a good quality. Photographs are taken in clear weather wherever possible. Finally, photographs within the body of this assessment are provided for illustrative purposes only and are not sized within the assessment for viewing to scale as is done in Landscape and Visual Impact Assessment (LVIA). If it is necessary to provide such a scaled view, it will be clearly labelled with specific viewing instructions.

3.5 Methodology for Assessment of Significance of Heritage Assets

3.5.1 Ultimately the assessment of the significance of archaeological remains and other heritage assets is a matter of professional judgement, having regard to the available evidence, including research priorities, guidance, as well as any designation the asset may have. The assessment will be made with reference to the Historic Environment Division's Criteria for the Scheduling of Historic Monuments and the Listing of Buildings of Special Architectural or Historic Interest, with associated procedures (DfC 2019a), and research priorities set out in the relevant regional and local archaeological research frameworks, as appropriate.

Table 1: Criteria for appraisal of level of importance of heritage assets			
Importance / value	Description		
Very High	- World Heritage Sites		
High	 Scheduled Monuments and archaeological sites of demonstrable schedulable quality & importance; 		
	- Protected Wreck Sites		
	 Listed buildings graded A and B+ 		
	 Designated registered parks and gardens 		
	 Registered Historic Landscapes of high interest 		
	- Conservation Areas		
Medium	 Local Authority designated sites and their settings; 		
	- Listed buildings graded B;		
	- Undesignated sites of demonstrable regional importance		
Low	 Sites with specific and substantial importance to local interest groups; 		
	 Sites whose importance is limited by poor preservation and poor survival of contextual associations. 		
No importance	- Sites with no surviving archaeological or historical component.		

3.5.2 The levels of significance used in this assessment are defined in table 1, below.



3.6 Assessment of the impacts of the proposed development

- 3.6.1 The assessment of the overall impacts of the proposed development on the significance of heritage assets is evaluated by taking into account both the significance of the heritage asset in question, as defined in table 1, above, and the nature and extent of the predicted effect on that significance which would result from the implementation of the proposed development.
- 3.6.2 Effects from a proposed development may be adverse, beneficial, or they may be neutral. The criteria for the assessment of adverse and beneficial effects which may result from the proposed development are set out below.

Adverse impacts

- 3.6.3 Assessments of the degree of adverse impacts on the significance of heritage assets are based on the extent to which the proposed development would affect the nature, extent and level of significance of the asset.
- 3.6.4 The degree of impact will vary in severity, depending on the extent, nature and level of effect to the significance of the heritage asset. Understanding the degree of effect is important to determine whether a potential effect is acceptable or not, as well as whether mitigation measures should be implemented, and what form them should take.
- 3.6.5 In order to inform this process, a spectrum of impacts is provided in Table 2, below, along with brief descriptions of the terms used. Where this assessment determines that an adverse impact would result from the implementation of the proposed development, the level of effect will be assigned based on the terms used in table 2.
- 3.6.6 By nature this process is not quantitative but relies on professional judgement. However, this judgment is informed by accepted, observable facts, such as spatial relationships and designations, the extent of any physical impacts, and the extent of changes to the surroundings of heritage assets.

Table 2: Criteria for determining the degree of adverse impact on the significance of heritage assets			
Level of impact	Description		
Major Adverse	 Total or substantial loss of the significance of a heritage asset. Harm to a heritage asset through effects to its setting, such that the significance of the asset would be totally lost or substantially reduced (e.g. the significance of a designated heritage asset would be reduced to such a degree that its designation would be questionable; the significance of an undesignated heritage asset would be reduced to such a degree that its categorisation as a heritage asset would be questionable). 		
Moderate Adverse	 Moderate harm to a heritage asset, such that the asset's significance would be materially affected/considerably devalued, but not totally or substantially lost. 		
Minor Adverse	 Low level of harm to the significance of a heritage asset. This could include the removal of fabric that forms part of the heritage asset, but that is not integral to its significance (e.g. the demolition of later extensions/additions of little intrinsic value). Low level of harm to the heritage asset's significance through effects to its setting. 		



Table 2: Criteria for determining the degree of adverse impact on the significance of heritage assets			
Level of impact	Description		
Negligible	 A change to a heritage asset or its setting that involves no loss of significance or harm or adverse effect to the integrity of its setting. 		
No Impact	 No change to a heritage asset or its setting. 		

Assessment of beneficial effects

- 3.6.7 In addition to adverse effects, a development may also have beneficial effects on the significance of a heritage asset. For example, a development may involve the repair and restoration of the fabric of a historic building which is at risk.
- 3.6.8 Furthermore, there are often instances where the effects of a development on the significance of a heritage asset are multifaceted, with both adverse and beneficial effects. In these instances it is necessary to come to an overall understanding of the impact of a proposed development, which considers both positive and negative effects. To inform such a judgment, it is not sufficient to understand that an effect is beneficial, it is also necessary to understand the scale of the benefit in order to understand how a harmful effect compares to a beneficial one.
- 3.6.9 Therefore, where a beneficial effect to a heritage asset is identified it will categorised as either major, moderate or low, mirroring the degrees of adverse effects set out in table 2, above. Where a benefit is categorised, this will be justified within the assessment. The categorisation of a benefit will follow the broad criteria set out below in table 3.

Table 3: Scale of heritage benefits			
Level of effect	Description		
Major benefit	- Benefits that enhance key elements of a heritage asset's significance to a substantive degree. This would include effects such as substantial repairs or restoration of original fabric of a listed building which is at risk, or works that allow a central part of an asset's special interest to be appreciated or understood where this was not previously possible.		
Moderate benefit	 Benefits that provide a moderate enhancement to important elements of a heritage asset's significance. Examples would be realising the research value of remains of archaeological interest through archaeological investigation, modest repairs and restoration of key parts of the fabric of a heritage asset, and works that better reveal key elements of the significance of a listed building, either by removing unsympathetic extensions or by sympathetically modifying the building's setting. 		
Minor benefit	 Benefits that either provide minor enhancements to important elements of a heritage asset's significance, or which benefit more peripheral elements of the asset's significance. Examples would include removing unsympathetic elements from the setting of a heritage asset which allow for generally enhanced appreciation of the asset's significance, or minor repairs and restoration of a historic building's fabric. 		

3.6.10 It is important to note that the descriptions and categories above are for guidance, and that assessments of benefits must ultimately be based on professional judgment which is



informed by a thorough understanding of the heritage asset's significance, and of the effects of the proposed development.

Assessment of significance of effects

- 3.6.11 The assessment of the overall impact of the proposed wind farm on the significance of heritage assets is evaluated by taking into account both the heritage significance of the heritage asset in question, and the magnitude of the predicted effect on that significance. As is set out in policy in relation to the determination of renewable energy developments with regard to effects to heritage assets (SPPS paragraph 6.224 and PPS 18 policy RE1), it is important to understand whether a development would result in an unacceptable adverse impact on the significance of built heritage interests.
- 3.6.12 To understand whether an effect to a heritage asset is unacceptable, it is necessary to understand the degree of effect a development would have on the significance of a heritage asset, as well as of the level of importance of the heritage asset in question. Due to the higher protection provided to heritage assets of higher importance, the significance of an adverse effect to the planning balance will vary depending on the importance of the asset in question (as defined in table 1, above), as well as the level of adverse or beneficial effect identified (as defined in tables 2 and 3).
- 3.6.13 Table 4 uses these factors to provide a framework for the identification of the significance of effect of an identified effect on the significance of a heritage asset, which would result from the proposed development.

Table 4: Criteria for determining the significance of effect				
Degree of	Level of importance (table 1)			
adverse and of beneficial effects (tables 2 and 3)	Very High	High	Medium	Low
Major Adverse	Very Large Adverse	Large Adverse	Moderate/Large Adverse	Moderate/Minor Adverse
Moderate Adverse	Large Adverse	Moderate/Large Adverse	Moderate/Minor Adverse	Minor Adverse
Minor Adverse	Moderate/Large Adverse	Moderate/Minor Adverse	Minor Adverse	Neutral
Negligible/No impact	Neutral	Neutral	Neutral	Neutral
Minor beneficial	Moderate/Large Beneficial	Moderate/Minor Beneficial	Minor Beneficial	Slight Beneficial
Moderate beneficial	Large Beneficial	Moderate/Large Beneficial	Moderate/Minor Beneficial	Minor Beneficial
Major beneficial	Very Large Beneficial	Large Beneficial	Moderate/Large Beneficial	Moderate/Minor Beneficial

3.6.14 The categories of significance of effect defined in Table 4, above, have been devised with reference to best practice as set out in ICOMOS Guidance on Heritage Impact Assessments for Cultural World Heritage Properties (ICOMOS 2011) as well as the Design Manual for Roads and Bridges volume 11 (Standards for Highways).



- 3.6.15 The categories of significance of effect are not meant to be proscriptive but are rather meant to allow the professional judgement of the assessor to be articulated clearly and consistently across different types of effects to heritage assets of varying nature, quality and significance, allowing for nuance where necessary. In recognition of this, where there are two options within a category of significance of effect, the assessor will provide evidence for one or the other of the options. For example, if an asset of high importance is subject to a moderate degree of adverse effect, the significance of that effect may be Moderate or Large, depending on the nature of the effect and of the asset in question. Ultimately, the most appropriate categorisation of the significance of effect must be chosen, using professional judgement which is informed by a thorough understanding of the significance of the heritage asset and the nature of the effect.
- 3.6.16 Where the significance of effect is assessed as being Moderate or higher, this is considered to be a significant effect as referred to in the Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2017.



4.0 Heritage Baseline and Indirect Effects

4.1 Introduction and approach

- 4.1.1 There are a high number of heritage assets which require assessment within the 10km study area around the study site, however the majority of these would be subject to either negligible or slight effects, with a small number subject to higher impacts which require more detailed consideration.
- 4.1.2 Therefore, to ensure that the main body of this assessment is proportionate and accessible, the assessment of the potential indirect effects of the proposed development on cultural heritage assets in the surrounding area followed a staged process, set out below.
- 4.1.3 Firstly, the ZTV was used to determine which designated heritage assets were likely to be intervisible with the proposed development, and therefore subject to effects. Where a heritage asset, and the area around it, was found to be outside of the ZTV, and sufficiently distant, it is clear that their significance would not be affected by the proposed development. As such these heritage assets were excluded from further detailed assessment and a list of the heritage assets outside of the ZTV is provided in Appendix 2.
- 4.1.4 A preliminary review was then undertaken of the remaining assets to identify any heritage assets which were modelled as being intervisible, but were in practice were screened to the degree that it was clear that no effects would arise. One additional listed building fell into this category, Beltrim Castle (HB11/16/013 B, listed B+). This has an enclosed setting and would be completely screened from the proposed development by intervening landscape features and is therefore excluded from further assessment.
- 4.1.5 The remaining assets have been subject to detailed individual assessment, which is provided in tabular form in Appendix 1. This has allowed for a consistent assessment of these heritage assets to be undertaken. Where the assessment provided in Appendix 1 has shown that the overall significance of effect of the proposed development would be minor adverse or higher, or involves additional complexity, then this is stated within the tabulated assessment, and further, more detailed assessment of the heritage asset, its significance, and the effect of the proposed development on that significance is provided below. Where it was clear that effects were lower, and would not amount to significant environmental effects, no further detailed assessment is needed beyond that provided in Appendix 1.
- 4.1.6 In this way, the most detailed assessment within the body of this report has been able to be focussed on the principal designated heritage assets which may be subject to more significant effects, while ensuring that the process by which these assets have been selected is robust and supported by detailed assessment. The assets discussed below are shown in Figure 2 of this assessment.

4.2 Designated Heritage Assets requiring further assessment

- 4.2.1 The assessment provided in Appendix 1 found that the proposed development would have either a negligible or slight significance of effect on the majority of the heritage assets in the surrounding area. However, the assessment has highlighted a number of assets which may be subject to a higher level of effect, or which involve additional complexity or sensitivity that would benefit from more detailed assessment.
- 4.2.2 These assets are:



- TYR 011:018 Giants Grave Scheduled Monument
- TYR 006:006 Court Tomb: The White Rocks Scheduled Monument
- TYR 006:030 Two Stone Circles and Stone Alignment Scheduled Monument
- TYR 006:004 Cashel Scheduled Monument
- TYR 006:047 Field Walls and Cairns Scheduled Monument
- TYR 006:044– Stone Circle, Cairns and Alignments Scheduled Monument
- TYR 006:045 Stone Circle, Cairns and Alignments Scheduled Monument
- TYR 006:046 Field Walls, Cairns and Standing Stones Scheduled Monument
- TYR 026:005 Stone Circle and Alignment Scheduled Monument
- TYR 011:016 Castledamph Circle: Two Stone Circles, Cairns with Cists and Two Alignments Scheduled Monument
- TYR 011:015 Bronze Age Ceremonial Landscape Scheduled Monument
- TYR 006:022 Two Stone Circles and Possible Alignment Scheduled Monument
- TYR 011:004 Castledamph Rath Scheduled Monument
- HB10/09/006 St Marys Roman Catholic Church, Grade B1
- HB10/05/019 141 Glenelly Road, Grade B2
- 4.2.3 The above assets will be considered in more detail below, and an assessment made of the effect the proposed development would have on their significance, as well as a discussion of any mitigation responses which could be employed.

4.3 TYR 011:018 - Giant's Grave scheduled monument

- 4.3.1 This Giant's Grave tomb is located 1.9km to the southwest of the nearest proposed turbine location and 1.7km southwest of the study site boundary. It is situated on a level terrace in an area of rough ground, with good views in all directions. The monument comprises the well-preserved remains of a wedge tomb, with a surrounding stone circle. The wedge tomb consists of a gallery covered by a single capstone, a cobbled interior, a pair of jams projecting to the southwest, with a large sill stone across the entrance forming a possible antechamber, or second chamber. The surrounding stone circle measured 16.2m in diameter with partly cobbled interior. The entrance to the tomb is at the south-western end, facing towards the southwest.
- 4.3.2 The tomb is of high significance, and earlier archaeological investigations have found that it contained additional associated artefactual and environmental evidence of high research value, including charcoal, bone, a flint chip and a barbed and tanged arrowhead. Although no pottery was recovered during the excavations wedge tombs were predominantly constructed between 2500 and 1800 BC and is by far the most numerous type of megalithic tomb (O'Sullivan and Downy, 2010). However, it was suggested by McConkey in 1987 that this monument may be a hybrid tomb, based on the presence of the stone circle which surrounds it (McConkey, 1987). The monument is legible from the immediate vicinity, and its orientation is readily appreciated at present, with an information board in a prominent position to the southwest of the tomb. Aligned southwest / northeast with the entrance at the southwest implies that the key part of experiencing the asset in the past, with views to the southwest being the most significant and are aligned with the past

experience of the monument. The placement of the information board at the southwest now encourages the monument to be experienced facing the northeast.



Plate 2 Giant's Grave TYR 011:018 Entrance (35mm)

- 4.3.3 The proposed wind turbines would potentially be visible in the distance of views from the northeast of the monument. However, the closest historic point of view (HPV) 9 suggests that none of the proposed wind turbines would be visible from the monument so the proposed development would not affect the core elements of the significance of the monument and would only have a slight effect on the setting, which would not meaningfully affect appreciation of the monument's significance and archaeological interest, or the integrity of its setting.
- 4.3.4 It is considered that the proposed development would not affect the core elements of the significance of the tomb, including its physical remains, association with nearby monuments, nor the experience and appreciation of its archaeological interest which is provided within its immediate setting. The only effect of the proposed development would the wider setting of the tomb, as the turbines would be visible in the distance in views of the tomb when looking to the east and east of northeast. This would have a small effect on appreciation of the tomb's significance but would not lead to substantive distraction due to the distance, and the fact that none of the turbines would be aligned along the central axis of the tomb.
- 4.3.5 On this basis the overall assessment of the level of impact of the proposed development on the significance of the Tomb (Table 2) is considered to be **minor adverse**. Due to the high significance of the tomb, this has the potential to result in either a **moderate adverse**, or a **minor adverse** significance of effect. Due to the distance between the proposed turbines and the tomb, and the lack of other impacts, it is considered that the significance of effect would be **minor adverse** as defined in Table 4 of this assessment.

Mullaghclogher Wind Farm, Aughabrack, Plumbridge, Northern Ireland

4.4 TYR 006:006 - Court Tomb 'The White Rocks' scheduled monument

- 4.4.1 This court tomb is located approximately 1.8km to the west of the nearest proposed turbine location and 790m west of the study site. It is situated in an area of rough ground on a terrace, on the east facing slope of the Inver Burn Valley with fine views of the surrounding area. The tomb consists of a large trapezoidal, denuded, long cairn of kerb stones aligned east to west. The cairn measures 24m long by 12m wide at the west tapering to approximately 9m in width at the east. The gallery measures 4.5m long and 2.6m wide at the west tapering to 1.1m at the east, if this was originally divided into two there is no visible evidence (Lynch 1966). Two entrance jams set transversely to the direction of the gallery at a height of 0.75m and provide access through a 0.5m wide gap out to the court which is 5m deep and approximately 6.8m at its widest. The court is defined at its northern edge by a peristyle of flat slabs set on edge which decrease in height to the west. The monument is legible, and its orientation is readily appreciated at present. The tomb is of high significance and will preserve additional archaeological evidence of high research value.
- 4.4.2 Almost 30% of the court tombs recorded in Ireland are located within Northern Ireland and these were in use between 3600BC and 2400BC (O'Sullivan and Downey, 2019). The court entrance faces west, and the tomb seems to be aligned to the summit of Balix Hill to the west of the monument, making views to the west significant for appreciating the past experience of the tomb (Lynch, 1966). This view is key to appreciating the archaeological and historical interest of the tomb, and provides an appreciation of its relationship to the surrounding historic topography. The monument is orientated east to west, and the court opening preceding the burial chamber is at the eastern end. The immediately surrounding area also provides a good appreciation of the tomb's archaeological interest, although this is not readily discernible from the wider area.



Plate 3 Looking east towards Court Tomb TYR 006:006 facing the study site (24mm)



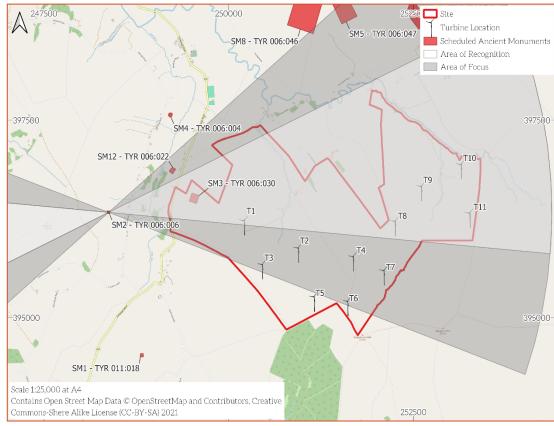


Plate 4 Views from Court Tomb TYR 006:006

- 4.4.3 The site visit confirmed that the proposed turbines would be visible in the backdrop of views from the tomb facing northeast. The impact of this will be assessed with reference to Visual Acuity. Visual Acuity is the measure of the ability of the human eye to distinguish shapes and details of objects at a given distance. Research has found that the field of view of the human eye consists of two elements: the recognition zone and the area of focus. The average human's recognition zone, where an object is readily recognised in a view, is 30° wide. By contrast, the area of focus, which forms a wider view of the surrounding context, has been calculated at 60° (Marieb, E.N. and Hoehn, K. 2019 and Leat, Yakobchuk-Stanger and Irving, 2020). The human eye has the capacity to see objects up to three miles away on a clear day, however the recognition of objects decreases over this distance due to the curvature of the earth, the brightness and size of an object, the person's line of sight and the person's overall eyesight (Marieb, E.N. and Hoehn, K. 2019).
- 4.4.4 As mentioned above some of the proposed turbines are present within the human recognition zone all of the proposed turbines are located outside the central area of recognition which means that although they are visible in the distance, the distance between the Site and the tomb as well as the intervening topography would provide some separation from the turbines, which would ensure that appreciation of the archaeological interest of the monument would not be unduly affected.
- 4.4.5 The alignment of the tomb was mapped, together with the recognition zone and area of focus, and shown in Plate 4, above. This model suggests the proposed turbines 1, 8-11 are present within the human recognition zone and all but turbine 5 present within the area of focus. Based on the visual acuity and field of view, when focussing on the tomb facing east, there will be a separation between the monument and the Site due to the distance between the two locations (Alphan, 2021).

Mullaghclogher Wind Farm, Aughabrack, Plumbridge, Northern Ireland



- 4.4.6 The proposed development would not affect any of the key elements of the significance of the tomb, or the experience and appreciation of its archaeological interest, which is provided by its immediate setting. The proposed development would also not affect the intervisibility between Balix Hill and the tomb (see plate 5, below). However, it would affect views from the monument to the east.
- 4.4.7 This would have a small effect on appreciation of the tomb's significance, but would not lead to substantive distraction due to the distance between the tomb and the proposed turbines. Furthermore, none of the proposed turbines would be aligned along the central alignment of the tomb when looking to the east. On this basis the overall assessment of the level of impact of the proposed development on the significance of the Tomb (Table 2) is considered to be **minor adverse**.
- 4.4.8 Due to the high significance of the tomb, this has the potential to result in either a **moderate adverse**, or a **minor adverse** significance of effect. Due to the distance between the proposed turbines and the tomb, and the lack of other impacts, it is considered that the significance of effect would be **minor adverse** as defined in Table 4 of this assessment.



Plate 5 Looking west from TYR 006:006 facing Balix Hill (50mm)

4.5 TYR 006:030 - Two Stone Circles and Stone Alignment scheduled monument

- 4.5.1 The two stone circles and stone alignment scheduled monument is located in the northwest of the study site, but the nearest proposed turbine would be located 710m to the southeast. The stone circles are situated in a field of heather and rough grazing on a west facing hill. The monument comprises two large stone circles, an alignment of stones in between (see plate 6, overleaf).
- 4.5.2 The two stone circles and stone alignment are of high significance, as is evidenced by their designation. It has high archaeological interest, and the monument will contain considerable associated artefactual and environmental evidence of high research value.
- 4.5.3 The monument is relatively well preserved and some of the stones are visible from the immediate vicinity. It is located on the west facing slope of the valley of the Inver Burn



watercourse, with rising topography to the east, and seems to have been sited to provide commanding views across the valley. The setting of the monument comprises the experience provided by the immediately surrounding area, although its archaeological interest is not readily discernible from a distance, for example in views from the Longland Road to the west. There are no information boards in the surrounding area, so it is difficult actively appreciate the historical interest.

- 4.5.4 The proposed turbines 4 and 6 and the blades of turbines 1 to 3 and 5 will be visible in the backdrop of views of the monument to the northeast, east and southeast, however these would be partially screened by intervening vegetation and would not meaningfully affect appreciation of the monument's significance. Furthermore, the proposed development would not affect views from the monument across the valley to the west.
- 4.5.5 The upper sweep of turbines 7 to 9 may be visible in the distant backdrop in views from Longland Road, however these would be partially screened by intervening vegetation and topographical changes and would not meaningfully affect appreciation of the monument's significance (see HVP 8).
- 4.5.6 The proposed development would not affect the core elements of the significance of the monument, and would only have a slight effect on the setting, which would not meaningfully affect appreciation of the monument's significance and archaeological interest, or the integrity of its setting.
- 4.5.7 On this basis the overall assessment of the degree of effect of the proposed development (Table 2) is considered to be **negligible**, with a **neutral** significance of effect (Table 4). This is not considered to be a significant effect.



Plate 6 Monument TYR 006:030 facing east to towards the proposed development (24mm)

4.6 TYR 006:004 - Cashel scheduled monument

4.6.1 The Cashel scheduled monument located on a natural terrace to the west of side of the Inver Burn Valley, with extensive views across the Inver Burn Valley to the east. The cashel



is located approximately 1.7km to the northwest of the nearest turbine location and 670m northwest of the study site.



Plate 7 Cashel TYR 006:004 (70mm)

- 4.6.2 The remains of this cashel consist of a stone bank with many large boulders, plus a later field wall, which is much disturbed. There is a good original wall face along the interior at southwest and west but there is no original entrance. There are structural remains defining a further four small structures (see plate 7, above).
- 4.6.3 The cashel is of high significance and has a high level of archaeological interest, with good preservation, and the monument will contain additional associated artefactual and environmental evidence of high research value. The monument is legible and visible from the immediate vicinity and Aghabrack road located to the west (see plate 9 below). Views of the cashel provide appreciation of the preservation and archaeological interest of the monument, with the presence of earth and stone elements of the original construction provides appreciation for the architectural interest of the monument.
- 4.6.4 Six of the proposed turbines and the blades of a further five turbines would be visible in the distance behind the cashel when seen from Aghabrack Road to the west, and so the proposed development would change the backdrop of the cashel (see HVP 6). The turbines would not affect the immediate setting of the cashel, nor affect appreciation of its archaeological and architectural interest. Intervening vegetation in the vicinity would also provide some partial screening. Therefore, while the turbines may be noticeable in the wider area, they would not affect how the setting contributes to the significance of the cashel.
- 4.6.5 Therefore, the proposed development would not affect any of the key elements of the significance of the cashel and would only have a slight effect on its setting, which would not meaningfully affect appreciation of the cashel's significance or archaeological interest. It therefore follows that the integrity of the setting of the monument would not be affected. On this basis the overall assessment of the degree of impact of the proposed



development (Table 2) is considered to be **negligible**, with a **neutral** significance of effect (Table 4), due to the high significance of the monument. This is not considered to be a significant effect.



Plate 8 Looking east across the Cashel TYR 006:004 toward development (47mm)

4.7 TYR 006:047 - Prehistoric Landscape scheduled monument

- 4.7.1 This prehistoric landscape is located 2.35km to the north of the nearest proposed turbine location and 950m north of the study site boundary. It is situated in an area of heather and open undeveloped grassland, with good views towards the south, across the Burndennett River. The monument comprises the well-preserved remains of three small cairns and an unbroken field wall. The wall is aligned north /south for 80m and consists of linear scraw-covered or turf bank feature to a maximum height of 0.6m high. The three small cairns are located to the west of the wall, between 2 to 3m in diameter with a maximum height of 0.5m, based on their appearance they are more likely to be field clearance and not burial cairns.
- 4.7.2 The prehistoric landscape is of high significance, and will contain additional associated artefactual and environmental evidence of high research value. The site visit confirmed that the monument is not readily discernible from the immediate vicinity, and there is no meaningful experience of the cairns or field wall from the wider area.
- 4.7.3 However, at close quarters the good preservation of the remains can be appreciated as is the orientation of the field wall, aligned south / north, which would have been a key part of experiencing the asset in the past as well as the present (based on information from HERONI record TYR 006:047). Due to the above ground undeveloped land, it is difficult to see the cairns and field wall from the wider area.
- 4.7.4 The proposed wind turbines would be visible in the distance to the south of the monument, and so would change the setting of the prehistoric landscape. However, the features in the landscape are not readily experienced visually, and no significant alignment or orientation forms a clear part of its setting or significance, although the placement of

the features seems to have been placed to provide commanding views across the topography to the south. However, the turbines would not affect the legibility of the surrounding topography, nor of the prehistoric landscape's strategic location within it. The turbines would be noticeable but would not meaningfully distract from the appreciation of the monument, which is limited in visual terms in any case.



Plate 9 Prehistoric Landscape TYR 006:047 looking south to the study site (47mm)

4.7.5 It is therefore considered that the proposed development would not affect any of the key elements of the significance of the prehistoric landscape, and would only have a slight effect on its setting, which would not meaningfully affect appreciation of the prehistoric landscape's significance or archaeological interest. As such, it is not considered that the proposed development would affect the integrity of its setting. On this basis the overall assessment of the degree of impact of the proposed development (Table 2) is considered to be **negligible**, with a **neutral** significance of effect (Table 4), due to the high significance of the monument. This is not considered to be a significant effect.

4.8 TYR 006:044 - Prehistoric Landscape scheduled monument

- 4.8.1 This prehistoric landscape is located 1.85km to the north of the nearest proposed turbine location and 950m northeast of the study site boundary. The monument comprises the well-preserved remains of a possible stone circle, two cairns and the two stone alignment. The possible stone circle consisted of 6 standing stones visible above the bog surrounding one of the cairns, the second cairn is located 10m to the northwest. The landscape is located on the south-facing slope of a hill, overlooking the Burndennett River.
- 4.8.2 The prehistoric landscape is of high significance and will contain additional associated artefactual and environmental evidence of high research value. The monument is legible from the immediate vicinity, however there is no meaningful experience of the stone circle, cairns or stone alignment from the wider area, and public access to the monument was not possible during the site visit.

Mullaghclogher Wind Farm, Aughabrack, Plumbridge, Northern Ireland



- 4.8.3 Due to the above ground undeveloped land, it is difficult to see the cairns, stone circle and alignment from the wider area. The proposed wind turbines would be visible in the distance to the south of the monument, and so would change the setting of the prehistoric landscape. However, the features in the landscape are not readily experienced visually, and no significant alignment or orientation forms a clear part of its setting or significance, although the placement of the features seems to have been placed to provide commanding views across the topography to the south.
- 4.8.4 The proposed wind turbines would be visible in the distance to the south of the monument, and so would change the setting of the prehistoric landscape. However, the features in the landscape are not readily experienced visually, and no significant alignment or orientation forms a clear part of its setting or significance, although the placement of the features seems to have been placed to provide commanding views across the topography to the south. However, the turbines would not affect the legibility of the surrounding topography, nor of the prehistoric landscape's strategic location within it. The turbines would be noticeable but would not meaningfully distract from the appreciation of the monument, which is limited in visual terms in any case.
- 4.8.5 It is therefore considered that the proposed development would not affect any of the key elements of the significance of the prehistoric landscape, and would only have a slight effect on its setting, which would not meaningfully affect appreciation of the prehistoric landscape's significance or archaeological interest. On this basis the overall assessment of the degree of impact of the proposed development (Table 2) is considered to be **negligible**, with a **neutral** significance of impact (Table 4), due to the high significance of the monument. This is not considered to be a significant effect.

4.9 TYR 006:045 - Prehistoric Landscape scheduled monument

- 4.10 This prehistoric landscape is located 1.85km to the north of the nearest proposed turbine location and 950m northeast of the study site boundary. The monument comprises the well-preserved remains of twelve cairns and two upright slabs recorded as an alignment. Four are grouped closely together 80m south are a further four cairns and 35m west of this group is three further cairns. Running southeast is a potential linear cairn as a stony bank and a further alignment of two upright slabs 90m to the southeast The possible stone circle consisted of 6 standing stones visible above the bog surrounding one of the cairns, the second cairn is located 10m to the northwest. The landscape is located on the south-facing slope of a hill, overlooking the Burndennett River.
- 4.10.1 The prehistoric landscape is of high significance, and will contain additional associated artefactual and environmental evidence of high research value. The monument is legible from the immediate vicinity, however there is no meaningful experience of the cairns and the stone alignment from the wider area, and public access to the monument was not possible during the site visit.
- 4.10.2 However, at close quarters the remains can be perceived, including the orientation of the linear cairn, aligned south / north, which would have been a key part of experiencing the asset in the past as well as the present (based on information from HERONI record TYR 006:045). Due to the above ground vegetation on the land, it is difficult to see the cairns and standing stones from the wider area and therefore appreciate the archaeological and architectural interest of the monument.
- 4.10.3 The proposed turbines would be visible in the distance to the south of the scheduled landscape. The turbines would not affect the legibility of the surrounding topography, nor



of the prehistoric landscape's strategic location within it. The turbines would be noticeable but would not meaningfully distract from the appreciation of the monument, which is limited in visual terms in any case.

4.11 It is therefore considered that the proposed development would not affect any of the key elements of the significance of the prehistoric landscape, and would only have a slight effect on its setting, which would not meaningfully affect appreciation of the prehistoric landscape's significance or archaeological interest. On this basis the overall assessment of the degree of impact of the proposed development (Table 2) is considered to be **negligible**, with a **neutral** significance of impact (Table 4), due to the high significance of the monument. This is not considered to be a significant effect.

4.12 TYR 006:046 - Field Walls, Cairns and Standing Stones scheduled monument

- 4.12.1 This monument is located 1.4km to the northwest of the nearest proposed turbine location and 1.1km north of the study site boundary. It is situated in bog land on a southwest facing slope of Tornoge Hill with clear views of the surrounding area. The monument comprises the well-preserved remains of thirteen cairns, a field wall and a standing stone. The cairns range in diameter of between 2 and 5m at a maximum height of 1m, the northern cairns are better built and spaced equally suggesting they are more likely to be burial cairns not field clearance. The field wall is visible as a low linear rise aligned northeast / southwest for 40m at the south of the monument, finally, the standing stone is 1.2m high and located at the southeast of the scheduled area. The monument is located on the south-facing slope of a hill, overlooking the Burndennett River.
- 4.12.2 The monument is of high significance, and will contain additional associated artefactual and environmental evidence of high research value. The monument is legible from the immediate vicinity, however there is no meaningful experience of it from the wider area, and public access to the monument was not possible during the site visit.
- 4.12.3 However, at close quarters the remains can be perceived, including the orientation of the field wall, aligned southwest / northeast (based on information from HERONI record TYR 006:046). Due to the ground conditions on the monument, it is difficult to see the cairns and standing stones from the wider area and therefore appreciate the archaeological and architectural interest of the monument (see plate 11, below). There are also no information boards in the surrounding area so it is difficult actively appreciate the historical interest of the monument.
- 4.12.4 The proposed wind turbines would be visible in the distance to the south of the monument, and so would change the setting of the monument. However, the turbines would not affect the legibility of the surrounding topography, nor of the monument's strategic location within it. The turbines would be noticeable, but would not meaningfully distract from the appreciation of the monument, which is limited in visual terms in any case.
- 4.12.5 It is therefore considered that the proposed development would not affect any of the key elements of the significance of the monument, and would only have a slight effect on its setting, which would not meaningfully affect appreciation of the prehistoric landscape's significance or archaeological interest. On this basis the overall assessment of the degree of impact of the proposed development (Table 2) is considered to be **negligible**, with a **neutral** significance of effect (Table 4), due to the high significance of the monument. This is not considered to be a significant effect.

Mullaghclogher Wind Farm, Aughabrack, Plumbridge, Northern Ireland





Plate 10 Prehistoric Landscape TYR 006:046 Field Wall (47mm)

4.13 TYR 026:005 - Stone Circles and Alignment scheduled monument

- 4.13.1 This monument is located 3.4km to the southeast of the nearest proposed turbine location and 2.4km south of the study site boundary. It is situated in improved grassland near the top of a hill sloping to the west, with good views in all directions. The monument comprises a stone circle facing west and made of 27 small closely set stones with a diameter of 8m and a maximum height of 0.62m. The monument also comprises a possible stone alignment of three low stones with an average height of 0.23m and aligned west for 3.5m at the top of the hill, wearing away towards the west.
- 4.13.2 The monument is of high significance, and will contain additional associated artefactual and environmental evidence of high research value. The monument is legible from the immediate vicinity, however there is no meaningful experience of it from the wider area due to the overgrown landscape. At close quarters the monument has moderate levels of preservation of the remains but due to the overgrown nature of the landscape it is difficult to appreciate the architectural and archaeological interest and the lack of information boards in the surrounding area makes it difficult to actively appreciate the historical interest (see plate 11, overleaf).
- 4.13.3 The blades of proposed wind turbines 4 and 6 are likely to be visible in the distance to the north of the monument, and so would change the backdrop of views from the monument to the north. However, the turbines would not interfere with the view along the alignment of the monument, nor affect appreciation of the archaeological and architectural interest provided by the immediate setting. Also, the proposed turbines would be located at a considerable distance, such that they would not be readily discernible from the setting of the monument.
- 4.13.4 It is therefore considered that the proposed development would not affect any of the key elements of the significance of the monument, and would not adversely affect its setting, or appreciation of the monument's significance or archaeological interest. On this basis the



overall assessment of the degree of effect of the proposed development (Table 2) is considered to be **negligible**, comprising a small change to the setting of the monument, but one which does not result in any harm or loss. This would result in a **neutral** significance of effect (Table 4), due to the high significance of the monument. This is not considered to be a significant effect.



Plate 11 Monument TYR 026:005 looking northwest, some stones are just visible through the vegetation (50mm)

4.14 TYR 011:016 - Megalithic Complex scheduled monument

- 4.14.1 This monument is located 3.4km to the south of the nearest proposed turbine location and 2.4km south of the study site boundary. It is situated in improved grassland on a south facing slope, with good views in all directions. The monument comprises the previously excavated remains of a double stone circle surrounding a central cairn with a cist, double tangential alignment, a second cairn and two further double stone circles. The central cairn measured 13m in diameter with the tallest stone at 1.1m.
- 4.14.2 The monument is of high significance, and will contain additional associated artefactual and environmental evidence of high research value. The monument is legible from the immediate vicinity, however there is no meaningful experience of it from the wider area, and public access to the monument was not possible during the site visit so it is difficult to appreciate the architectural and archaeological interest and the lack of information boards in the surrounding area makes it difficult to actively appreciate the historical interest.
- 4.14.3 The blades of proposed wind turbines 4 and 6 are likely to be visible in the distance looking north from the monument, affecting the backdrop of the monument when facing north. However, the turbines would not interfere with the views out of the monument, nor affect appreciation of the archaeological and architectural interest provided by the immediate setting. Also, the proposed turbines would be located at a considerable distance, such that they would not be readily discernible from the setting of the monument.

Mullaghclogher Wind Farm, Aughabrack, Plumbridge, Northern Ireland



4.14.4 It is therefore considered that the proposed development would not affect any of the key elements of the significance of the monument, and would only have a slight effect on its setting, which would not meaningfully affect appreciation of the monument's significance or archaeological interest. On this basis the overall assessment of the degree of effect of the proposed development (Table 2) is considered to be **negligible**, with a **neutral** significance of effect (Table 4), due to the high significance of the monument. This is not considered to be a significant effect.

4.15 TYR 011:015 – Bronze Age Ceremonial Landscape scheduled monument

- 4.15.1 This ceremonial landscape is located 3km to the southwest of the nearest proposed turbine location and 1.7km south of the study site boundary. It is situated on a wide, flat summit of a spur of land rising to the north with excellent views of the surrounding hills, Castledamph valley to the east with the best views towards Mullaghcairn to the southeast. The monument consists of at least three stone circles, one containing a disturbed cist grave and another a standing stone with a stone alignment in the east.
- 4.15.2 The monument is of high significance, and will contain additional associated artefactual and environmental evidence of high research value. The monument is legible from the immediate vicinity, however there is no meaningful experience of it from the wider area, and public access to the monument was not possible during the site visit, so it is difficult to appreciate the architectural and archaeological interest and the lack of information boards in the surrounding area makes it difficult to actively appreciate the historical interest.
- 4.15.3 Proposed wind turbine 4, the blades of proposed wind turbines 2 and 6 and the upper sweep of turbines 1, 3 and 5 would be visible in the distance to the north of the monument, causing a change to the setting of the ceremonial landscape. However, the turbines would not interfere with the views from the monument, nor affect appreciation of the archaeological and architectural interest provided by the immediate setting. Also, the proposed turbines would be located at a considerable distance with an ancient woodland in between the monument and the proposed development so the turbines would not be readily discernible from the setting of the landscape.
- 4.15.4 It is therefore considered that the proposed development would not affect any of the key elements of the significance of the Bronze Age ceremonial landscape, and would only have a slight effect on its setting, which would not meaningfully affect appreciation of the Bronze Age ceremonial landscape's significance or archaeological interest. On this basis the overall assessment of the degree of impact of the proposed development (Table 2) is considered to be **negligible**, with a **neutral** significance of impact (Table 4), due to the high significance of the monument. This is not considered to be a significant effect.

4.16 TYR 006:022 - Stone Circle scheduled monument

4.16.1 This stone circle is located 1.2km to the northwest of the nearest proposed turbine location and 170m north of the study site boundary. It is situated on a flat terrace overlooking the Inver Burn Valley with fine views all around. The monument comprises two circles within 30m of each other, the first is approximately 9.5m in diameter and consists of eleven stones most of which are low set with a single stone in the centre standing 0.5m high. The second circle is positioned slightly downslope from the first on a second terrace, measuring approximately 13m in diameter, consisting of thirteen stones in a low set position with a the tallest at a height of 0.85m.





Plate 12 Looking towards Stone Circle TYR 006:022 from Longland Road (50mm)

- 4.16.2 The stone circle is of high significance, and will contain additional associated artefactual and environmental evidence of high research value. The monument is legible from the immediate vicinity but public access to the monument was not possible during the site visit, and the architectural and archaeological interest of the monument was not readily discernible from the wider area (see plate 12, above).
- 4.16.3 Within the initial research of the proposed development, HVP 7 suggested that eight of the proposed turbines would be visible from the stone circle. This was confirmed during the site visit, looking from Longland Road towards the study site there are clear panoramic views of the surrounding area.
- 4.16.4 Proposed wind turbines 1, 2 and 4 to 6, the blades of proposed wind turbines 3, 7 and 8 and the upper sweep of turbines 9 to 11 would be visible to the east of the monument, and so would change the views out of the monument facing east. The turbines would interfere with the view out of the monument, but would not affect appreciation of the archaeological and architectural interest provided by the immediate setting. Also, the proposed turbines would be located at a considerable distance, such that they would not be readily discernible from the setting of the stone circles.
- 4.16.5 It is therefore considered that the proposed development would not affect any of the key elements of the significance of the stone circle, and would only have a slight effect on its setting, which would not meaningfully affect appreciation of the monument's significance or archaeological interest. On this basis the overall assessment of the degree of effect of the proposed development (Table 2) is considered to be **negligible**, with a **neutral** significance of effect (Table 4), due to the high significance of the monument. This is not considered to be a significant effect.

4.17 TYR 011:004 - Rath scheduled monument

4.17.1 This rath is located 3.4km to the south of the nearest proposed turbine location and 3km south of the study site boundary.



Plate 13 Rath TYR 011:004 looking to northwest towards the study site (70mm)

- 4.17.2 The rath is of high significance, and will contain additional associated artefactual and environmental evidence of high research value. The monument is legible from the immediate vicinity, however there is no meaningful experience of the rath from the wider area due to the presence of intervening vegetation and the lack of public access. There are no information boards in the surrounding area making it difficult to actively appreciate the historical interest.
- 4.17.3 The rath is located on the south-facing valley, overlooking the Glenelly River, which is a clearly strategic location for this feature. The entrance was located at the south end of the rath (based on information from HERoNI record TYR 011:004), suggesting that the key association of the monument was with the river valley to the south.
- 4.17.4 The blades of the proposed wind turbines 4 and 6 would be visible in the distance in views to the northwest of the monument, and so would change the views to the north of the Rath. However, the turbines would not interfere with the legibility of the relationship of the rath with the river valley, nor affect appreciation of the archaeological and architectural interest provided by the immediate setting. The proposed turbines are also located at a considerable distance, such that they would not be readily discernible from the setting of the monument.
- 4.17.5 It is therefore considered that the proposed development would not affect any of the key elements of the significance of the rath, and would only have a slight effect on its setting, which would not meaningfully affect appreciation of the rath's significance or archaeological interest. On this basis the overall assessment of the degree of impact of the proposed development (Table 2) is considered to be **negligible**, with a **neutral** significance of impact (Table 4), due to the high significance of the monument. This is not considered to be a significant effect.

4.18 HB 10/09/006 - St. Marys Roman Catholic Church, Grade B1

- 4.18.1 St. Marys Roman Catholic Church is constructed in a cruciform plan, the nave aligned north / south and double height transepts at east and the west, located 2.3km northwest of the nearest proposed turbine location. The main frontage of the church faces south, with a lean-to porch. The church has high architectural and historic interest and is of high significance (Table 1).
- 4.18.2 The list description notes that the church is situated on an elevated location with views to the surrounding area. The church was constructed in 1897 and then remodelled in 1940, with a graveyard to the east, all of which is surrounded by mature trees. The church is located within a churchyard which comprises its immediate setting (see plate 15, overleaf). Some views of the church are afforded from the wider area, for example from the Tornage Road to the north (see plate 16, overleaf).
- 4.18.3 The immediate setting provides the best experience of the church's architectural interest, and the group value it has with the nearby graveyard. The wider area provides a more limited experience of the church's special interest but provides a rural setting which is sympathetic to its historic function.
- 4.18.4 The turbines would not affect the experience in the immediate setting of the church, and only the upper sweep of a couple of the turbines could potentially be visible in the distance in winter views. The turbines would also be visible in longer views of the church from the north, such as that seen in plate 14. However, the turbines would be distant in the view, and would not dominate the church. Finally, the proposed development would not affect the appreciation of the church's wider rural setting. Therefore, the proposed development may be noticeable, but would not detract from the contribution the setting makes to the significance of the church.



Plate 14 St. Mary's Roman Catholic Church (24mm)





Plate 15 Looking S from Tornage Road towards St Mary's Church (70mm)

4.18.5 It is therefore considered that the proposed development would not affect any of the key elements of the significance of the church, and would only have a slight effect on its setting, which would not meaningfully affect appreciation its significance or heritage interest. On this basis the overall assessment of the degree of impact of the proposed development (Table 2) is considered to be **negligible**, with a **neutral** significance of effect (Table 4), due to the high significance of the building. This is not considered to be a significant effect.

4.19 HB 10/05/019 - 141 Glenelly Road, Grade B2

- 4.19.1 141 Glenelly Road is a two-storey three-bay house with well-proportioned and detailed outbuildings, located approximately 5.5km to the southeast of the nearest proposed turbine location. The main frontage of the house faces north, towards an offshoot of Glenelly River. The house has high architectural interest and is only of local historical interest, but it still is of high significance (Table 1).
- 4.19.2 The list description notes that the house is situated on the south side of Glenelly Road, Plumbridge. The house is surrounded by mature trees and rural fields, with a grassed over lawn to the north, two outbuildings are located to the rear of the house, all constructed in the early 19th century. The immediate setting provides the best experience of the farmhouses' architectural interest, and the group value it has with the nearby outbuildings. The wider area provides a more limited experience of the farmhouse's special interest but provides a rural setting which is sympathetic to its historic function. Public access to the monument was not possible during the site visit. There are no information boards in the surrounding area making it difficult to actively appreciate the historical interest.
- 4.19.3 The turbines would not affect the key views from the house towards the sea to the east. The tips of a couple of the turbines would be potentially visible in the distant backdrop of views of the house from Magherabrack Road. However, several buildings and areas of vegetation are present in the intervening landscape, such that they are unlikely to be

discernible. Finally, the proposed development would not affect the appreciation of the house provided by the wider rural setting. Therefore, the proposed development may be noticeable, but would not detract from the contribution the setting makes to the significance of the house.

4.19.4 It is therefore considered that the proposed development would not affect any of the key elements of the significance of the house, and would only have a slight effect on its setting, which would not meaningfully affect appreciation its significance or heritage interest. On this basis the overall assessment of the degree of impact of the proposed development (Table 2) is considered to be **negligible**, with a **neutral** significance of effect (Table 4), due to the high significance of the building. This is not considered to be a significant effect.



5.0 Archaeological Baseline and Predicted Physical Effects

5.1 Introduction

5.1.1 The archaeological evidence set out in section 3 of this assessment is described below, together with a consideration of the reliability of the information provided by each source, and its relevance to the assessment of the archaeological potential of the study site. This will be followed by an assessment of the archaeological potential of the study site by period. Finally, an assessment of the likely significance of the potential buried archaeology within the study site will be provided.

5.2 Previous archaeological investigations

5.2.1 No intrusive archaeological investigations are recorded either within or in the vicinity of the study site. However, a number of site visits and observational field surveys have been conducted either within, or in the immediate vicinity of the study site, and these have revealed the following evidence, which has been recorded in the NISMR:

TYR 011:042 – The site is a low circular bank containing large rocks. It is situated on a small level platform on a sloping extent of peatland in Butterlope Glen, with wide views to the south. A possible roundhouse with a diameter of approximately 10m with large tumbled bounders marking the edges, particularly prominent in the north, east and south, only a badly defined low rocky bank on the west. The maximum height of the bank is 0.4m, with a low linear bank aligned southwest/ northeast for 60m located 20m northeast of the circle. The area is surrounded by a significant concentration of Bronze Age ritual monuments and it potentially preserves an important Bronze Age Landscape pre-dating the extensive thin peatland.

TYR 011:039 – In a shallow blanket bog south of Butterlope Glen, on the gently sloping land to the south and west contained several archaeological monuments. These include possible stone circles, a field wall, cairns, stoney banks, a wedge-shaped cist and a prehistoric house or hut site. This site consists of eleven distinct features spread over an area of 0.02km². However, most of the report in relation to these monuments has been lost and further information is no longer available.

TYR 011:020 – On the summit of a prominent hillock of rough grassland with fine views but higher ground gradually rising to the east. The site consists of two Old Red Standstone boulders each standing 0.7m high and set 0.7m apart. The stones are aligned approximately north / south the example to the north is angular measuring 0.5m by 0.4m whereas its neighbour to the south is more rounded measuring roughly 0.8m by 0.5m.

TYR 011:038 – Just east of the Butterlope Road this site consisted of several stones visible above the surface of the thin bog. The area is a projected circle, based on the visible stones is mounded with bog and grass-covered, a distinct green among darker surrounding, heather bogland. Towards the would-be centre of the circle is a standing stone, a fine slab over 1m high. This standing stone is not archaeological and is loose and can be rocked as it is set in the bogland not subsoil by the landowner in the 1990s. The site is difficult to classify, the three stones in the west appear to be in a straight line yet the two stones to the north and south of thee suggest that the feature is curving in at either end. The size of the stones and the even spaces between them suggest that it may be a stone circle, perhaps flattened along the west. Probing along the projected line

of the circumference of the circle reveals that there was further stones below the surface of the bog.

TYR 011:043 – A small but distinctive standing stone situated approximately half way up the eastern slope of Balix Glen between Plumbridge and Dunamanagh. It stands in the corner of an old field boundary, at the intersection of three low stone and earth banked boundaries, and next to a small stream. It seems to be set deeply into the ground with the boundaries built up around it. It stands 1.35m above the boundaries and was presumably a well established landmark when the land was divided by the boundaries. The land is rushy and used for sheep grazing. There are fine views to the west across the glen from the stone. The landowner entered a DARD scheme and wants to remove the wire from the stone.

5.3 Site walkover and aerial imagery

5.3.1 The site visit included a site walkover of the proposed turbine locations and of the study site in general. During the visit two cairns, a megalithic tomb, a beacon and finally, the potential foundations of a booley house were noted within the study site.

5.4 TYR 011:032 - Cairn, Undesignated Monument

5.4.1 This cairn is located 30m west of the study site and 410m southwest of the closest proposed turbine (see plate 16 below). Located on the second summit of Mullaghcarbatagh Mountain, roughly circular in plan, measuring 3.5m in diameter and 1.75m high. Th stones have been chosen to create a stable structure, likely gathered from the immediate vicinity but none of them appear to be structural with no evidence of cists or chambers within the site. The cairn itself is composed entirely of stone with no sign of soil or sod in construction, however this could be because of weathering of the cairn.



Plate 16 Looking southwest towards TYR 011:032 located in the east of the study site (24mm)

5.4.2 The cairn is situated in a prominent location in the landscape suggesting the cairn would have been significant in the past. The cairn may contain additional associated artefactual



and environmental evidence of research value. The monument is legible from the immediate vicinity, as well as across the wider area of the Site.

- 5.4.3 Due to the low grassland surrounding the monument it is possible to see the cairn from the wider area. The proposed wind turbines would be located within the wider setting of the undesignated monument and therefore would change the setting of the cairn. The turbines would also interfere with the views from the cairn and have an effect on the appreciation of the archaeological and architectural interest provided by the immediate setting.
- 5.4.4 It is therefore considered that the proposed development affect key elements of the significance of the cairn and would only have a large effect on its setting, which would affect appreciation of the cairn's significance and archaeological interest. On this basis the overall assessment of the degree of effect of the proposed development (Table 2) is considered to be **moderate adverse**, with a **minor adverse** significance of effect (Table 4), due to the high proximity of the turbines to the undesignated monument. This is not considered to be a significant effect.

5.5 TYR 011:033 - Cairn, Undesignated Monument

- 5.5.1 This cairn is located 20m south of the study site, on a secondary out crop to the west of TYR 011:032, 405m southeast of the closest turbine. It consists of loose cairn of stones, piled together rather than placed suggesting that it is a field clearance cairn. It is roughly circular on plan measuring 1.5m in diameter and at its tallest is 0.75m high (see plate 17, below).
- 5.5.2 The cairn is situated in a prominent location in the landscape suggesting the cairn would have been significant in the past. The Cairn may contain additional associated artefactual and environmental evidence of high research value. The monument is not legible from the immediate or wider vicinity.



Plate 17 Cairn TYR 011:033 located in the southeast of the study site (24mm)

5.5.3 The proposed wind turbines would be located within the wider setting of the undesignated monument and therefore would change the setting of the cairn. The turbines would also



interfere with the views from the cairn and have an effect on the appreciation of the archaeological and architectural interest provided by the immediate setting.

5.5.4 It is therefore considered that the proposed development affect key elements of the significance of the cairn and would only have a major effect on its setting, which would affect appreciation of the cairn's significance and archaeological interest. On this basis the overall assessment of the degree of effect of the proposed development (Table 2) is considered to be **moderate adverse**, with a **minor adverse** significance of effect (Table 4), due to the high proximity of the turbines to the undesignated monument. This is not considered to be a significant effect.

5.6 TYR 011:014 - Megalithic Tomb Undesignated Monument

5.6.1 Located 555m west of the study site is a Megalithic Tomb TYR 011:014 located 870m west of the closest proposed turbine (see plate 18, below). This Megalithic tomb was destroyed by the landowner during some routine drainage works but it was recorded as comprising of two thin slabs set on their edge, the tomb measured 2.5m long by 0.35m wide to a max depth of 0.5m. while the monument was intact it was constantly flooded due to its proximity to a nearby stream. Any associated artefacts and / or ecofacts will most likely have been removed during the demolition and drainage works.



Plate 18 Megalithic Tomb TYR 011:014 located in the study site (35mm)

- 5.6.2 The proposed wind turbines would be potentially visible in the distance in views to the northeast of the monument, and so would change the views to the northeast of the Tomb. However, the turbines would not interfere affect appreciation of the archaeological interest provided by the immediate setting, as the monument has been destroyed.
- 5.6.3 It is therefore considered that the proposed development would not affect any of the key elements of the significance of the tomb, and would only have no effect on its setting, which would not meaningfully affect appreciation of the tomb's significance or archaeological interest. On this basis the overall assessment of the degree of effect of the proposed development (Table 2) is considered to be **negligible**, with a **no impact** on the



significance (Table 4), due to the high significance of the monument. This is not considered to be a significant effect.

5.7 TYR 011:006 - Beacon Undesignated Monument

- 5.7.1 This is located within the southwestern extent of the study site on an area of rough ground in the northwest of the craggy summit of Mullaghcarbatagh mountain with panoramic views, 120m northwest of the nearest turbine (see plate 19 below). This is a modern upright beacon that first appeared on the Tyrone County Series 1st edition Map, is roughly circular, around 12m in diameter with a flat topped to a height of 1.5m high. The original cairn was flattened and the larger stones were used to construct this modern beacon, however there is no evidence of structurally set stones among the small, flat angular stones visible during the site visit.
- 5.7.2 The beacon is situated in a prominent location in the landscape suggesting it was significant to the local area in the past. This would explain why the cairn was modified into a beacon during the Post-Medieval period. Due to the modification in the Post-Medieval period it is unlikely that any associated artefactual and environmental evidence of high research value would remain. The monument is legible from the immediate vicinity, as well as across the wider area of the Site.
- 5.7.3 Due to the low grassland surrounding the monument it is possible to see the beacon from the wider area. The proposed wind turbines would be located within the wider setting of the undesignated monument and therefore would change the setting of the beacon. The turbines would also interfere with the views from the beacon and have an effect on the appreciation of the archaeological and architectural interest provided by the immediate setting.



Plate 19 Beacon TYR 011:006 looking north near the centre of the study site (24mm)

5.7.4 It is therefore considered that the proposed development affect key elements of the significance of the beacon, and would only have a major effect on its setting, which would affect appreciation of the beacon's significance and archaeological interest. On this basis



the overall assessment of the degree of effect of the proposed development (Table 2) is considered to be **moderate adverse**, with a **minor adverse** significance of effect (Table 4), due to the close proximity of the turbines to the undesignated monument. This is not considered to be a significant effect.

5.8 TYR 006:052 - Booley House Undesignated Monument

- 5.8.1 Located in the 215m northwest of the study site and 785m northwest of the nearest turbine is the potential remains of a booley house foundation TYR 006:052 of unknown date. Set on a high northwest facing hillslope with excellent views in all directions, except in the southwest where it is blocked by rising ground. This consists of a small circle of stones, one or two courses high and 4m in diameter, set against the remains of an old lane or boundary.
- 5.8.2 Due to the low grassland surrounding the monument it is possible to see the booley house from the wider area. The proposed wind turbines would be located within the wider setting of the undesignated monument and therefore would change the setting of the structure. The turbines would also interfere with the views from the monument and have an effect on the appreciation of the archaeological and architectural interest provided by the immediate setting.
- 5.8.3 It is therefore considered that the proposed development affect key elements of the significance of the monument, and would only have a major effect on its setting, which would affect appreciation of the booley house's significance and archaeological interest. On this basis the overall assessment of the degree of effect of the proposed development (Table 2) is considered to be **moderate adverse**, with a **minor adverse** significance of effect (Table 4), due to the close proximity of the turbines to the undesignated monument. This is not considered to be a significant effect.

5.9 Review of archaeological evidence by period

Prehistoric

- 5.9.1 The NISMR records a single prehistoric cairn (TYR 011:016) within the southwestern extent of the study site. However, this cairn underwent modification in the Post-Medieval / modern period and therefore it is unlikely that any associated artefactual and environmental evidence of high research value would remain.
- 5.9.2 Several records of known prehistoric remains are present in the wider area, such as the two cairns mentioned above are located in just outside of the study site (TYR 011:032 and TYR 011:033), however vary in preservation. The scheduled remains of the portal and wedge tombs located 4.5km southeast of the study site (TYR 012:005 / TYR 012:024), wedge tomb located 3.9km north of the study site (TYR 006:002) and portal tomb located 3.7km southwest of the study site (TYR 011:013). Further there are also several undesignated prehistoric remains within the immediate vicinity of the study site including prehistoric ritual complexes, standing stones, stone circles and potential roundhouses and huts.
- 5.9.3 The area surrounding the study site contains a heavy concentration of prehistoric heritage assets with symbolic and cultural importance likely due to the topography of the area which provides good visibility of the sunrise and sunset. Given the adaptation of the cairn (TYR 011:006) in the Post-Medieval period there is a low potential for remains associated with associated with prehistoric ceremonial and symbolic activity. Due to the heavy density

of prehistoric remains in the study site's vicinity, there is a moderate potential for yet unknown prehistoric remains.

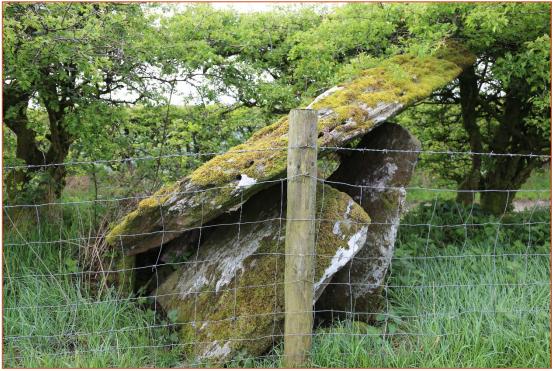


Plate 20 Portal Tomb TYR 012:005

Early Christian and Medieval

- 5.9.4 The area surrounding the study site contains several Scheduled Cashels and Raths dating to the Early Christian and Medieval periods. The chronology of Cashels and Raths is often controversial, but these are the most common type of field monument. Two main clusters of Raths are present in the area surrounding the study site, the first cluster is located between 5.5km and 7km southeast of the study site along the Glenelly River, these include TYR 012:007, TYR 012:008, TYR 012:009, TYR 012:010, TYR 012:011 and TYR 012:012. The second cluster is located between 7km and 9.8km to the northeast of the study site along the River Faughan, including TYR 029:005, TYR 029:006, TYR 030:001, TYR 030:002 and TYR 030:003.
- 5.9.5 The available evidence suggests that settlement activity in the vicinity of the study site during this period was focussed to the southeast and northeast, on lower elevations nearer to larger waterways. As such it is unlikely that the study site contains settlement evidence of significance from this period.
- 5.9.6 On this basis it is considered that the study site has a low potential to contain buried settlement remains of archaeological interest from this period.

Post-Medieval/Modern

5.9.7 As has been noted above, the study site contains a prehistoric cairn (TYR 011:006) which was modified during the Post-Medieval period to be a recognisable beacon in the area which is still in use today. The area to the south of the study site contains the remains of sheepfolds which remained in use until 1986, and a still house (IHR 04217:000:000) of Post-Medieval date. In addition, this assessment has located some non-designated heritage assets in the area surrounding the study site.



- 5.9.8 Historic mapping of this area has been reviewed and the Tyrone County series 1st Edition map is an old still house IHR 04217:000:000, located 1.1km south of the nearest proposed turbine (see Figure 5), however, on analysis of the Tyrone County series 2nd Edition map it is no longer visible. A visit to this location during the site visit did not reveal any remains of the building.
- 5.9.9 In addition, on the Tyrone County series 3rd edition there is a single sheepfold located 1.3km south of the nearest proposed turbine (See Figure 6). This sheepfold appears to remain in use for nearly a century as it is still visible on the OSNI Metric Scale historic mapping dating to 1986 (See figure 8).
- 5.9.10 Finally, on review of historic mapping there are several changes to field boundaries visible within the study site on the OSNI Metric Scale map which were not present in the preceding maps (Figure 7 and 8).
- 5.9.11 A single unlocated graveyard (TYR 007:002) is mentioned in OS memoirs which could be 660m to the northeast of the study site, but there are no visible remains present within this area. The only reference to its location states that it is in Stranagawilly near Inverbridge, about halfway between it and Straw. The area has been broken up and cultivated making it very difficult to locate the graveyard.
- 5.9.12 Therefore, the study site has a general potential to contain remains from the Post-Medieval period. In addition, there is a low potential for the study site to contain additional remnants of Post-Medieval agricultural activity, such as field boundaries.

5.10 Summary of archaeological potential and assessment of significance

- 5.10.1 A review of the available evidence has suggested that the study site has a low potential for prehistoric remains associated with ceremonial and symbolic activity due to likely disturbance caused by the adaptation of TYR 011:006 into a beacon and a moderate potential for the presence of yet unknown prehistoric remains. There is also a low potential for remains associated with the Early Christian / Medieval period. Finally, there is a known potential for the Post-Medieval / Modern period and a low potential for the presence of yet unknown Post-Medieval / Modern period associated with agricultural processes.
- 5.10.2 The presence of the prehistoric remains within the study site are only of low interest as defined in Table 1, as such they make meaningful contribution to local research objectives. As such there is no evidence of well-preserved prehistoric remains of high significance within the study site and it is considered that any unknown remains present within the study site are likely to also be of low interest.

5.11 The Proposed Development

5.11.1 The proposed development comprises a wind farm, with up to 11 turbines measuring to a maximum of 180m in height, to be placed across the study site, together with a BESS and associated access an infrastructure. These turbines will be set on foundations, and will be accessed using a modest track, which will make use of existing routes where possible. There will also be additional construction phase impacts during the erection of the turbines, to stabilise them, and transport the turbine parts to the study site and put them into place, any compound which is constructed. The development would be sparsely distributed throughout the study site, with a low below ground impact relative to the area.



5.12 Potential Impacts

5.12.1 These activities have the potential to result in the localised removal of any archaeological remains which may be present where any impact is planned. Given the potential for the presence of as yet undiscovered buried remains of local/low interest, these impacts could result in a **minor adverse** to a **moderate adverse** significance of effect, depending on the nature of the remains in question (see Table 4).

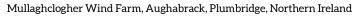
5.13 Mitigation Measures

Embedded mitigation

5.13.1 In response to this risk, the proposed turbine locations, access road routes, construction activities and cable route have been placed to avoid all known, clearly located archaeological heritage assets, and their immediate vicinity. In this way, there would be no physical loss or harm to known, reliably located buried archaeological remains within the study site.

Archaeological recording

- 5.13.2 As has been noted, it is possible that additional, as yet unknown remains may be present within the planned areas of development, which could be impacted by the proposed development. Based on the density of historical assets in the area surrounding the study site, it may be advantageous to undertake a Lidar survey of the study site to identify any unknown below ground remains of interest.
- 5.13.3 In response to this potential effect, a programme of archaeological works can be implemented ahead of the development to detect and record any remains prior to any impact. The recording of archaeological remains serves to realise the research value of those remains, and enhance understanding and appreciation of the more significant remains in the wider area which would not be affected. While this benefit does not undo or fully outweigh the loss of any remains, it would serve to partially compensate for the loss, and would reduce any residual significance of effect to **minor adverse**.
- 5.13.4 As such with the benefit of a programme of archaeological works to mitigate the effect of the proposed development no significant environmental effects would result from the proposed development due to impacts on buried archaeological remains. This programme of works could be secured as a condition to planning consent and implemented ahead of the construction of the proposed development.



6.0 Summary and Conclusions

- 6.1.1 This cultural heritage baseline assessment considers land at Mullaghcloger Wind Farm, Aughabrack, Plumbridge, Northern Ireland (Figure 1). It has been researched and prepared by Landgage Heritage on behalf of Renewable Energy Systems to identify any impacts to heritage assets and to inform the final placement of proposed turbines within the study site.
- 6.1.2 This assessment has provided a comprehensive assessment of the potential indirect impacts the proposed development could have on the significance of designated heritage assets in the wider area due to changes to their settings. It has found that in most cases, the degree of effect which would result from the proposed development would be no more than slight, and in no instance would the proposed development result in a significance of effect higher than **minor adverse**.
- 6.1.3 It has therefore been found that the impacts of the proposed development are unlikely to result in significant environmental effects due to indirect effects to the setting of heritage assets. In all cases, the effects are medium term and reversible, and in no instance would the proposed development directly affect a key aspect of the significance of any of the designated heritage assets assessed. However, due to the sensitivity of the assets in question, it is recommended that all 15 of the assets assessed in full detail in the main body of this report should be assessed within the ES cultural heritage chapter in Volume 2 of the ES. The remaining assets already assessed in detail in Appendix do not require additional assessment within ES chapter 5, as it is clear that the effect of the proposed development on them would not lead to any significant effects.
- 6.1.4 A review of the available evidence has suggested that the study site has a low potential for prehistoric remains associated with ceremonial and symbolic activity due to likely disturbance caused by the adaptation of TYR 011:006 into a beacon and a moderate potential for the presence of yet unknown prehistoric remains. There is also a low potential for remains associated with the Early Christian / Medieval period. Finally, there is a known potential for the Post-Medieval / Modern period and a low potential for the presence of yet unknown Post-Medieval / Modern period associated with agricultural processes.
- 6.1.5 The presence of the prehistoric remains within the study site are only of low interest as defined in Table 1, as such they make meaningful contribution to local research objectives. As such there is no evidence of well-preserved prehistoric remains of high significance within the study site and it is considered that any unknown remains present within the study site are likely to also be of low interest.
- 6.1.6 The proposed development comprises a wind farm, with up to 11 turbines measuring to a maximum of 180m in height, to be placed across the study site, together with a BESS and associated access an infrastructure. These turbines will be set on foundations, and will be accessed using a modest track, which will make use of existing routes where possible. There will also be additional construction phase impacts during the erection of the turbines, to stabilise them, and transport the turbine parts to the study site and put them into place, any compound which is constructed. The development would be sparsely distributed throughout the study site, with a low below ground impact relative to the area.
- 6.1.7 These activities have the potential to result in the localised removal of any archaeological remains which may be present where any impact is planned. Given the potential for the presence of as yet undiscovered buried remains of local/low interest, these impacts could

result in a **minor adverse** to a **moderate adverse** significance of effect, depending on the nature of the remains in question (see Table 4).

- 6.1.8 In response to this risk, the proposed turbine locations, access road routes, construction activities and cable route have been placed to avoid all known archaeological heritage assets, and their immediate vicinity. In this way, there would be no physical loss or harm to known buried archaeological remains within the study site.
- 6.1.9 It is possible that additional, as yet unknown remains may be present within the planned areas of impact, which could be impacted. In response to this potential effect, a programme of archaeological works can be implemented ahead of the development to detect and record any remains prior to any impact. The recording of archaeological remains serves to realise the research value of those remains, and enhance understanding and appreciation of the more significant remains in the wider area which would not be affected. While this benefit does not undo or fully outweigh the loss of any remains, it would serve to partially compensate for the loss, and would reduce any residual significance of effect to **minor adverse**.
- 6.1.10 As such with the benefit of a programme of archaeological works to mitigate the effect of the proposed development no significant environmental effects would result from the proposed development due to impacts on buried archaeological remains. This programme of works could be secured as a condition to planning consent and implemented ahead of the construction of the proposed development.
- 6.1.11 In conclusion, the potential effects of the proposed development on the setting of heritage assets have been minimised by the design of the proposed development, and any archaeological impacts could be mitigated by a programme of archaeological works secured via planning condition. It would therefore be possible to implement the proposed development in accordance with the requirements set out in policies BH2 4 of PPS 6, paragraph 6.224 of the SPPS and policy HE1 in the LDP 2035.

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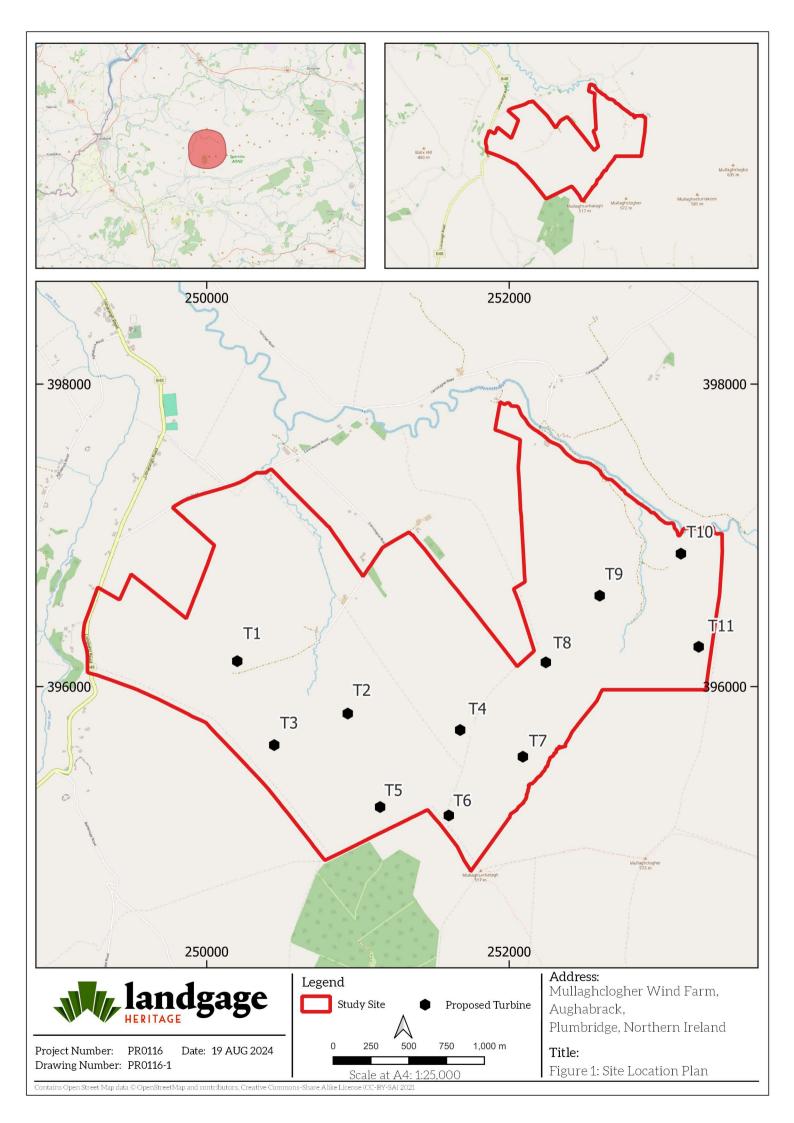
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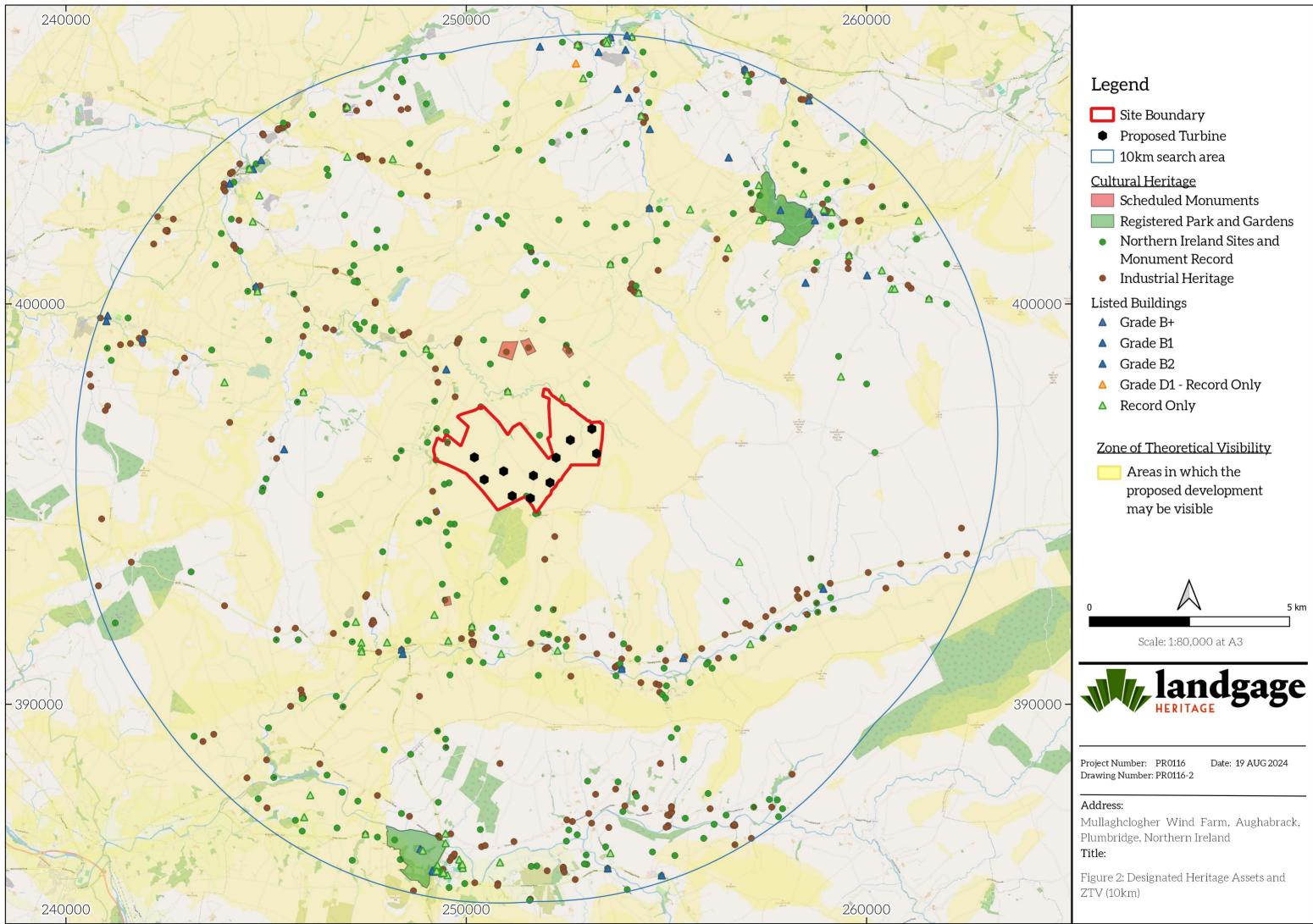
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Cartographic

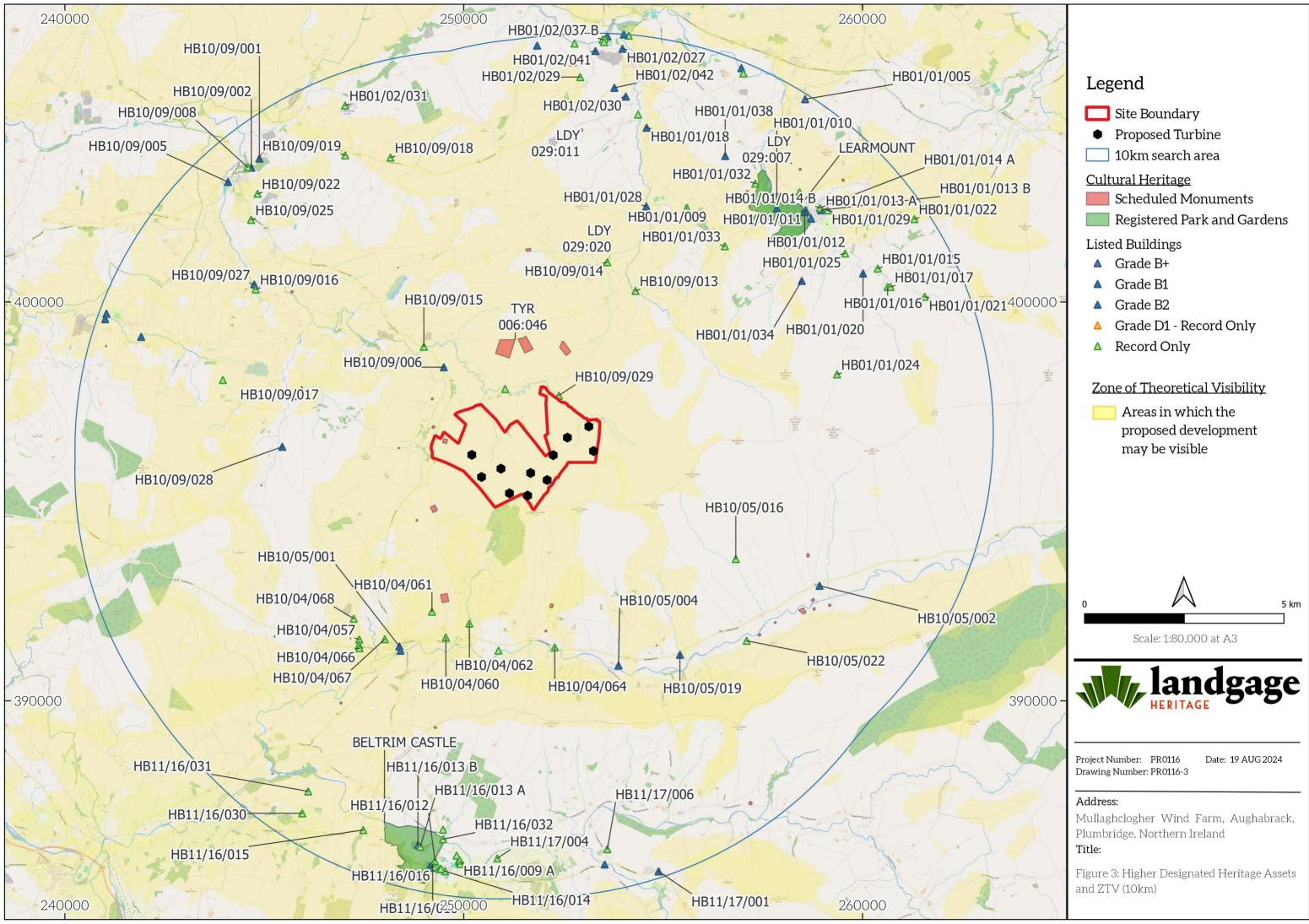
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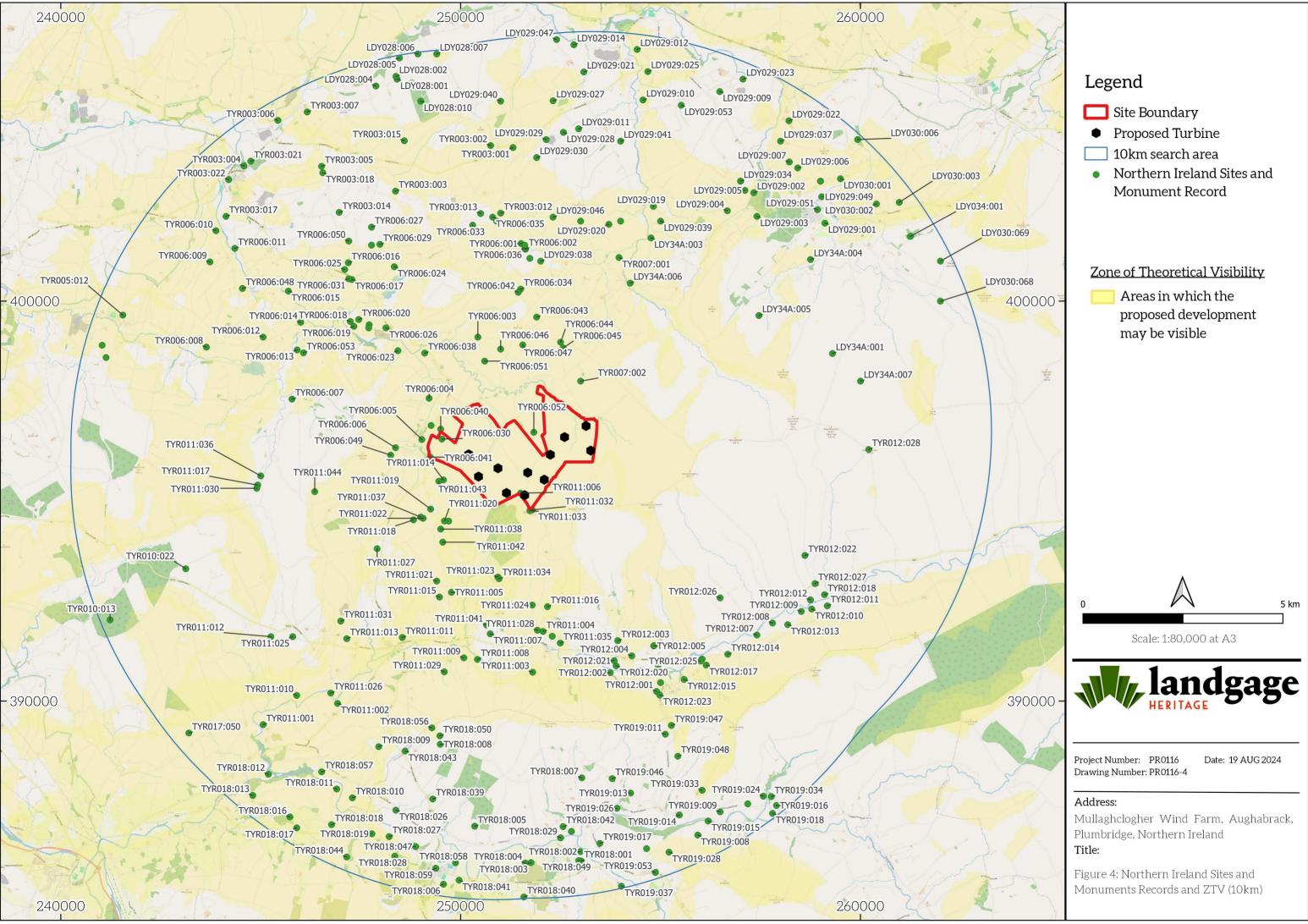




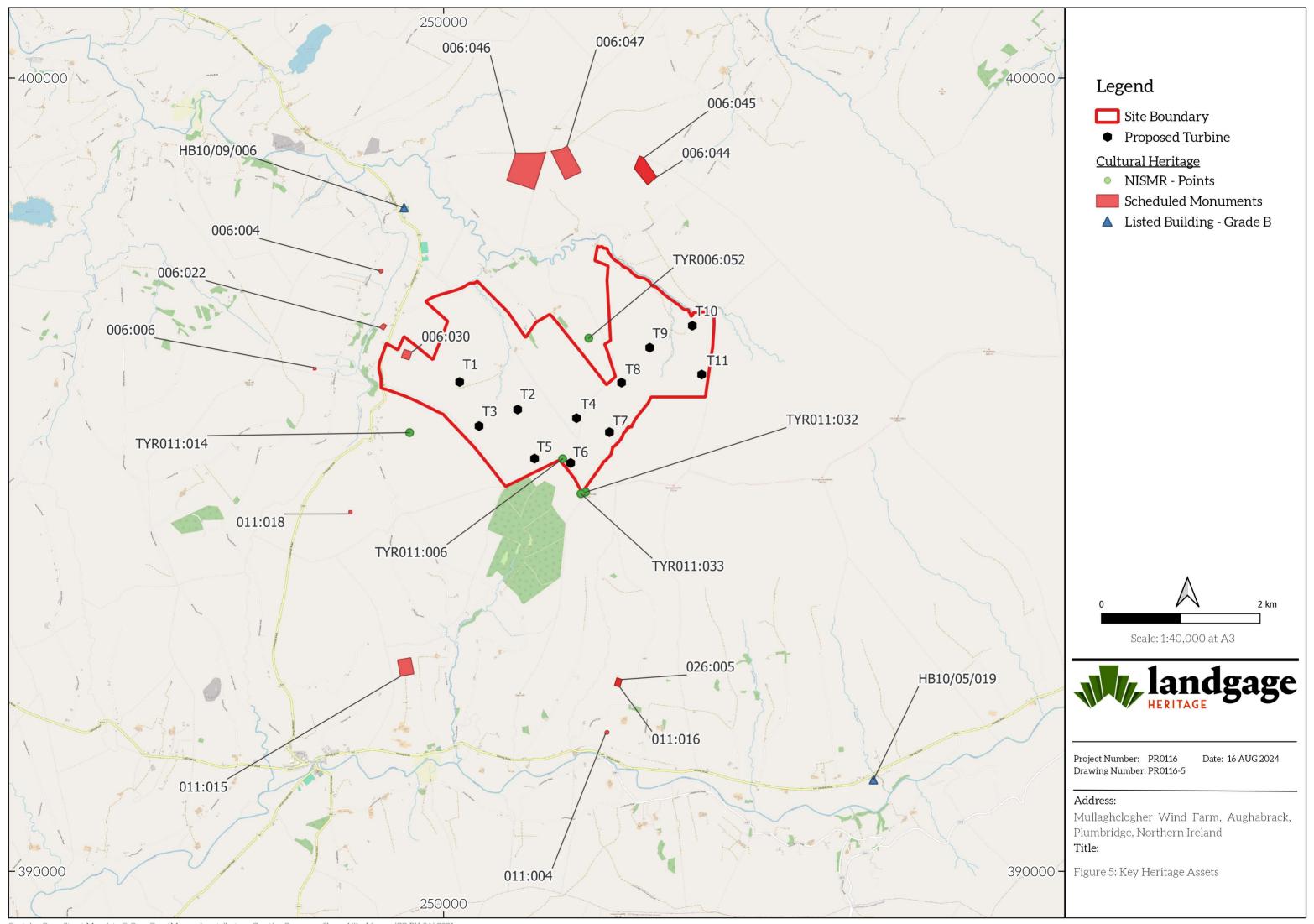
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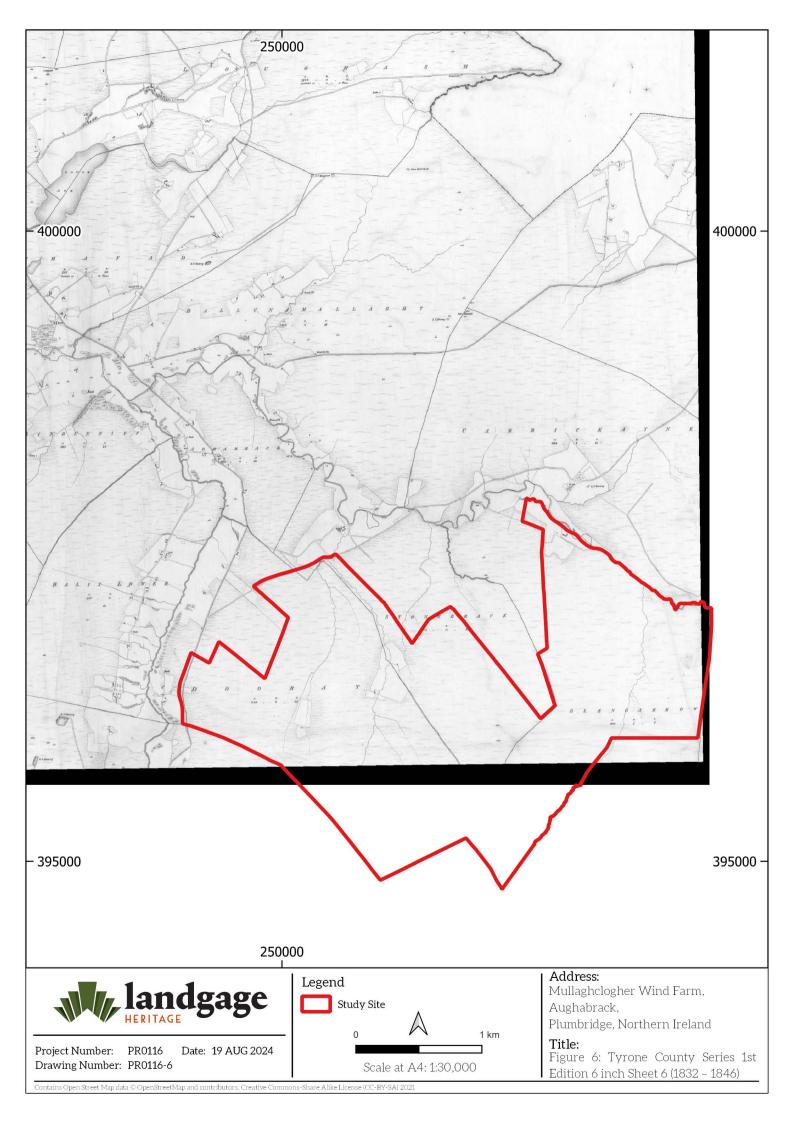
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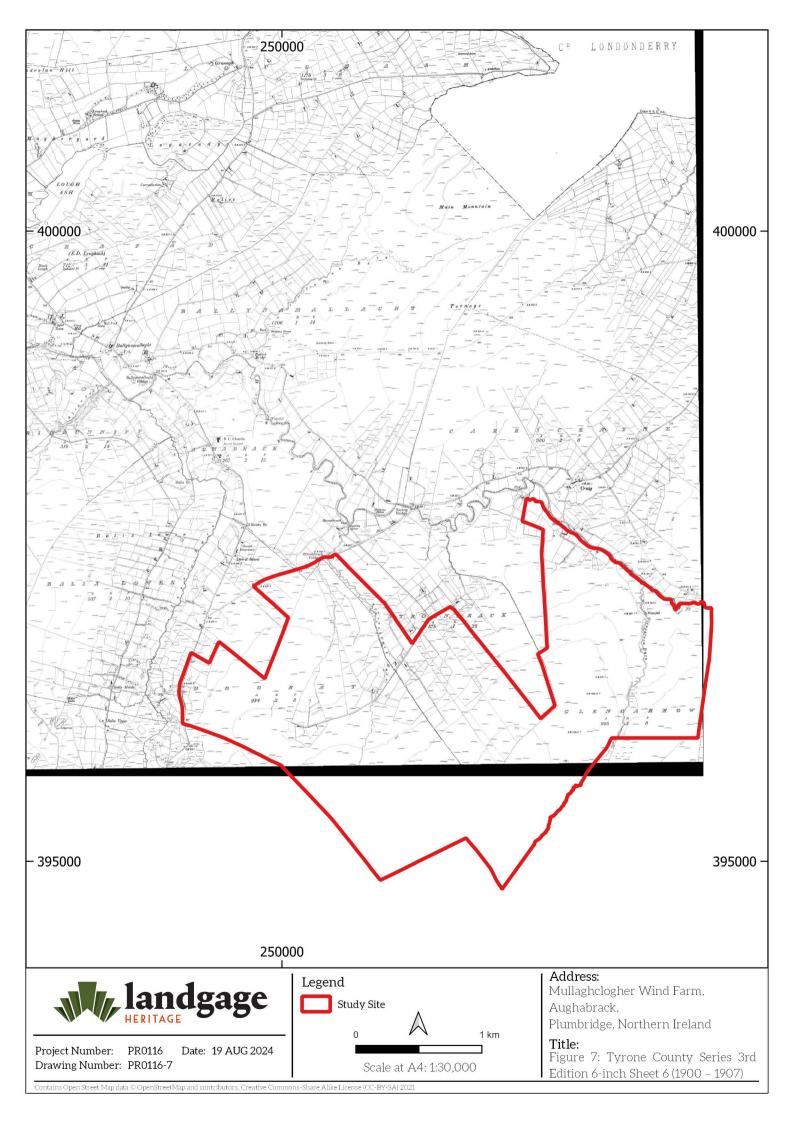


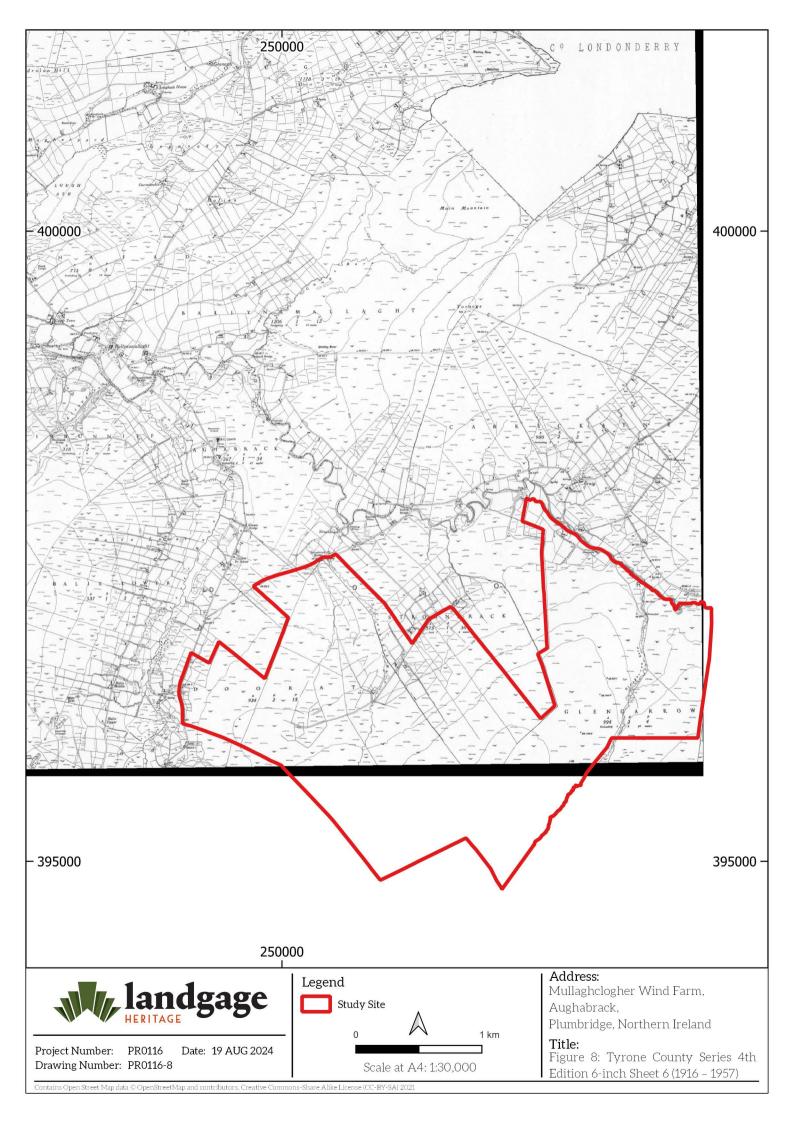
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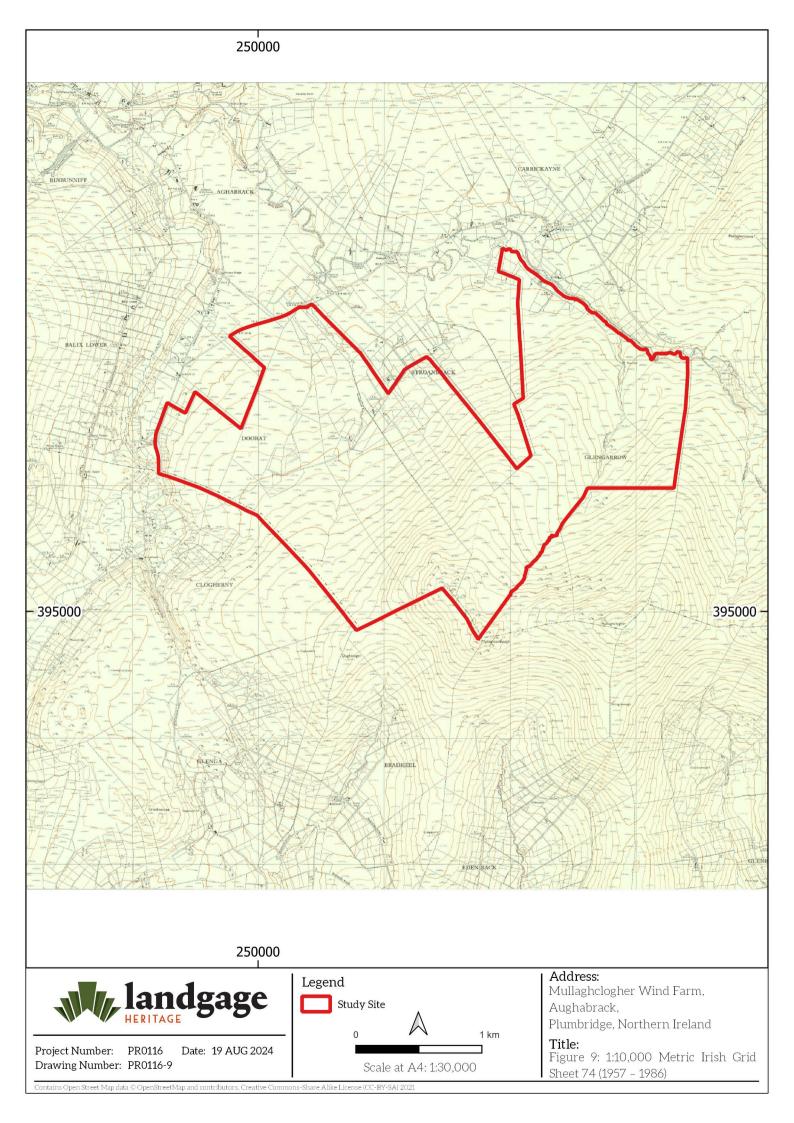


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Appendix 1 - Assessment of indirect effects to heritage assets

Scheduled Ancient Monuments

Heritage Asset:	Name: Giant's Grave Designation: SAM Reference: TYR 011:018	
Description:	Distance: 2km southwest of the nearest turbine, 680m southwest study site Description: On a fairly level terrace, the site was excavated in 1937. A stone circle of relatively tall stones surrounds a wedge tomb set to SW. The tomb consists of a gallery covered by a single capstone. A pair of jambs project SW of this forming a possible antechamber, or a 2nd chamber. A large sill stone is set across the entrance with a pair of jambs outside. The chamber contained charcoal, bone, a flint chip & a barbed-&-tanged arrowhead. The circle is 16.2m diam. & parts of the interior were cobbled. Dating to either the Neolithic or the Bronze Age period	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High, preservation is good, and the monument has been fully excavated and associated artefactual and environmental evidence was of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains of the tomb provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Moderate, earth and stone elements of the original construction are still legible, with surviving structural elements despite age.	No effect on ability to appreciate architectural interest.
Setting and views:	The monument is legible from the immediate vicinity however there is no meaningful experience of the tomb from the wider area. At close quarters the good preservation of the remains is evident as is its orientation, aligned NW-SE, which would have been a key part of experiencing the asset in the past as well as the present. The entrance was located at the NE, and so views to the SW are significant, and are aligned with the past experience of the monument.	The proposed wind turbines would be visible in the distance, and so would change the backdrop of the tomb. However, the turbines would not interfere with the view along the alignment of the tomb, nor affect appreciation of the archaeological and architectural interest provided by the immediate setting.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.



Heritage Asset:	Name: Giant's Grave Designation: SAM Reference: TYR 011:018
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Moderate or Minor adverse Significance of effect (Table 4): Minor adverse Comments: The proposed development would not affect any of the key elements of the significance of the monument and would only have a slight effect on the setting, which would not meaningfully affect appreciation. On this basis this effect is not considered to be a significant effect.





Heritage Asset:	Name: Court Tomb: The White Rocks Designation: SAM Reference: TYR 006:006	
Description:	Distance: 1.85km west of the nearest turbine 810m west study site Description: This structure consists of a denuded long cairn, c.24m long & trapezoidal in shape, 12m wide at W & 9m at E. Set in the W end & facing uphill is a large, wedge shaped chamber with an orthostatic facade delimiting a V-shaped forecourt. The chamber is 4.5m long & 2.6m wide at W, decreasing to 1.1 m at E. There is no evidence of a division of the chamber. The court is 5m deep & approx. 6.8m at its widest. Some 5m E of the chamber are remains of what may be a subsidiary chamber. See SM7 for detailed description & plan. Under the care of the State.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High, preservation is good, and the monument has been fully excavated and associated artefactual and environmental evidence was of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains of the tomb provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Moderate, earth and stone elements of the original construction are still legible, with surviving structural elements despite age.	No effect on ability to appreciate architectural interest.
Setting and views:	The monument is legible from the immediate vicinity however there is no meaningful experience of the tomb from the wider area. At close quarters the good preservation of the remains is evident as is its orientation, aligned NE-SW, which would have been a key part of experiencing the asset in the past as well as the present. The entrance was located at the NE, and so views to the SW are significant, and are aligned with the past experience of the monument.	The proposed wind turbines would be visible in the distance, and so would change the setting of the tomb. However, the turbines would not interfere with the view along the alignment of the tomb, nor affect appreciation of the archaeological and architectural interest provided by the immediate setting.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Moderate or Minor adverse Significance of effect (Table 4): Minor adverse Comments: The proposed development would not affect any of the key elements of the significance of the monument and would only have a slight effect on the setting, which would not meaningfully affect appreciation. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: Two Stone Circles and Stone Alignment Designation: SAM Reference: TYR 006:030	
Description:	Distance: 710m northwest of the nearest turbine, inside study site Description: Located on ground sloping down to the west. In the northeast is a stone circle measuring 11m in diameter with 19 stones, at a max height of 0.59m. 19m southwest, a single standing stone orientated east / west, measuring 1.2m(H) x 0.7m (W) x 0.4m (T)A second oval stone circle is located 7.5m southeast of the first, this measured 7m (L) by 5.5m (W) and consists of 6 visible stones, the tallest of which is 0.5m. Between this second stone circle and the standing stone is an alignment of 32 stones which are aligned northeast / southwest for 54m until it reaches the bog face.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High/Unknown, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate/Unknown may provide appreciation of prehistoric use of landscape and demarcation of space.	No effect on ability to appreciate historic interest.
Architectural interest:	Not Listed	No effect on ability to appreciate architectural interest.
Setting and views:	The monument is set on a western facing slope of a hill with commanding views to the west, southwest and south. The monument is located within an area of open pasture currently used as grazing land for sheep, meaning that appreciation of its archaeological interest is possible from the wider area.	Proposed turbines 1-2 and the blades of turbines 3- 9 and 11-13 will be visible in the backdrop of views to the northeast, east and southeast, however these would be partially screened by intervening vegetation and would not meaningfully affect appreciation of the monument's significance.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Negligible Significance of effect (Table 4): Neutral Comments: The proposed development would not affect any of the key elements of the significance of the monument and would only have a slight effect on the setting, which would not meaningfully affect appreciation. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: Cashel Designation: Scheduled Archaeological Monument Reference: TYR 006:004	
Description:	Distance: 1.7km northwest of the nearest turbine, 690m Norwest study site Description: On a natural terrace to the W side of the Inver Burn valley. The site is defined by a stone bank with many large boulders, built into the hillside at W. The enclosing bank, topped by a later field wall, is much disturbed. It is 4m wide, 1m above the interior & 1.5m above the exterior ground at N, E & S. There is good original wall face along the interior at SW &W. There are eroded areas of bank, but none is an original entrance. There are structural remains defining about 4 small structures.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains of Cashel provide appreciation of Early Christian cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Moderate, earth and stone elements of the original construction are still legible with surviving structural elements despite age.	No effect on ability to appreciate architectural interest.
Setting and views:	The monument is set on a natural terrace to the western side of the Inver Burn Valley with panoramic views of the surrounding areas. The monument is located within an area of open pasture currently used as grazing land for sheep, meaning that appreciation of its archaeological interest is possible from the wider area. The setting of the monument consists primarily of the experience provided from within the monument and to the each within the pasture it is located.	The Proposed development is a distance from the immediate setting of the monument. Proposed turbines 1-4, the blades of turbines 5-13 will be visible in the backdrop of views from Aghabrack Road looking east, however these would be partially screened by intervening vegetation, modern infrastructure and buildings and would not meaningfully affect appreciation of the monument's significance. There are clear views from the monument of the B38 to the east, Aghabrack road to the west and modern housing and sports facilities in the immediate vicinity of the monument. Therefore, the views from the monument have already been changed from the original setting.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Negligible Significance of effect (Table 4): Neutral Comments: The proposed development would not affect any of the key elements of the significance of the monument and would only have a slight effect on the setting, which would not meaningfully affect appreciation. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: Field Walls and Cairns Designation: SAM Reference: TYR 006:047	
Description:	Distance: 2.35km northwest of the nearest turbine, 1km northwest of study site Description: This pre-bog complex forms part of a larger pre-bog landscape of cairns, field walls, standing stones, alignments etc. This site consists of an unbroken field wall & 3 small cairns. The wall runs N-S downslope for c.80m, visible as a linear scraw-covered feature. I is 2m wide & c.0.5-0.6m high. It then runs into a turf bank & is hidden by deep bog for c.20m, then re-emerges & runs a further 25m. W of the wall are 3 small cairns, whose appearance & size suggests they are field clearance rather than burial. They are 2-3m diam. & reach 0.5m above sub-soil. The deep, uncut bogland W of the wall & cairns may well conceal further features.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High/Unknown, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate/Unknown may provide appreciation of prehistoric use of landscape and demarcation of space.	No effect on ability to appreciate historic interest.
Architectural interest:	Moderate, earth and stone elements of original construction are still legible, with surviving structural elements despite age.	No effect on ability to appreciate architectural interest.
Setting and views:	The monument is set on a south facing hill with clear views of the area to the south. The monument is located within an area of heather and open undeveloped grassland, so it is difficult to appreciate the archaeological interest of the site until you are in the immediate vicinity. The above ground remains are only visible from the immediate vicinity due to overgrown grassland. Therefore, the setting of the monument consists primarily of the experience provided from within the monument.	The Proposed development is at some distance from the immediate setting of the monument. Proposed turbines 1-4 and 6-9, and the blades of turbines 5 and 10-13 will be visible in the distance from the monument looking south, however these would be partially screened by intervening vegetation, modern infrastructure and buildings and would not meaningfully affect appreciation of the monument's significance. There are clear views from the monument of Lisnaragh Road to the west, Carrickayne Road to the south and modern housing and industrial structures in the immediate vicinity of the monument. Therefore, the views from the monument have already been changed from the original setting.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.



Heritage Asset:	Name: Field Walls and Cairns Designation: SAM Reference: TYR 006:047
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Negligible Significance of effect (Table 4): Neutral Comments: The proposed development would not affect any of the key elements of the significance of the monument and would only have a slight effect on the setting, which would not meaningfully affect appreciation. On this basis this effect is not considered to be a significant effect.



Heritage Asset:	Name: Stone Circle, Cairns and Alignments Designation: SAM Reference: TYR 006:044 / 006:045	
Description:	Distance: 1.85km north of the nearest turbine, 950m north of study site Description: This site is part of an extensive complex of features found under cut turf, forming a prehistoric landscape with hut sites, cairns, field systems, tombs, stone circles etc. This site consists of a possible stone circle, 2 cairns & 2 alignments. The stone circle is formed of 6 stones visible above the bog, with 5 more found by probing. One of the cairns sits within the circle & the other is 10m to NW. The site is linked to another site close by, Tyr 006:045, also comprising cairns, field walls & an alignment. See SM7 for detailed description, plans etc.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High/Unknown, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate/Unknown may provide appreciation of prehistoric use of landscape and demarcation of space.	No effect on ability to appreciate historic interest.
Architectural interest:	Moderate/Unknown, earth and stone elements of original construction are still legible, with surviving structural elements despite age.	No effect on ability to appreciate architectural interest.
Setting and views:	The monument is set on a south facing hill with clear views of the area to the south. The monument is located within an area of heather and open undeveloped grassland, so it is difficult to appreciate the archaeological interest of the site until you are in the immediate vicinity. The above ground remains are only visible from the immediate vicinity due to overgrown grassland. Therefore, the setting of the monument consists primarily of the experience provided from within the monument.	The Proposed development is a distance from the immediate setting of the monument. Proposed turbines 6-11, and the blades of turbines 1-5 and 12-13 will be visible in the distance from the monument looking south, however these would be partially screened by intervening vegetation, modern infrastructure and buildings and would not meaningfully affect appreciation of the monument's significance. There are clear views from the monument of Mullintill Road to the southeast, Carrickayne road to the south and modern housing and industrial structures in the immediate vicinity of the monument. Therefore, the views from the monument have already been changed from the original setting.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Negligible Significance of effect (Table 4): Neutral Comments: The proposed development would not affect any of the key elements of the significance of the monument and would only have a slight effect on the setting, which would not meaningfully affect appreciation. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: Field Walls, Cairns and Standing Stones Designation: SAM Reference: TYR 006:046	
Description:	Distance: 2.3km northeast of the nearest turbine, 1.1km northeast of study site Description: This is a complex of pre-bog features on the SW-facing slope of Tornoge hill. It forms part of a larger pre-bog landscape extending over this area of bog, with field systems, cairns, alignments, megalithic tombs etc. This site comprises 13 cairns, ranging 2-5m in diam. & 0.4-1m high. At the N end of the site the cairns are evenly spaced & many are well built, suggesting they may be burial cairns rather than field clearance cairns. S of the site & running c.40m NE-SW is a length of field wall, visible as a low, linear rise in the cut-away bog. At the E end of the site is a short length of stony bank 12m long running NNE-SSW. S of this is a standing stone 1.2m high. See SM7 for details & plan of site.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High/Unknown, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate/Unknown may provide appreciation of Bronze Age use of landscape and demarcation of space.	No effect on ability to appreciate historic interest.
Architectural interest:	Moderate, earth and stone elements of the original construction are still legible, with surviving structural elements despite age.	No effect on ability to appreciate architectural interest.
Setting and views:	The monument is set on a south facing hill with clear views of the area to the south. The monument is located within an area of heather and open undeveloped grassland, so it is difficult to appreciate the archaeological interest of the site until you are in the immediate vicinity. The above ground remains are only visible from the immediate vicinity due to overgrown grassland. Therefore, the setting of the monument consists primarily of the experience provided from within the monument.	The Proposed development is a distance from the immediate setting of the monument. Proposed turbines 1-6, and the blades of turbines 7-13 will be visible in the distance from the monument looking southeast, however these would be partially screened by intervening vegetation, modern infrastructure and buildings and would not meaningfully affect appreciation of the monument's significance. There are clear views from the monument of Tornoge Road to the south, Carrickayne road to the southeast and modern housing and industrial structures in the immediate vicinity of the monument. Therefore, the views from the onument have already been changed from the original setting.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.



Heritage Asset:	Name: Field Walls, Cairns and Standing Stones Designation: SAM Reference: TYR 006:046
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Negligible Significance of effect (Table 4): Neutral Comments: The proposed development would not affect any of the key elements of the significance of the monument and would only have a slight effect on the setting, which would not meaningfully affect appreciation. On this basis this effect is not considered to be a significant effect.



Heritage Asset:	Stone Circle and Alignment Designation: Scheduled Archaeological Monument Reference: TYR 026:005	
Description:	Distance: 2.8km south of the nearest turbine, 2km south study site Description: The site consists of a ring of at least 27 small, closely set stones. It is 8m diam. N-S x 8.1m E-W. The tallest stone is 0.62m high & faces W. The average stone height is 0.23m. A possible alignment of 3 low stones c.7m W of the ring runs for 3.5m. It is situated close to the top of a hill which is worn away to W.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High/Unknown, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate/Unknown may provide appreciation of prehistoric use of landscape and demarcation of space.	No effect on ability to appreciate historic interest.
Architectural interest:	Not Listed	No effect on ability to appreciate architectural interest.
Setting and views:	The monument is set on a west facing hill with panoramic views of the surrounding area. The monument is located within an open pasture, and due to the low height of the stone it is only clearly visible from the immediate vicinity. Therefore, the setting of the monument consists primarily of the experience provided from within the monument.	The proposed development would be largely screened and distant from the immediate setting of the house. The blades of 4-5 and 13 of the turbines may be visible in views looking north from the monument and visible in the backdrop of views from Castledamph Road facing north, however these would be partially screened by intervening vegetation and would not meaningfully affect appreciation of the monument's significance.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Negligible Significance of effect (Table 4): Neutral Comments: The proposed development would not affect any of the key elements of the significance of the monument and would only have a slight effect on the setting, which would not meaningfully affect appreciation. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Castledamph Circle - Two stone circles; cairn with cist and 2 alignments Designation: SAM Reference: TYR 011:016	
Description:	Designation: SAW Reference: Tricolloop Distance: 2.85km south of the nearest turbine, 2km south study site Description: This complex site, excavated in 1937, incorporates part of a double stone circle with a central cairn & cist & double tangential alignment, with a 2nd cairn to E. 100 yds N of this are 2 contiguous stone circles & 50 yds E are remains of a 3rd double circle. The W circle is 13m in diam, with the tallest stone being 1.10m & the smallest 0.40m. Diameter of E circle 11.20m E/W x 11.60m N/S. The tallest stone is 1m high & smallest 0.20m high. Double alignment 21.50m long running N/S along direction of valley. Smaller line to west, large alignment to east - but stones not set along their axes- more like construction of old field fence. To the north of alignments - group of smallest stones, much disturbed by lazy bedding - but probably remains of stone circles. 16 stones in large alignment -tallest 0.90m high & 10 stones in smaller alignment -tallest 0.35m high. Possible small cairn 1.50m east of alignment, 3m in diam. x 0.40m high; its centre has been quarried.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High/Unknown, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate/Unknown may provide appreciation of prehistoric use of landscape and demarcation of space.	No effect on ability to appreciate historic interest.
Architectural interest:	Moderate/Unknown, earth and stone elements of original construction are still legible, with surviving structural elements despite age.	No effect on ability to appreciate architectural interest.
Setting and views:	The monument is set on a west facing hill with panoramic views of the surrounding area. The monument is located within an open pasture, and due to the low height of the stone it is only clearly visible from the immediate vicinity. Therefore, the setting of the monument consists primarily of the experience provided from within the monument.	The proposed development would be largely screened and distant from the immediate setting of the house. The blades of 4-5 and 13 of the turbines may be visible in views looking north from the monument and visible in the backdrop of views from Castledamph Road facing north, however these would be partially screened by intervening vegetation and would not meaningfully affect appreciation of the monument's significance.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Negligible Significance of effect (Table 4): Neutral Comments: The proposed development would not affect any of the key elements of the significance of the monument and would only have a slight effect on the setting, which would not meaningfully affect appreciation. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Bronze Age Ceremonial Lands	cape Designation: SAM Reference: TYR 011:015
Description:	Name: Bronze Age Ceremonial Landscape Designation: SAM Reference: TYR 011:015 Distance: 3km southwest of the nearest turbine, 1.7km southwest study site Description: This is a complex site, incorporating parts of at least 3 stone circles, one containing a disturbed cist grave, another a standing stone. There is also an alignment to E. No further details available at present. Sited on a wide, flat summit of a spur of land rising to the N and falling away at E, S and W. Excellent views of the surrounding hills and Castledamph valley to East. The best views are to the SE, towards Mullaghcairn. A peat bank to the NE stands 1m high indicating that peat has probably been cut off the site. 1. Standing stone Orientated NWN-ESE Coarse sedimentary (?) rock with a lot of quartz pebbles. 1.25m high 0.60m wide 0.80m long 2. Stone circle 15.5m to the SE of the standing stone. A large stone circle is defined by sections of arcs of low stones. In the interior towards the NW 3 large angular stones may be the remains of a disturbed cist. To the N of centre is a single large stone which may indicate another cist. Diameter N-S 29m E-W 34m 3. Cairn, (possible megalithic structure) A cairn is left if the cutaway peat at the corner where 2 peat banks meet. Some large stones are clearly set to form a kerb, but this appears to be quite square at the SE corner and curved at the NW. Some loose stone on top all covered in bog and heather. Diameter NW-SE 5.80m SW-NE 4.50m 1.50 high at centre falling away on all sides. Further features have been identified to the SW of the cluster already described. These are possibly a further stone circle (H4948192510) 25m diameter E-W/ 20m N-S; a 15m alignment of 4 stones (H4950392499) and a small cairn approx. 0.6m high and 1m diameter (H4951692516). These features have been located by local enthusiast Brendan Gormley, and were surveyed by GPS in Feb 2012, for the purpose of enlarging the scheduled area. An in-depth field survey would likely identify further features in this significant landscape.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High/Unknown, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate/Unknown may provide appreciation of Bronze Age use of landscape and demarcation of space.	No effect on ability to appreciate historic interest.
Architectural interest:	Moderate/Unknown, earth and stone elements of original construction are still legible, with surviving structural elements despite age.	No effect on ability to appreciate architectural interest.
Setting and views:	The monument is set on flat summit of a spur of land rising to the north with panoramic views of the surrounding area. The monument is located within an area of heather and open undeveloped grassland, and it is possible to appreciate the archaeological interest of the monument from the wider area especially from the north.	The proposed development would be largely screened and distant from the immediate setting of the house. The blades of 2-5, 11 and 13 of the turbines may be visible in views looking northeast from the monument, however these would be partially screened by intervening vegetation and would not meaningfully affect appreciation of the monument's significance.

Heritage Asset:	Name: Bronze Age Ceremonial Landscape Designation: SAM Reference: TYR 011:015	
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:		al ot affect any of the key elements of the significance of a slight effect on the setting, which would not



Heritage Asset:	Name: Two Stone Circles and Possible Alignment Designation: SAM Reference: TYR 006:022	
Description:	Distance: 1.2km west of the nearest turbine, 90m west study site Description: On a flat terrace overlooking the Inver Burn Valley & with fine views all round. There are 2 stone circles within 30m of each other. The 1st consists of 11 low set stones forming a rough circle 9.5m N-S x 7.5m E-W. One stone 0.5m high, lies inside the circle at SE. There i a possible double tangential alignment W of the circle running NE/SW. The 2nd circle is downslope & is large & more complex, 13m N-S x 11m E-W. 13 stones form the circle. At least 9 other stones protrude through the mound defined by the circle.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High/Unknown, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate/Unknown may provide appreciation of prehistoric use of landscape and demarcation of space.	No effect on ability to appreciate historic interest.
Architectural interest:	Not Listed	No effect on ability to appreciate architectural interest.
Setting and views:	The monument is set on flat terrace with commanding panoramic views of the surrounding area. The monument is located within an area of open undeveloped grassland, meaning that appreciation of its archaeological interest is possible from the wider area.	The proposed development is a distance from the immediate setting of the monument. Proposed turbines 1, the blades of turbines 2-6 and 9 will be visible in the backdrop of views to the northeast, east and, however these would be partially screened by intervening vegetation, modern infrastructure and buildings and would not meaningfully affect appreciation of the monument's significance. There are clear views from the monument of the B38, 90m to the east of the monument, and several modern houses with associated buildings and landscaping in the immediate vicinity of the monument. Therefore, the views from the
Importance:	High: Scheduled Archaeological Monument	monument have already been changed. The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Negligible Significance of effect (Table 4): Neutral Comments: The proposed development would not affect any of the key elements of the significance of the monument and would only have a slight effect on the setting, which would not meaningfully affect appreciation. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: Castledamph Rath Designation: SAM Reference: TYR 011:004	
Description:	 Distance: 3.4km south of the nearest turbine, 2.6km south study site Description: On the N slopes of the Glenelly River valley, with commanding views. The site was constructed by digging into the hillside & throwing the spoil forward to create a platform. The backscarp & lateral banks thus formed have been consolidated by the use of large boulders. The internal area is roughly circular, 35m E-W x 34m N-S. The scarp stands 2.5m high & is topped by a bank 2.4m wide & 0.3m high, increasing to E & W to 2.8m wide, 1.4m high internally & 1.2m externally. The S is defined by a platform 1.8m high. 	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains of Early Christian rath provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Modest, elements of original construction are still legible, but no complex architectural structures noted.	No effect on ability to appreciate architectural interest.
Setting and views:	The rath is located 250m north of Glenelly River on a south facing slope of a pasture field. Clearly located here to take advantage of this watercourse and the longer access to the sunshine. The rath is located within an area of open pasture and tree growth along the sides of the monument, meaning that appreciation of its archaeological interest is possible from the wider area. The rath has commanding panoramic views of the surrounding landscape including the Glenelly River, as mentioned in the HERONI. The entrance was located at the south, and so views to the south are significant, and are aligned with the past experience of the	The proposed wind turbines would be visible in the distance, and so would change the wider setting of the Rath. The turbines would not interfere with the historic views to the south, nor affect appreciation of the archaeological and architectural interest provided by the immediate setting. The presence of mature woodland in between the monument and the proposed turbines means that in practice the turbines are likely to be less visible and would not affect the experience of the rath within its setting.
Importance:	High: Scheduled Archaeological	The proposed development would not result in any loss to the level of importance of the monument.



Heritage Asset:	Name: Castledamph Rath Designation: SAM Reference: TYR 011:004
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Negligible Significance of effect (Table 4): Neutral Comments: The proposed development would not affect any of the key elements of the significance of the rath and would only have a slight effect on the setting, which would not meaningfully affect appreciation. On this basis, the above effect is not considered to be a significant effect.



Heritage Asset:	Name: Five Stone Circles Designation: Scheduled Archaeological Monument Reference: TYR 011:019	
Description:	Distance: 1.4km southwest of the nearest turbine, 400m northwest of SW tip of study site Description: This complex originally consisted of 5 stone circles. Of these, 2 are still upstanding & a 3rd has been reduced to one stone. Davies excavated one of the circles in 1937. One of the circles (Davies' D/E) is 12m in diameter & the other (A/B) is 8m in diameter. See SM7 for further details.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High/Unknown, preservation of the final stone circle is good, and it will contain additional associated artefactual and environmental evidence of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate/Unknown may provide appreciation of prehistoric use of landscape and demarcation of space.	No effect on ability to appreciate historic interest.
Architectural interest:	Not Listed	No effect on ability to appreciate architectural interest.
Setting and views:	The monument is set on a north- eastern facing slope of a hill in an area of open undeveloped grassland within a valley. The views from the monument are limited due to its location in a valley, therefore the monument can only be appreciated within its immediate vicinity.	The ZTV suggests that there could be some intervisibility between the monument and the proposed development, however the site visit confirmed that in practice the proposed development would be completely screened by intervening trees and topography, even in winter views. Given this it is considered that the proposed development would have no effect on the setting of the monument.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the monument. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Wedge Tomb: Cashelbane Designation: SAM Reference: TYR 006:002	
Description:	Distance: 4.9km north of the nearest turbine, 3.8km north of study site Description: On the N side of a small valley. The wedge tomb is orientated SSW. It consists of 2 portals leading into a gallery. The back capstone of the gallery is in situ - others are gone. There is outer walling on both sides. It is 7.2m long, 3.5m wide at front & 2.2m wide at back. When excavated by Davies is had a round cairn c.55m diam., which had once been 5ft above the capstone but had been removed c.50 years before. At this time many urns were found. Finds included flints, burnt bone & sherds of food vessels. See SM7 for further details.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High, preservation was good, and the monument has been fully excavated and associated artefactual and environmental evidence was of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains of the tomb provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Moderate, earth and stone elements of the original construction are still legible, with surviving structural elements despite age.	No effect on ability to appreciate architectural interest.
Setting and views:	The monument is legible from the immediate vicinity however there is no meaningful experience of the tomb from the wider area. At close quarters the good preservation of the remains is evident as is its orientation, aligned NW-SE, which would have been a key part of experiencing the asset in the past as well as the present. The entrance was located at the NE, and so views to the SW are significant, and are aligned with the past experience of the monument.	The proposed wind turbines would be visible in the distance, and so would change the setting of the tomb. However, the turbines would not interfere with the view along the alignment of the tomb, nor affect appreciation of the archaeological and architectural interest provided by the immediate setting. Also, the proposed turbines would be located at a considerable distance, such that they would not be readily discernible from the setting of the tomb.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Negligible Significance of effect (Table 4): Neutral Comments: The proposed development would not affect any of the key elements of the significance of the monument and would not materially affect its setting. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Megalithic Tomb: Possibly Wedge Dermot or Griania's Bed Designation: SAM Reference: TYR 012:024	
Description:	Distance: 5km southeast of the nearest turbine, 4km southeast of study site Description: Situated near the corner of a field which has been recently reclaimed. The tomb is orientated E-W. This is the remains of a megalithic tomb & cairn material 19m long & 6m wide. It has been robbed out & badly destroyed, making classification very difficult. Dating to either the Neolithic or the Bronze Age.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	Limited, the wedge tomb has been robbed out and badly destroyed making classification difficult.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, Remains of tomb provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Moderate, Earth and stone elements are still legible, with some surviving structural elements even with the destruction.	No effect on ability to appreciate architectural interest.
Setting and views:	The monument is legible from the immediate vicinity however there is no meaningful experience of the tomb from the wider area. At close quarters the good preservation of the remains is evident as is its orientation, aligned NW-SE, which would have been a key part of experiencing the asset in the past as well as the present. The entrance was located at the NE, and so views to the SW are significant, and are aligned with the past experience of the monument.	The proposed wind turbines would be visible in the distance, and so would change the setting of the tomb. However, the turbines would not interfere with the view along the alignment of the tomb, nor affect appreciation of the archaeological and architectural interest provided by the immediate setting. Also, the proposed turbines would be located at a considerable distance, such that they would not be readily discernible from the setting of the tomb.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Negligible Significance of effect (Table 4): Neutral Comments: The proposed development would not affect any of the key elements of the significance of the monument and would not materially affect its setting. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Portal Tomb: Dermot and Griania's Bed Designation: SAM Reference: TYR 012:005	
Description:	Distance: 5km southeast of the nearest turbine, 4km southeast of study site Description: This site is orientated NW/SE & consists of a single chamber cut off from the portals by a tall sill stone 0.8m high. There are a pair of portals 1.3m high & a flat capstone 2.1m wide x 0.25m thick x 2.25m long, resting on the S portal & 2 sides stones of the chamber. The 0.3m gap between the capstone & backstone was probably bridged by a smaller capstone, now lying outside the tomb. Some possible cairn material can be seen lying around. Likely dating to the Neolithic period.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains of the tomb provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Moderate, earth and stone elements of original construction are still legible, with surviving structural elements despite age.	No effect on ability to appreciate architectural interest.
Setting and views:	The monument is legible from the immediate vicinity however there is no meaningful experience of the tomb from the wider area. At close quarters the good preservation of the remains is evident as is its orientation, aligned NW-SE, which would have been a key part of experiencing the asset in the past as well as the present. The entrance was located at the NE, and so views to the SW are significant, and are aligned with the past experience of the monument.	The proposed wind turbines would be visible in the distance, and so would change the setting of the tomb. However, the turbines would not interfere with the view along the alignment of the tomb, nor affect appreciation of the archaeological and architectural interest provided by the immediate setting. Also, the proposed turbines would be located at a considerable distance, such that they would not be readily discernible from the setting of the tomb.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Negligible Significance of effect (Table 4): Neutral Comments: The proposed development would not affect any of the key elements of the significance of the monument and would not materially affect its setting. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Letterbrat Portal Tomb Designation: SAM Reference: TYR 011:013	
Description:	Distance: 5.4km southwest of the nearest turbine, 3.7km southwest of study site Description: Situated in fairly level pasture. The site consists of a single cist-like chamber with one large capstone, orientated NE/SE. The capstone is 2.8m long & 1.5m wide, likely built during the Neolithic period.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains of the tomb provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Moderate, earth and stone elements of original construction are still legible, with surviving structural elements despite age.	No effect on ability to appreciate architectural interest.
Setting and views:	The monument is legible from the immediate vicinity however there is no meaningful experience of the tomb from the wider area. However, at close quarters the good preservation of the remains is evident as is its orientation, aligned NW-SE, which would have been a key part of experiencing the asset in the past as well as the present. The entrance was located at the NE, and so views to the SW are significant, and are aligned with the past experience of the monument.	The proposed wind turbines would be visible in the distance, and so would change the setting of the tomb. However, the turbines would not interfere with the view along the alignment of the tomb, nor affect appreciation of the archaeological and architectural interest provided by the immediate setting. Also, the proposed turbines would be located at a considerable distance, such that they would not be readily discernible from the setting of the tomb.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Negligible Significance of effect (Table 4): Neutral Comments: The proposed development would not affect any of the key elements of the significance of the monument and would not materially affect its setting. On this basis this effect is not considered to be a significant effect.	

Mullaghclogher Wind Farm, Aughabrack, Plumbridge, Northern Ireland



Heritage Asset:	Name: Wedge Tomb: Giant's Grave Designation: SAM Reference: TYR 006:024	
Description:	Distance: 5km northwest of the nearest turbine, 3.6km northwest study site Description: On a hilltop sloping down to S. The tomb is enclosed by a wedge-shaped cairn. The entrance, which faces W, has a split-portal arrangement & there is an antechamber. The overall length of the cairn is 10m, 4m wide at back & 7.5m wide at front. The gallery & antechamber are 6.5m long x 1.7m wide. Excavation of the site uncovered several artefacts in the gallery. Towards the front was the broken mould of a palstave & at the back, part of a bronze blade. Sherds from 4 Beakers, 5 other pots were found with flint flakes. There was some charcoal & cremated bone, representing perhaps 3 individuals, the main burial being in a pit towards the back of the gallery. See SM7 for further details. Dating to the Neolithic or Bronze Age periods of prehistory.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains of tomb provide appreciation of early culture and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Moderate, earth and stone elements of original construction are still legible, with surviving structural elements despite age.	No effect on ability to appreciate architectural interest.
Setting and views:	The monument is legible from the immediate vicinity however there is no meaningful experience of the tomb from the wider area. At close quarters the good preservation of the remains is evident as is its orientation, aligned NW-SE, which would have been a key part of experiencing the asset in the past as well as the present. The entrance was located at the NE, and so views to the SW are significant, and are aligned with the past experience of the monument.	The proposed turbines could be theoretically visible from the immediate setting of the tomb, however, the presence of mature woodland and considerable distance in between the monument and the proposed turbines means that in practice the turbines would not be visible, nor would they affect the experience of the tomb within its setting.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: Rath Designation: SAM Reference: TYR 006:015	
Description:	Distance: 6km northwest of the nearest turbine, 5km northwest study site Description: At the summit of a prominent hillock overlooking the confluence of the Dunnboe Burn & Burn Dennet to NE. The site is defined by an oval platform 32.5m N-S x 28.5m E-W & standing on average 1.75m high, but increasing to 3m high in response to the natural slope. The platform is surmounted by an intermittent bank, best preserved at N, 2.5m wide & 1m high. Elsewhere, it is 1.75m wide & 0.3m high. The interior has been ploughed & reseeded, but retains its original, domed profile. There is no sign of an entrance.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains of Early Christian rath provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Modest, elements of original construction are still legible, but no complex architectural structures noted.	No effect on ability to appreciate architectural interest.
Setting and views:	The rath is located adjacent to the confluence of the Dunnboe Burn & Burn Dennet and was clearly located here to take advantage of these watercourses. It is well preserved and highly visible from the immediate vicinity, as mentioned in the HERONI, the rath has commanding panoramic views of the surrounding landscape including the Dunboe Burn and Burn Dennet. The entrance for the rath appears to be located at the north and so views to the north are significant and aligned with the past experience of the monument.	The proposed development would be largely screened and distant from the immediate setting of the rath. The proposed turbines could be theoretically visible from the immediate setting of the rath, however, the presence of mature woodland and considerable distance in between the monument and the proposed turbines means that in practice the turbines would not be visible, nor would they affect the experience of the rath within its setting.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Cross Designation: Scheduled Arcl	naeological Monument Reference: LDY 029:020
Description:	Distance: 5.9km northeast of the nearest turbine, 4.4km northeast of study site Description: On the lower SE slopes of Crockdooish Mt. The cross stands on top of a lane bank. Nearby are the remains of a derelict farmstead composed of roughstone reputed to come from the church which was destroyed in Penal times. Behind the cross is a house & garden & a graveyard is reputed to have been located there as human bones have been found in the past. 2 bells are also supposed to have been dug up here. The cross is formed from a schist slab with a Latin cross lightly incised into the W face. The arms are stumpy, projecting only slightly out from the shaft. It stands 1.19m high & 0.38m wide; the arms project 0.05m out from the shaft & are 1.8m long.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	Uncertain	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Not Listed	No effect on ability to appreciate historic interest.
Architectural interest:	Not Listed	No effect on ability to appreciate architectural interest.
Setting and views:	The cross is located adjacent to a modern bungalow and a further barn, within a privately owned plot. It is well preserved and highly visible from the immediate vicinity; the cross has views of open pastureland to the northeast.	The ZTV suggests that there could be some intervisibility between the monument and the proposed development, however the site visit confirmed that in practice the proposed development would be completely screened by intervening trees, even in winter views. Given this and the considerable distance between the nearest turbine and the monument, it is considered that the proposed development would have no effect on the setting of the monument
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Dergbrough Rath Designation: SAM Reference: TYR 011:002	
Description:	Distance: 6.8km southwest of the nearest turbine, 5.2km southwest of the study site Description: On a prominent spur with fine views all round. The rath is defined by a bank enclosing an oval area 30m N-S x 28.5m E-W. It is intermittent & of variable height. At SE, it is 6m wide, 2.5m high internally & 2m high externally. Elsewhere, it is 4m wide, 1m high internally & 2m externally. The outer perimeter is protected by a mixture of ditch, bank & platform. At S, there is a ditch 2.5m wide x 0.75m deep; the W side is defined by a platform; at N is a ditch with counterscarp bank & at E, simply a bank. See SM7 for further details.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains of Early Christian rath provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Modest, elements of original construction are still legible, but no complex architectural structures noted.	No effect on ability to appreciate architectural interest.
Setting and views:	The rath is located adjacent to Glenelly River and was clearly located here to take advantage of the watercourse. It is well preserved and highly visible from the immediate vicinity, as mentioned in the HERONI, the rath has commanding panoramic views of the surrounding landscape including the Glenelly River. The entrance for the rath appears to be located at the south and so views to the south are significant and aligned with the past experience of the monument.	The proposed development would be largely screened and distant from the immediate setting of the rath. The proposed turbines could be theoretically visible from the immediate setting of the rath, however, the presence of mature woodland in between the monument and the proposed turbines means that in practice the turbines would not be visible, nor would they affect the experience of the rath within its setting.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Negligible Significance of effect (Table 4): Neutral Comments: The proposed development would not affect any of the key elements of the significance of the monument and would not materially affect its setting. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: Culvacullion Stone Circle Designation: Scheduled Archaeological Monument Reference: TYR 018:056	
Description:	Distance: 6.2km south of the nearest turbine, 55km south of study site Description: Set in a wide expanse of heather moorland, with extensive views in all directions except N, where the land rises. This is a well-preserved example of a small stone circle. It consists of 11 stones set in a circle 9m in diam., with one outlier at W. The stones in the arc from E-S- W range in height from 0.5-0.8m. Most are standing although some are leaning at angles and 2 have fallen. The arc of circle W-N-E is much lower, some standing only 0.2m high, and partly hidden by heather.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value.	No effect on ability to appreciate archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains of prehistoric standing stone circle provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Not Listed	No effect on ability to appreciate architectural interest.
Setting and views:	The stone circle is located on a ridge at the base of a hill located to the north. It Is legible from the immediate vicinity, however there are no meaningful experience of the stone circle from the wider area. Appreciation of its archaeological interest is only possible at a close range, views from the hill to the north provide a means of appreciating the heritage values of the stones.	The wind turbines would theoretically be visible in the wider area and so would change the setting of the monument. However, they would be at a distance of nearly 7km, and so the presence if the turbines would not interfere with the appreciation of the archaeological and historic interest provided by the setting of the monument nor would it affect views along the alignment of the monument. The presence of a hill to the north of the monument provides substantial screening. Given this and the considerable distance between the nearest turbine and the scheduled monument, it is considered that the proposed development would have no effect on the setting of the stone circle.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the monument. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: C17th House Designation: Scheduled Archaeological Monument Reference: TYR 006:048	
Description:	Distance: 7km northwest of the nearest turbine, 6km northwest of study site Description:	
	This house dates to the C17th & was lived in until the 1950s. It is at present 2 stories high, but was originally 3, according to the owner. The owner also recalled a cellar & 2 blocked-up openings in the NE gable. A fine projecting turret is supported on stone brackets at first floor level in the N corner. This had extended to the 3rd floor but was reduced in height with the main structure. The interior has been stripped out. The ground floor is divided into a large open space with a smaller room to NE & the upper floor is used as a hay loft. See SM7 file for photos & detailed description.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	Modest/Unknown, large amounts of modern construction has been undertaken in the immediate vicinity and setting of the building and so it is unlikely but not impossible that additional associated artefactual and environmental evidence of high research value are present.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains of provide appreciation of cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Moderate, earth and stone elements of original construction are still legible, with surviving structural elements despite age.	No effect on ability to appreciate architectural interest.
Setting and views:	The building is located adjacent to a modern bungalow within a privately owned plot. It is well preserved and highly visible from the immediate vicinity, as mentioned in the HERONI, the building has views of open pastureland to the north. The entrance for building appears to be located at the east and so views to the east were significant and aligned with past experience of	The ZTV suggests that there could be some intervisibility between the monument and the proposed development, however the site visit confirmed that in practice the proposed development would be completely screened by intervening trees, even in winter views. Given this and the considerable distance between the nearest turbine and the monument, it is considered that the proposed development would have no effect on the setting of the monument
Importance:	the building. High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Rath Designation: SAM Reference: LDY 029:005	
Description:	Distance: 7.1km northeast of the nearest turbine, 7.1km northeast of study site Description: On an ESE facing slope which falls down to the valley of the R.Faughan, with panoramic views NNE-E-S. This is a well preserved rath. The E end of the site has been built up to counter the natural fall of slope, leaving a level interior surface & a scarp at E 1.5m high. The interior is 32m N-S x 31m E-W, level & flat with no trace of any structures. There is a very slight fall from the centre to a gap at SW which seems to be the original entrance, 2.2m wide. The enclosing bank is of earth & stones & has been badly eroded. It is absent NNE-E-SSE, the area of the scarp. At W, it is 1.5m high internally, 1.2m externally & 4.75m wide. Stone footings were noted along the scarp & there may have been a low bank or pallisade along it.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains of Early Christian rath provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Modest, elements of original construction are still legible, but no complex architectural structures noted.	No effect on ability to appreciate architectural interest.
Setting and views:	The rath is located adjacent to the Kilgort and was clearly located here to take advantage of the watercourse. The rath is covered by historic woodland, which make it highly visible from the immediate vicinity, as mentioned in the HERONI, the rath has commanding panoramic views of the surrounding landscape.	The proposed development would be largely screened and distant from the immediate setting of the rath. The proposed turbines could be theoretically visible from the immediate setting of the rath, however, the presence of mature woodland and considerable distance in between the monument and the proposed turbines means that in practice the turbines would not be visible, nor would they affect the experience of the rath within its setting.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: Standing Stone Designation: SAM Reference: LDY 029:007	
Description:	Distance: 8.3km northeast of the nearest turbine, 8km northeast of study site Description: On the SW slopes of Straid Hill with good views over lower ground to S & W. This is a single standing stone, its long axis aligned E-W, 1.65m high, 0.9m wide & 0.6m thick. The stone may once have been encased in a field wall which runs off down-slope to W & there is a tumble of loose field stones against its base, but the wall no longer extends as far upslope as the standing stone, which now stands in the corner of a field. The OS memoir records a standing stone 7ft high, but if it refers to this stone, then the surrounding ground level has been raised c.0.75m around the base of the stone.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High/Unknown, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate/Unknown may provide appreciation of prehistoric use of landscape and demarcation of space.	No effect on ability to appreciate historic interest.
Architectural interest:	Not Listed	No effect on ability to appreciate architectural interest.
Setting and views:	The standing stone is located at the base of a hill to the northeast within an area of open pasture surrounded by woodland. It Is legible from the immediate vicinity, however there are no meaningful experience of the standing stone from the wider area. Appreciation of its archaeological interest is only possible at a close range, views from the hill to the northeast provide a means of appreciating the heritage values of the stones.	The ZTV suggests that there could be some intervisibility between the monument and the proposed development, however the site visit confirmed that in practice the proposed development would be completely screened by intervening trees, even in winter views. Given this and the considerable distance between the nearest turbine and the monument, it is considered that the proposed development would have no effect on the setting of the monument
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: Rath Designation: SAM Reference: LDY 029:006	
Description:	Distance: 8.3km northeast of the nearest turbine, 8.2km northeast of study site Description: On a steep SW-facing slope of Straid Hill with excellent views ESE-S-WNW. The interior of the rath, 36m x 42m, is featureless & slopes to SW. The bank is high NE-E-S on the upslope, E, side, while the scarp on the W side has a lower bank. The bank is of earth & stone & is revetted in parts with quite large slabs. At E, the bank stands 1.8m high internally, 1.5m externally & 1.5m wide. The original entrance is at NW & is 0.9m wide. Outside the bank N-W is a sunken lane which may be on the site of a ditch. It is 3.2m wide & 0.5m deep.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains of Early Christian rath provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Modest, elements of original construction are still legible, but no complex architectural structures noted.	No effect on ability to appreciate architectural interest.
Setting and views:	The rath is located adjacent to the confluence of the Dunnboe Burn & Burn Dennet and was clearly located here to take advantage of these watercourses. It is well preserved and highly visible from the immediate vicinity, as mentioned in the HERONI, the rath has commanding panoramic views of the surrounding landscape including the Dunboe Burn and Burn Dennet. The entrance for the rath appears to be located at the north and so views to the north are significant and aligned with the past experience of the monument.	The proposed development would be largely screened and distant from the immediate setting of the rath. The proposed turbines could be theoretically visible from the immediate setting of the rath, however, the presence of mature woodland and considerable distance in between the monument and the proposed turbines means that in practice the turbines would not be visible, nor would they affect the experience of the rath within its setting.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: Rath Designation: SAM Reference: LDY 030:001	
Description:	Distance: 8.8km northeast of the nearest turbine, 8.5km northeast study site Description: On a steep S-facing slope with ground falling to a ravine at S & panoramic views E-S-W. The rath interior, 30m x 33m, slopes down sharply to S, though the S extent of the site has been platformed to counteract the steepness of the natural slope. The bank survives well at N & is completely absent at S, though there is a steep drop from the perimeter to the exterior of 2.5m. The bank at N is 6.3m wide, 2.5m high internally & 1.9m externally. The entrance seems to have been located at E. At the W side, a trace of an outer ditch was noticed, but not defined enough to measure.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains of Early Christian rath provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Modest, elements of original construction are still legible, but no complex architectural structures noted.	No effect on ability to appreciate architectural interest.
Setting and views:	The rath is located adjacent to Altinure Upper and was clearly located here to take advantage of the watercourse. It is well preserved and highly visible from the immediate vicinity, as mentioned in the HERONI, the rath has commanding panoramic views of the surrounding landscape including Altinure Upper The entrance for the rath appears to be located at the east and so views to the east are significant and aligned with the past experience of the monument.	The proposed development would be largely screened and distant from the immediate setting of the rath. The proposed turbines could be theoretically visible from the immediate setting of the rath, however, the presence of mature woodland and considerable distance in between the monument and the proposed turbines means that in practice the turbines would not be visible, nor would they affect the experience of the rath within its setting.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: Cashel Designation: SAM Reference: LDY 030:002	
Description:	Distance: 9km northeast of the nearest turbine, 8.8km northeast study site Description: On sloping ground with panoramic views E-S-WSW. This is a small cashel, 24.6m x 26m, whose stone walls have an earth content. The basic construction is stone with some massive slabs. The interior is rush covered & slopes down to S. At N, the wall stands 1.18m high internally, 1m externally & 3.9m wide. It is unlikely that there was ever a ditch surrounding the site & there are certainly no indications now. The original entrance is at E, 1.4m wide, now blocked by a sheepwire fence. There is an indentation in the wall, identical to one in a nearby rath, Ldy 030:003. It is 2.2m square & 0.6m deep & is lined with stone. It is not certain whether this is an original or a later feature.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains of Cashel provide appreciation of Early Christian cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Moderate, earth and stone elements of the original construction are still legible with surviving structural elements despite age.	No effect on ability to appreciate architectural interest.
Setting and views:	The Cashel is located on sloping ground rising towards the northeast. It Is legible from the immediate vicinity, however there are no meaningful experience of the Cashel from the wider area. Appreciation of its archaeological interest is only possible at a close range, due to presence of mature foliage surrounding the monument.	The ZTV suggests that there could be some intervisibility between the monument and the proposed development, however the site visit confirmed that in practice the proposed development would be completely screened by intervening trees, even in winter views. Given this and the considerable distance between the nearest turbine and the monument, it is considered that the proposed development would have no effect on the setting of the monument
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Stone Circle Designation: Scheduled Archaeological Monument Reference: TYR 005:014	
Description:	Distance: 9.6km west of the nearest turbine, 8.5km west of study site Description: On a slight knoll in rather boggy ground. The monument consists of 16 visible largish stones set in an oval which is 16.4m E-W & 13m N-S. One at S is set radially, which may indicate an entrance or false entrance (see UJA 2, 1939, 4, fig. 2 where more stones are visible). The average height of the stones is 0.8m & in general they have flat faces which are turned towards the centre; the tallest, which is 1.5m high, faces WSW of centre. there is no sign of the structure mentioned in PSAMNI, 214. A field fence cuts through the site NNE-SSW & an animal track runs N-S through the site.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High/Unknown, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate/Unknown may provide appreciation of prehistoric use of landscape and demarcation of space.	No effect on ability to appreciate historic interest.
Architectural interest:	Not Listed	No effect on ability to appreciate architectural interest.
Setting and views:	The stone circle is located within an area of dense woodland. It is only legible from the immediate vicinity and are no meaningful experience from the wider area. Appreciation of its archaeological interest is only possible at a close range, due to presence of mature foliage surrounding the monument.	The ZTV suggests that there could be some intervisibility between the monument and the proposed development, however the site visit confirmed that in practice the proposed development would be completely screened by intervening trees, even in winter views. Given this and the considerable distance between the nearest turbine and the monument, it is considered that the proposed development would have no effect on the setting of the monument
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: Rath Designation: SAM Reference: LDY 030:003	
Description:	Distance: 9.6km northeast of the nearest turbine, 9.2km northeast study site Description: Near the top of a slope with panoramic views E-S-WSW. This rath, 30m diam., has been slightly landscaped by farming activities. The interior has traces of lazy beds & slopes down to the entrance at SSE. There is a large stone slab protruding from the bank at NW which may be the lintel of a souterrain. The bank is low, but relatively well preserved, with traces of an internal stone revetting visible in places. At N, the bank stands 1m high internally, 0.74m externally & 3.8m wide. There appears to be a remnant trace of ditch at NW-N-NE, enclosed by the field boundary. There is an indentation in the bank at ENE, 1.4m long & 0.4m wide, revetted with stone, identical to one in a nearby cashel, Ldy 030:003.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains of Early Christian rath provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Modest, elements of original construction are still legible, but no complex architectural structures noted.	No effect on ability to appreciate architectural interest.
Setting and views:	The rath is located within the corner of four arable fields. It is well preserved and highly visible from the immediate vicinity, as mentioned in the HERONI, the rath has commanding panoramic views of the surrounding landscape. The entrance for the rath appears to be located at the southeast and so views to the southeast are significant and aligned with the past experience of the monument.	The proposed development would be largely screened and distant from the immediate setting of the rath. The proposed turbines could be theoretically visible from the immediate setting of the rath, however, the presence of mature woodland and considerable distance in between the monument and the proposed turbines means that in practice the turbines would not be visible, nor would they affect the experience of the rath within its setting.
Importance:	High: Scheduled Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	



Listed Buildings

Heritage Asset:	Name: St Marys RC Church Designation: Grade B1 Listed Building Reference: HB10/09/006	
Description:	Distance: 2.3km northwest from nearest turbine, 890m northwest study site Description: A cruciform plan, Roman Catholic church, set in a good rural setting to the east side of Lisnaragh Road, Donemana. The simple church displays good style and proportions and retains much fine detailing such as lancet windows and original doors. The church is a significant architectural landmark, on a raised site, near the hamlet of Aghabrack, and has social interest for the local community.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	A. Style B. Proportion C. Ornamentation D. Plan Form I. Quality and survival of Interior J. Setting	No effect on ability to appreciate architectural interest.
Historic interest:	X. Local Interest Y. Social, Cultural or Economic Importance V. Authorship	No effect on ability to appreciate historic interest.
Setting and views:	This church is located in a very rural area, facing south and set back from the main road within its own grounds. The setting of the church consists primarily of the experience provided within the churchyard, the church carpark and on approach along Lisnaragh Road from the south. The views from the carpark provide a particularly good appreciation of the church's architectural and historical interest as well as its context with the nearby churchyard and the rural landscape in the backdrop.	The turbines would be visible from the carpark to the north of the church. While the turbines would be noticeable from the churchyard, they would not affect views of the church from the churchyard or the surrounding area, nor impede appreciation of the architectural and historic interest of the church which is provided there, nor of the rural character of the surrounding parish.
Importance:	High: Grade B1 Listed Building	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Slight Adverse Significance of effect (Table 4): Slight Adverse Comments: The proposed development would not affect any of the key elements of the significance of the church, and would only have a slight effect on the setting, which would not meaningfully affect appreciation. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: 141 Glenelly Road Designation: Grade B2 Listed Building Reference: HB10/05/019	
Description:	 Distance: 5.5km southeast from nearest turbine, 4.5km southeast of study site Description: A two storey three-bay house, probably dating from the early nineteenth century and later raised and formalised during the late nineteenth or early twentieth centuries, located on the south side of Glenelly Road, Plumbridge. Retaining its simple detailing and having symmetrical openings to the front elevation and good proportions, the house represents a type of farmhouse once common in rural locations. It has traditional lime-washed rubble stone construction and retains most of its original sash windows and other detailing both externally and internally. A rural setting and well-proportioned and detailed outbuildings to the rear enhance the character of the house and contribute to its interest. 	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	A. Style B. Proportion C. Ornamentation D. Plan Form H Alterations detracting from building I. Quality and survival of Interior J. Setting	No effect on ability to appreciate architectural interest.
Historic interest:	X. Local Interest	No effect on ability to appreciate historic interest.
Setting and views:	The house is located in a very rural area, set back from the main road within its own grounds. The setting of the house consists primarily of the experience provided within the grounds, the open landscape to the north and south and on approach along Glenelly Road from the east and Magherabrack Road from the south. The views from within the grounds and from Magherabrack Road facing northwest, provide a particularly good appreciation of the house's architectural and historical interest as well as its context in relation to the nearby outhouse and its rural landscape setting.	The proposed development would be largely screened and distant from the immediate setting of the house. The blades of 10 to 13 of the turbines may be visible in the distant backdrop in views from Magherabrack Road and the open landscape to, however these would be partially screened by intervening vegetation and would not meaningfully affect appreciation of the house's significance.
Importance:	High: Grade B2 Listed Building	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	 Overall assessment of adverse effect (Tables 2 and 3): Slight Adverse Significance of effect (Table 4): Slight Adverse Comments: The proposed development would not affect any key elements of the significance of the building and would only have a slight effect on the setting, which would not meaningfully affect appreciation. On this basis this effect is not considered to be a significant effect. 	



Heritage Asset:	Name: Straidarran House Designation: Grade B+ Listed Structure Reference: HB01/01/005	
Description:	Distance: 9.8km northwest from nearest turbine, 9.5km northeast of study site Description: A fine well-proportioned small Georgian country house in a landscape carefully altered to compliment the house (lake and planting) in a good state of repair. An early Victorian castellated stable block to one side covered in ivy which does not detract from the Georgian composition but rather is hidden from the main views and appears as a surprise at the end of the approach road. It is charmingly decorated as a castle and enhances the scale and importance of the building as a whole. From Altinure Road above, the buildings appear as a Georgian house set within the ruins of a bawn such as at Walworth in Ballykelly (HB02/10/002) perhaps this was deliberate. The views of the building are marred by the unsightly sand quarry surrounding on two sides.	
Assessment of significance	Description of heritage interest and significanceDescription of effects of proposed development on elements of significance	
Architectural interest:	A. Style B. Proportion C. Ornamentation D. Plan Form E. Spatial Organisation H Alterations detracting from building	No effect on ability to appreciate architectural interest.
Historic interest:	W. Northern Ireland/International Interest X. Local Interest Z. Rarity	No effect on ability to appreciate historic interest.
Setting and views:	The house stands in a very rural area bounded on three sides by thick woodland with open parkland and a pond to the north-east.	The setting of the house is focussed on the immediate surroundings, due to the construction of modern buildings to the south of the House.
	The architectural and historic interest of the house are available from the associated open parkland and pond in the north-east.	ZTV suggests that there could be some intervisibility between the house and the proposed development. In practice there is considerable distance between the closest turbine and the house, with intervening woodland and buildings. As such it is considered that the proposed development would have no effect on the setting of the house.
Importance:	High: Grade B+ Listed Building	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the house. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: Plumb Bridge Designation: Grade B1 Listed Structure Reference: HB10/05/001	
Description:	Distance: 4.7km southeast from nearest turbine, 3.3km southeast of study site Description: A single-span bridge, built c.1790, carrying Culvacullion Road over Glenelly River. This attractive bridge, built of rubble stone, is well constructed and detailed. Interest is added by string course and wall-ties. The bridge has a charming location in the centre of the village, to the east of parkland, and contributes positively to Plumbridge, evidently named after the structure.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	A. Style B. Proportion C. Ornamentation D. Plan Form F. Structural System H- Alterations detracting from building J. Setting	No effect on ability to appreciate architectural interest.
Historic interest:	Local	No effect on ability to appreciate historic interest.
Setting and views:	The Bridge stands within a relatively rural area within the small village of Plumbridge with the steep wooded banks. Views along the Culvacullion Road and open space to the west provides an appreciation of the architectural and historic interest. As such the key element of the setting of the structure is provided	The setting of the bridge is focussed on the roadside. The ZTV suggests that there could be some intervisibility between the bridge and the proposed development, however the site visit confirmed that in practice the proposed development would be completely screened by intervening trees and buildings, even in winter views. Given this and the considerable distance between the nearest turbine and the bridge, it is considered that the proposed development would have no effect on the setting of the bridge.
Importance:	High: Grade B1 Listed Structure	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Silverbrook Mills Designation: Grade B1 Listed Building Reference: HB10/09/027	
Description:	Distance: 6.9km northwest from nearest turbine, 5.8km northwest study site Description:	
	A complex of mill buildings including two-storey corn mill, built c.1830 with one-and-a- half-storey flax mill built c.1850, located to the east side of Brook Road. The complex evolved during the nineteenth century into a hub of industry inlcuding corn, linen and timber production. It is unusual to find a corn, flax and sawmill grouped in such proximity and powered by the same mill race, giving the buildings group value and also interest due to their rarity. The site was recently sympathetically restored as a public attraction, with traditional interiors and working machinery. Though currently closed as a tourist facility, it is an important complex and has architectural and historic interest for the local area.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	A. Style B. Proportion C. Ornamentation D. Plan Form J. Setting K. Group value	No effect on ability to appreciate architectural interest.
Historic interest:	X. Local Interest Z. Rarity	No effect on ability to appreciate historic interest.
Setting and views:	The Mill is located in a very rural and scenic area, set back from the main road within its own grounds. The setting of the mill consists of the experience provided within its grounds and on approach along Brook Road from the north. The views from Brook Road provide good appreciation of the mill's architecture and historical interest.	The ZTV suggests that there could be some intervisibility between the Mill and the proposed development, however the site visit confirmed that in practice the proposed development would be completely screened by intervening trees and buildings, even in winter views. Given this and the considerable distance between the nearest turbine and the Mill, it is considered that the proposed development would have no effect on the setting of the mill.
Importance:	High: Grade B1 Listed Building	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the mill. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: Learmount Castle Designation: Grade B1 Listed Building Reference: HB01/01/010	
Description:	Distance: 7.2km northeast from nearest turbine, 6.9km northeast study siteDescription:A good example of late Georgian neo Tudoresque style of country house set in a prominent elevated site overlooking the River Faughan. Similar to the 19th century work at Necarne Castle by J B Keane.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	A. Style B. Proportion C. Ornamentation D. Plan Form J. Setting	No effect on ability to appreciate architectural interest.
Historic interest:	V. Authorship W. Northern Ireland/International Interest X. Local Interest	No effect on ability to appreciate historic interest.
Setting and views:	Learmount Castle is located in a very rural area designated as a registered park. The house is surrounded by dense woodland, all located within its own grounds. The architectural and historic interest of the house are available from within its grounds.	The setting of the house is focussed on the immediate surroundings, due to the dense woodland surrounding the building. The ZTV suggests that there could be some intervisibility between the house and the proposed development, however the site visit confirmed that in practice the proposed development would be completely screened by intervening trees, even in winter views. Given this and the considerable distance between the nearest turbine and the house, it is considered that the proposed development would have no effect on the setting of the house.
Importance:	High: Grade B1 Listed Building	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the house. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Ling House Designation: Grade B1 Listed Building Reference: HB01/01/018	
Description:	Distance: 7.6km north from nearest turbine, 7km north study site Description: Extended 17th century farmhouse, which displays many vernacular influences in its organisation (circulation along the facade, kitchen on entering, function more important than symmetry). Yet, it also displays some highly architectural details - the elaborate entrance and the lugged architraves (possibly later) in particular. Its association with Colonel Murray is important and makes it a building worth restoring	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	D. Plan Form E. Spatial Organisation H+. Alterations enhancing the building	No effect on ability to appreciate architectural interest.
Historic interest:	V. Authorship W. Northern Ireland/International Interest Y. Social, Cultural or Economic Importance Z. Rarity	No effect on ability to appreciate historic interest.
Setting and views:	Ling house is located in a very rural area, set back from the main road within its own grounds. The setting of the house consists primarily of the experience provided within the grounds, the open landscape to the west and on approach along Slieveboy Road from the north. The views from Slieveboy Road provide a particularly good appreciation of the house's architectural and historical interest as well as its context with the nearby barns and the rural landscape in the backdrop.	The ZTV suggests that there could be some intervisibility between the house and the proposed development, however the site visit confirmed that in practice the proposed development would be completely screened by intervening trees, even in winter views. Given this and the considerable distance between the nearest turbine and the house, it is considered that the proposed development would have no effect on the setting of the house.
Importance:	High: Grade B1 Listed Building	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the house. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Christie's Mill Designation: Grade B1 Listed Building Reference: HB10/11/020	
Description:	Distance: 8.8km west from nearest turbine, 7.8km west study site Description: This mill is of both architectural and historical interest. Architecturally, its plain utilitarian style is typical of many such small-scale industrial enterprises throughout the countryside. Its plan form reflects the mill's connectivity with the kiln and store, both of which were essential to its successful operation. The disposition between floors of the various pieces of machinery reflects the different processes involved in milling and the utilization of gravity to assist, as far as possible, in the production process. The interior is unaltered and there is no evidence that the gearing and machinery, all of which survives, is other than original. The mill's setting is also of note in reflecting the rural context in which it operated. Historically, the documentary evidence indicates a fairly certain date of erection – in the late 1850s. This is supported by the fabric of the mill, all of which is original except for part of the S gable of the mill. The use of brick dressings around the openings and the lineshaft arrangement of the gears and stones are typical of the mid and later 1800s. The mill is, without doubt, of high local interest as it once played a key role in this locality's agricultural economy. Moreover, although cornmills were once ubiquitous throughout Ulster, relatively few now survive in such an intact state. The fact that it has lineshaft gearing rather than the more common great- spurwheel arrangement enhances its historical and technical interest.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	A. Style B. Proportion C. Ornamentation D. Plan Form G. Innovatory Qualities I. Quality and survival of Interior J. Setting	No effect on ability to appreciate architectural interest.
Historic interest:	X. Local Interest Y. Social, Cultural or Economic Importance Z. Rarity W. Northern Ireland/International Interest	No effect on ability to appreciate historic interest.
Setting and views:	The Mill is located in a very rural and scenic area, set back from the main road within its own grounds. The setting of the mill consists of the experience provided within its grounds and on approach along Crockan Road from the south and west. The views from Crocken Road provide good appreciation of the Mill's architectural and historical interest. The group value can also be appreciated with the nearby associated buildings.	The ZTV suggests that there could be some intervisibility between the Mill and the proposed development, however the site visit confirmed that in practice the proposed development would be completely screened by intervening trees and buildings, even in winter views. Given this and the considerable distance between the nearest turbine and the mill, it is considered that the proposed development would have no effect on the setting of the mill.
Importance:	High: Grade B1 Listed Building	The proposed development would not result in any loss to the level of importance of the monument.

Heritage Asset:	Name: Christie's Mill Designation: Grade B1 Listed Building Reference: HB10/11/020
Summary and	Overall assessment of adverse effect (Tables 2 and 3): No Impact
assessment of	Significance of effect (Table 4): Neutral
effect and	Comments:
significance of	The proposed development would not affect the setting or significance of the mill.
effect:	On this basis this effect is not considered to be a significant effect.



Heritage Asset:	Name: St Joseph's RC Church Designation: Grade B1 Listed Building Reference: HB10/11/007	
Description:	Distance: 9.8km west from nearest turbine, 8.8km west study site Description: St Joseph's Roman Catholic Church is a simple late Victorian single-cell Catholic church located at the west side of the rural hamlet of Glenmornan. The church design is largely without ornament, with interest provided in the details of the tower such as the exposed rubble stone section and crenellated parapet. The church has recently been refurbished and the resulting replacement of internal fabric and entrance doors has reduced its architectural character. Timber lattice windows remain intact, and do much to enliven the plain exterior. The church is of historic and social interest, representing the latest place of worship in a longstanding Catholic tradition in the area, and having replaced a previous pre-Emancipation church on the site and an earlier mass rock. Of social interest also is the boundary-wall-mounted post-box, dating from the reign of Queen Victoria and representing early communication links and infrastructure changes in rural areas such as Glenmornan.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	A. Style B. Proportion C. Ornamentation D. Plan Form H Alterations detracting from building J. Setting	No effect on ability to appreciate architectural interest.
Historic interest:	X. Local Interest Y. Social, Cultural or Economic Importance	No effect on ability to appreciate historic interest.
Setting and views:	The church is located in a very rural area, facing the main road within its own grounds. The setting of the church consists of the experience provided within the churchyard, the open land to the southwest and adjacent Moorlough Road. The views from Moorlough Road provides a particularly good appreciation of the church's architectural and historical interest, its context within the nearby churchyard, with the rural landscape in the backdrop.	The ZTV suggests that there could be some intervisibility between the church and the proposed development. In practice there is considerable distance between the closest turbine and the church and are screened by intervening woodland. Located southwest of the church is already a wind farm which is very visible in the local landscape. As such it is considered that the proposed development would have no effect on the setting of the church.
Importance:	High: Grade B1 Listed Building	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the church. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: Church of the Sacred Heart Designation: Grade B2 Listed Building Reference: HB10/05/005	
Description:	Distance: 4.8km southwest from nearest turbine, 3.3km southwest study site Description: A detached symmetrical double-height Roman Catholic Church, dated 1896, located to the south side of Dergbrough Road, Plumbridge. The building retains much of its original character both externally and internally with similar construction style and materials indicating that all parts of the church including square tower at west and chancel at east are all from the same period. It is well proportioned, enjoys a raised setting and is one of the most significant buildings in Plumbridge.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	A. Style B. Proportion C. Ornamentation D. Plan Form I. Quality and survival of Interior J. Setting	No effect on ability to appreciate architectural interest.
Historic interest:	X. Local Interest Y. Social, Cultural or Economic Importance	No effect on ability to appreciate historic interest.
Setting and views:	The church is located in an urban area, set back from the main road within its own grounds. The setting of the church consists primarily of the experience provided within the graveyard and carpark. The upper elevation can be seen on approach along Dergbrough Road from the southwest. The views from the car park provide a particularly good appreciation of the church's architectural and historical interest as well as its context with the graveyard. The views from Dergnorough Road are limited in their ability to provide a good appreciation of the church's architectural and historical interest,	The setting of the church is focussed on the immediate surroundings, due to the construction of modern buildings surrounding the church. ZTV suggests that there could be some intervisibility between the house and the proposed development. In practice there is considerable distance between the closest turbine and the house, with intervening woodland and buildings. As such it is considered that the proposed development would have no effect on the setting of the house.
Importance:	High: Grade B2 Listed Building	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the church. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Glenrandal Bridge Designation: Grade B2 Listed Structure Reference: HB01/01/028	
Description:	Distance: 5.7km northeast from nearest turbine, 5.2km northeast study site Description: A fine late Georgian stone three arch bridge making a fine contribution to the landscape of the upper Glenrandal River valley.	
Assessment of significance	Description of heritage interest and significance Description of effects of proposed development on elements of significance	
Architectural interest:	A. Style B. Proportion F. Structural System	No effect on ability to appreciate architectural interest.
Historic interest:	V. Authorship W. Northern Ireland/International Interest X. Local Interest Y. Social, Cultural or Economic Importance	No effect on ability to appreciate historic interest.
Setting and views:	The Bridge stands within a very rural area, with a steep wooded banks on both sides. The architectural and historic interest of the bridge are not readily appreciated while driving over it, as the surface is modern and indistinguishable from other parts of the carriageway. As such the setting of the bridge is limited to the immediate surroundings.	The setting of the bridge is focussed on the roadside in which it is situated. The ZTV suggests that there could be some intervisibility between the bridge and the proposed development, however the site visit confirmed that in practice the proposed development would be completely screened by intervening trees, even in winter views. Given this and the considerable distance between the nearest turbine and the bridge, it is considered that the proposed development would have no effect on the setting of the bridge.
Importance:	High: Grade B2 Listed Structure	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: Lettermuck TD House on Sawowilly Road Designation: Grade D1 Record Only Structure Reference: HB01/02/028	
Description:	Distance: 9.1km north from nearest turbine, 8.2km north study site Description: Partial Survey Only - While of local interest, it is not among the best examples of the type and is not of special architectural and historic interest.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Not Listed	No effect on ability to appreciate architectural interest.
Historic interest:	Not Listed	No effect on ability to appreciate historic interest.
Setting and views:	The house is located within a very rural area, set back from the main road within its own grounds. The setting of the house consists primarily of the experience provided within the grounds, the open landscape to the west, Lower Ballvartan Road to the northeast and on approach along Sawowilly Road from the north. The views from within the grounds and from the open landscape to the west, provide a particularly good appreciation of the house's architectural and historical interest.	The proposed development would be distant from the immediate setting of the house. The blades of 7 to 8 of the turbines may be visible in the distant backdrop in views from Lower Ballyartan Road to the northeast and the open landscape to the west, however these would be partially screened by intervening vegetation and would not meaningfully affect appreciation of the house's significance. The setting of the house has also already been changed to incorporate several large modern barns within the grounds of the house.
Importance:	low: Grade D1 Record Only Structure	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: Bridge at Gorticrum Road Designation: Grade B2 Listed Structure Reference: HB10/11/021	
Description:	Distance: 9.8km northwest from nearest turbine, 8.8km northwest study site Description: A late 19th Century single-arch concrete road bridge over the Glenmornan River, near Artigarvan in Strabane, Co. Tyrone The bridge's style and design are not typical of concrete bridges, usually horizontal beam type. Designed with an arched opening and constructed in mass concrete with a high admixture of random rubble, it mimics the form of 19th C masonry- and brick-arched bridges. Located in an unspoilt setting nearby St Josephs Chuch (HB10/11/007), it is an authentic and rare example of a rural road bridge and an early example of structural concrete.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	A. Style F. Structural System G. Innovatory Qualities J. Setting	No effect on ability to appreciate architectural interest.
Historic interest:	S. Authenticity T. Historic Importance R. Age Z. Rarity X. Local Interest	No effect on ability to appreciate historic interest.
Setting and views:	The Bridge stands within a very rural area, with a steep wooded bank on the east. The architectural and historic interest of the bridge are not readily appreciated while driving over it, as the surface is modern and indistinguishable from other parts of the carriageway. As such the setting of the bridge is limited to the immediate surroundings, including the open landscape to the west in which the arch can be appreciated.	The setting of the bridge is focussed on the roadside and nearby countryside in which it is situated. The ZTV suggests that there could be some intervisibility between the bridge and the proposed development, however the site visit confirmed that in practice the proposed development would be completely screened by intervening trees, even in winter views. Given this and the considerable distance between the nearest turbine and the bridge, it is considered that the proposed development would have no effect on the setting of the bridge.
Importance:	High: Grade B2 Listed Structure	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the house. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Name: 23 Glenmacoffer Road Designation: Grade B2 Listed Building Reference: HB11/17/005	
Description:	Distance: 10km south from nearest turbine, 9.6km south study site Description: A detached three-bay two-storey symmetrical vernacular house, built c.1860, located on the west side of Glenmacoffer Road. The house has retained much of its original detailing and layout. It is on the interface of vernacular and formal design, featuring a symmetrical principal elevation but a nearly blank rear elevation with a bed outshot. The combination of two storeys with a bed outshot is unusual; outshots were normally associated with clachans and raising of vernacular houses usually occurred in the later 1800s. Thus it also represents an historical progression, which adds to its architectural and historic interest.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	A. Style B. Proportion C. Ornamentation D. Plan Form J. Setting	No effect on ability to appreciate architectural interest.
Historic interest:	X. Local Interest Z. Rarity	No effect on ability to appreciate historic interest.
Setting and views:	The house is located in a very rural area, set back from the main road within its own grounds. The setting of the house consists primarily of the experience provided within the grounds, the open landscape to the west and on approach along Glenmacoffer Road from the north and south. The views from Glenmacoffer Road provide a particularly good appreciation of the house's architectural and historical interest as well as its context with the nearby outhouse and the rural landscape in the backdrop.	The ZTV suggests that there could be some intervisibility between the house and the proposed development, however the site visit confirmed that in practice the proposed development would be completely screened by intervening trees and topographical changes, even in winter views. Given this and the considerable distance between the nearest turbine and the house, it is considered that the proposed development would have no effect on the setting of the house.
Importance:	High: Grade B2 Listed Building	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the house. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Vernacular building to rear of 60 Carrickayne Road Designation: Record Only Structure Reference: HB10/09/029	
Description:	Distance: 1km north from nearest turbine, 100m north study site Description: Vernacular Building which does not meet the listing requirements.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Not Listed	No effect on ability to appreciate architectural interest.
Historic interest:	Not Listed	No effect on ability to appreciate historic interest.
Setting and views:	The building is located in a very rural area, set back from the main road within the grounds of a modern house. The setting of the building consists primarily of the experience provided within the grounds of the modern house, the open landscape to the north and on approach along Carrickayne Road from the north. The views from Carrickayne Road provide a particularly good appreciation of the house's architectural and historical interest but its original context has been changed by the incorporation of modern architecture to the vernacular building and modern construction of houses.	Proposed turbines 6-8 and the blades of turbines 1-5 and 9-13 will be visible in views from the building, however these would be partially screened by intervening vegetation and would not meaningfully affect appreciation of the building's significance.
Importance:	low: Record Only Structure	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	



Registered Parks, Gardens and Demesnes

Heritage Asset:	Name: Beltrim Castle Designation: G T/005	Grade A Registered Park and Garden Reference:
Description:	Distance: 8.7km south of the nearest turbine, 7.5km south study site Description:	
	The demesne (127ha), which lies on the western side of the village of Gortin, and has its origin in the early- 17 th century, when a bawn 'of Lyme and stone, 42ft square, 7ft high with a number of flankers were built here by William Hamilton by 1622. The appearance of the house in the 18 th century remains conjectural, but a long, narrow pond to the northwest of the site could be a relic of a canal associated with formal gardens of the early house The present house, a modest, sprawling, two-story manor was built around 1820 and is complemented by the undulating land of the landscape park. The site was referred to as 'romantic in the valley through which flows the Owenkillew river' by Young in 1909.	
	There are mature shelter and woodland trees, which are being reinforced with new planting. In the nineteenth century, there were walks and rides through the woods. There is an ornamental garden at the house on the site of a once, more complex Victorian formal garden. The large rectangular kitchen garden, partly walled, lies to the east of the house and yards. It was originally enclosed with hedges and covered 1.2ha, but was reduced in size to 1ha in the later-nineteenth century with the building of a northern wall. The area today is partly cultivated on the western side, and otherwise covered with farm buildings, yards and grass paddocks. One of three demesne gate lodges survives.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	Moderate; the park contains the remains of the bawn described in the 1622 survey of lyme and stone (TYR018:047).	No effect on ability to appreciate archaeological interest.
Historic interest:	Moderate: the park preserves the grounds of an 18th century park, surrounding a house of national interest.	No effect on ability to appreciate historic interest.
Architectural interest:	Moderate: the historic park contains a historic property which is listed Grade B+ (HB11/16/013 B), and a record only property (HB11/16/013A).	No effect on ability to appreciate architectural interest.



Heritage Asset:	Name: Beltrim Castle Designation: Grade A Registered Park and Garden Reference: T/005	
Setting and views:	Key views within the park are from the main house in the centre of the park facing southeast. The remainder of the park consists of areas of woodland and informal open space, creating habitats for game, and locations for hunting. The southern fields of the park are enclosed pasture fields, and so do not provide a strong appreciation of the historic interest of the park. As a result, appreciation of the park's special interest is limited from within its wider setting. Within the wider landscape and visible from within the park are established windfarms.	The ZTV suggests that there could be some intervisibility between the registered park and the proposed development, however the site visit confirmed that in practice the proposed development would be completely screened by intervening trees, even in winter views and the presence of already established wind farms in the surrounding landscape. Given this and the considerable distance between the nearest turbine and the park, it is considered that the proposed development would have no effect on the setting of the park.
Importance:	High: Grade A Registered Park and Garden	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the park. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Learmount Designation: Grade B Registered Park and Garden Reference: L/012	
Description:	Distance: 6.4km northeast of the nea	rest turbine, 6.2km northeast study site
	Description:	
	Sometimes known as Learmount Castle or Laremount, the holding goes back to the early 17 th century, passing from Skipton, Montgomery and from the late 18 th century, to the Beresford families. The present Gothic-Tourdoresque ashlar house, which faces north, is placed above a steep, terraced drop to the River Faughan, was probably built and designed of J.B. Keane of Dublin C.1830 to replace a house c.1710. The terracing, which is probably eighteenth-century in date, is grassed and decorated with ornamental yew trees of mid-Victorian date.	
	To the south of the house lie a coach and stable yard range, and to the the west and south-west of this is the eighteenth-century walled garden (0.6ha), which is divided into two sections. The large designed informal landscape, now covered by coniferous plantations, once covered a large area to the south of the River Faughan and north of the Park Road (89ha); a smaller area of parkland to the south of the road covered 25.8ha. Much of this planting was apparently undertaken in the 1820s, although in 1837 Lewis noted in his Topographical Dictionary, that the demesne had 'large and valuable timber' suggesting an earlier date. There were Victorian pleasure grounds close to the house on the northwest and north-east, of which some tree and shrub planting survives. The demesne park was entered through two main ornamental drives from the Park Road, both with gate lodges, to the south-west and south-east of the house; a road to the south of the yards linking with a crossroads served as the tradesman's entrance. The demesne is presently administered by the Forest Service (DAERA) and contains extensive commercial plantations; mature deciduous trees survive around the house and yards and on the northern fringes. Paths are maintained, and the site is an amenity. From 1950-83, the house was used as a Youth Hostel, during which time the eastern wing was demolished. In 2000 the coach house to the rear of the house was sold into private hands, while the house was converted into self-catering apartments, and part of the gardens	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High, the park contains a scheduled monument.	No effect on ability to appreciate historic interest.
Historic interest:	Moderate: the park preserves the grounds of an 19th century park, surrounding a house of local interest.	No effect on ability to appreciate historic interest.
Architectural interest:	Moderate: the historic park contains a historic property which is listed Grade B1 (HB01/01/010) and contains the remains of a well (LDY029:002).	No effect on ability to appreciate architectural interest.



Heritage Asset:	Name: Learmount Designation: Gra	de B Registered Park and Garden Reference: L/012
Setting and views:	Key views are from the main house in the centre of the park facing northwest. The remainder of the park consists of dense woodland so does not provide a strong appreciation of the historic interest of the park. As a result, appreciation of the park's special interest is limited from within its wider setting. Due to dense woodland the views into the park are not possible.	The ZTV suggests that there could be some intervisibility between the registered park and the proposed development, however the site visit confirmed that in practice the proposed development would be completely screened by intervening trees, even in winter views and the presence of already established wind farms in the surrounding landscape. Given this and the considerable distance between the nearest turbine and the park, it is considered that the proposed development would have no effect on the setting of the park.
Importance:	High: Grade B Registered Park and Garden	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the park. On this basis this effect is not considered to be a significant effect.	



Non-Designated Archaeological Monuments

Heritage Asset:	Mullaghcarbatagh Cairn Designation: Undesignated Archaeological Monument Reference: TYR 011:032	
Description:	Distance: 420m south of the nearest turbine, 30m south study site	
	Description:	
	On the summit of Mullaghcarbatagh Mt. with superb views all round, TYR 011 :006 is situated atop a 2nd summit of NW. The site consists of a cairn, 1.75m high & roughly circular in plan, c.35m in diameter. The stones are well chosen to create a stable structure, all could have been gathered from the immediate vicinity & none appears structural, with no evidence for cists or chambers within the site. The cairn itself is composed entirely of stone, with no sign of soil or sod in the construction.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	Modest, no sign of soil or sod in the construction and unclear if stones are related to the original feature. Could potential yield additional associated environmental and artefactual evidence but is unlikely to be of high research value.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Low, Remains of cairn provide some appreciation of early cultural and lived experience, but it is unclear what remains of the original structure.	No effect on ability to appreciate historic interest.
Architectural interest:	Low, stones do not appear to be structural and could have all been gathered in the immediate vicinity, no evidence of cists or chambers.	No effect on ability to appreciate architectural interest.
Setting and views:	The cairn is located on level ground at the summit of Mullaghcarbatagh Mt. It is located within undeveloped open grass land, allowing appreciation of the monument from the wider area.	The proposed development would be located within the setting of the undesignated monument. This would therefore have a major effect on its setting and would have an effect on the archaeological interest of the structure. Most if not all the turbines would be visible from this monument.
Importance:	Low: Undesignated Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Moderate Adverse Significance of effect (Table 4): Minor Adverse Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Cairn Designation: Undesignated Archaeological Monument Reference: TYR 011:006	
Description:	 Distance: 130m northwest of the nearest turbine, located within the grounds of the full development Description: NW of the craggy summit of Mullaghcarbatagh with superb views all round. The cairn is situated on a prominent spur close to the OS triangulation point. The cairn is roughly circular, c12m diam. & stands a flat-topped 1.5m high. The flattening of the cairn is due to the construction of a modern upright beacon which was constructed from some of the large cairn stones. There is no evidence for structurally set stones among the generally small, flat, angular stones of the cairn. 	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	Low, poor preservation and as the cairn has been flattened so any associated artefactual or environmental evidence will have been disturbed and are likely to be unstratified.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Low, poor preservation due to construction of modern upright beacon, so is unable to provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Low, no evidence for structurally set stones.	No effect on ability to appreciate architectural interest.
Setting and views:	The cairn is located on level ground at the summit of Mullaghcarbatagh Mt. It is located within undeveloped open grass land, allowing appreciation of the monument from the wider area.	The proposed development would be located within the setting of the undesignated monument. This would therefore have a major effect on its setting and would have an effect on the archaeological interest of the structure. Most if not all the turbines would be visible from this monument.
Importance:	Low: Undesignated Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Moderate Adverse Significance of effect (Table 4): Minor Adverse Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	

Heritage Asset:	Booley House Designation: Undesignated Archaeological Monument Reference: TYR 006:052	
Description:	Distance: 340m north of the nearest turbine, In exclusion zone of study site Description: Set on a high NW facing hillslope, with excellent views in all directions, except SW where it is blocked by rising ground. This is a small circle of stones, 1-2 courses high and 4m in diameter. It is set against the remains of an old lane or boundary and appears to be the footings for a booley house.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	High, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Modest, elements of original construction are still legible, but no complex architectural structures noted.	No effect on ability to appreciate architectural interest.
Setting and views:	The booley house is located on the northwest facing side of a hill with panoramic views of the surrounding area within open pastureland. Appreciation of its archaeological interest is possible from the wider area surrounding the monument.	The proposed development would be located within the setting of the undesignated monument. This would therefore have a major effect on its setting and would have an effect on the archaeological interest of the structure. Most if not all the turbines would be visible from this monument.
Importance:	Low: Undesignated Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Moderate Adverse Significance of effect (Table 4): Minor Adverse Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Cairn Designation: Undesignated Archaeological Monument Reference: TYR 011:033	
Description:	Distance: 420m south of the nearest turbine inside study site Description: On top of a secondary outcrop immediately W of the summit of Mullaghcarbatagh Mt., this site is much smaller & less impressive than TYR 011:032. It consists of a loose cairn of stones, piled together rather than placed. It is roughly circular in plan, 1.5m diam. & stands at best 0.75m high. TYR 011:006 & TYR 011:032 are both clearly visible to NW & E respectively & the site itself commands fine views, particularly to S & SW.	
Assessment of significance	Description of heritage interest and significance Description of effects of proposed development on elements of significance	
Archaeological interest:	High, preservation is good, and the monument will contain additional associated artefactual and environmental evidence of high research value	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Moderate, remains provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Architectural interest:	Modest, elements of original construction are still legible, but no complex architectural structures noted.	No effect on ability to appreciate architectural interest.
Setting and views:	The cairn is located on level ground at the summit of Mullaghcarbatagh Mt. It is located within undeveloped open grass land, allowing appreciation of the monument from the wider area.	The proposed development would be located within the setting of the undesignated monument. This would therefore have a major effect on its setting and would have an effect on the archaeological interest of the structure. Most if not all the turbines would be visible from this monument.
Importance:	Low: Undesignated Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): Moderate Adverse Significance of effect (Table 4): Minor Adverse Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Megalithic Tomb Designation: Undesignated Archaeological Monument Reference: TYR 011:014	
Description:	Distance: 900m west of the nearest turbine, within study site Description: On steeply sloping, W facing ground, with fine views all round. The site was destroyed some years ago during drainage work. It consisted of two thin slabs set on edge c.2.5m long & 0.35m apart. When removed each was noted to be c.0.5m deep. No further stones were seen. The farmer remarked that the feature was permanently full of water due to the proximity of a nearby stream.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Archaeological interest:	Low, poor preservation and as the tomb completely removed so no associated artefactual or environmental evidence remains.	No effect on archaeological evidence or on ability to appreciate archaeological interest.
Historic interest:	Low, Remains of tomb provide some appreciation of early cultural and lived experience but little of the original feature remained.	No effect on ability to appreciate historic interest.
Architectural interest:	Low, only two slabs of stone were recovered, and no structural elements remain.	No effect on ability to appreciate architectural interest.
Setting and views:	The tomb was originally situated on the west facing slope of a hill within open pastureland. As the tomb was destroyed there is no views available of the monument.	Some of the proposed development would be largely screened from the monument. Proposed turbines 1-5 and the blades of turbines 6,9 and 13 will be visible in views from the monument, however these would be partially screened by intervening vegetation and would not meaningfully affect appreciation of the monument's significance.
Importance:	Low: Undesignated Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Standing Stone Designation: Undesignated Archaeological Monument Reference: TYR 011:043		
Description:	Distance: 1km west of the nearest turbine, 80m west study site Description: This is a small but distinctive standing stone situated approximately halfway up the eastern slope of the Balix Glen between Plumbridge and Dunamanagh. It stands in the corner of an old field boundary, at the intersection of three low stone and earth banked boundaries, and next to a small stream. It seems to be set deeply into the ground and the boundaries have been built up around it. It stands 1.35m above the boundaries and was presumably a well-established landmark when the land was divided by the boundaries. The land is rushy and used for sheep grazing. There are fine views to W across the glen from the stone. The stone has been incorporated into a modern fence and has wire wrapped around it.		
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance	
Archaeological interest:	Modest/unknown, area has been incorporated into modern boundaries and fencing, making it difficult to associate artefactual and environmental evidence to the monument.	No effect on archaeological evidence or on ability to appreciate archaeological interest.	
Historic interest:	Modest, remains provide appreciation of prehistoric division and use of land.	No effect on ability to appreciate historic interest.	
Architectural interest:	Not listed.	No effect on ability to appreciate architectural interest.	
Setting and views:	The standing stone is located on an east facing slope within an area of undeveloped grassland used for sheep grazing. It has been incorporated into modern field boundaries and fencing making appreciation of its archaeological interest is only possible at a close range.	Some of the proposed development would be screened from the monument. Proposed turbines 1-4 and the blades of turbines 5-6, 9, 11 and 13 will be visible in views from the monument, however these would be partially screened by intervening vegetation and would not meaningfully affect appreciation of the monument's significance.	
Importance:	Low: Undesignated Archaeological Monument	The proposed development would not result in any loss to the level of importance of the monument.	
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.		

Heritage Asset:	Field Wall and 7 Standing Stones Designation: Undesignated Archaeological Monument Reference: TYR 006:040		
Description:	Distance: 950m northwest of the nearest turbine, 10m north study site western point Description: On a ridge of bogland on the E side of the Inver Burn Valley. The area has been badly disturbed by cultivation ridges. The wall to N consists of a series of stones standing on end, aligned SE/NW. They fall into 2 distinct groups, a group of 3 stones to SE & a group of 4 to NW. The sets are c.50m apart along the same alignment. A further 4 low set stones were noted, which appear to create a continuous line stretching c.75m. The 2nd wall is 20m to S, consisting of stone & soil, 0.75m wide & 0.4m high.		
Assessment of significance	Description of heritage interest and significance Description of significance		
Archaeological interest:	Modest/unknown, area has been badly disturbed by cultivation making it difficult to associate artefactual and environmental evidence to the monument.	No effect on archaeological evidence or on ability to appreciate archaeological interest.	
Historic interest:	Modest, remains of Prehistoric Field wall and standing stones provide appreciation of prehistoric division and use of land.	No effect on ability to appreciate historic interest.	
Architectural interest:	Modest, elements of original construction are still legible, but no complex architectural structures noted.	No effect on ability to appreciate architectural interest.	
Setting and views:	The standing stones and wall are located on a west facing slope of a hill within an area of open pastureland. It Is legible from the immediate vicinity, however there are no meaningful experience of the standing stone from the wider area. Appreciation of its archaeological interest is only possible at a close range, due to the disturbance from cultivation ridges.	Some of the proposed development would be largely screened from the monument. Proposed turbines 1-5 and the blades of turbines 6-7 and 9- 13 will be visible in views from the monument, however these would be partially screened by intervening vegetation and would not meaningfully affect appreciation of the monument's significance.	
Importance:	Low: Undesignated Archaeological Monument	I The proposed development would not result in any loss to the level of importance of the monument.	
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.		



Industrial Heritage

Heritage Asset:	Old Still House Designation: Industrial Heritage Reference: 04217:000:00		
Description:	Distance: 1.1km south from nearest turbine, 690m south study site Description: Old Still House visible on the OS County Series 1 st Edition 1832 – 1846, which was likely demolished soon after as it is no longer visible in the OS County Series 2 nd Edition 1846- 1862. Potentially below ground remains could have survived, but no above ground remains are visible.		
Assessment of significance	Description of heritage interest and significanceDescription of effects of proposed development on elements of significance		
Archaeological Interest:	Low/ Unknown, potentially below ground remains associated with the Old Still house could be present.	No effect on ability to appreciate archaeological interest.	
Historic interest:	Low/Unknown may provide appreciation of Distilling techniques in the 19 th century.	No effect on ability to appreciate architectural interest.	
Architectural interest:	Low, no structural remains present.	No effect on ability to appreciate historic interest.	
Setting and views:	The Old Still House was located at the base of Mullaghcarbatagh Mt within Bog land. As the Still House was demolished there is no views available of the house.	The proposed development would be mostly screened from the immediate setting of the building. The blades of turbine 13 will be visible in views from the Industrial building, however these would be partially screened by intervening vegetation and would not meaningfully affect appreciation of the monument's significance.	
Importance:	low: Industrial Heritage	The proposed development would not result in any loss to the level of importance of the monument.	
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): No Impact Significance of effect (Table 4): Neutral Comments: The proposed development would not affect the setting or significance of the bridge. On this basis this effect is not considered to be a significant effect.		



Appendix 2 - Heritage assets that do not required detailed assessment

Heritage assets located completely outside of ZTV for the proposed development

Heritage Asset Reference	Name/address	Location
LDY 029:001	Wedge Tomb	Tireighter
LDY 029:011	Rath	Lisbunny
LDY 029:014	Mound – Rectangular Platform	Lettermuck
TYR 006:007	Standing Stone and Two Stone Circles	Meendamph
TYR 011:012	Cout Tomb	Meenagorp
TYR 011:017	Killen	Ballykerry
TYR 012:007	Rath	Clogherny Glebe
TYR 012:008	Rath	Clogherny Glebe
TYR 012:009	Rath	Clogherny Glebe
TYR 012:010	Rath	Corramore
TYR 012:011	Platform rath	Corramore
TYR 012:012	Rath	Oughtdoorish
TYR 012:022	Stone Alignment	Oughtboy
TYR 018:002	Two Standing Stones	Glenmacoffer
TYR 018:008	Four Stone Circles, Alignment, Slievebeg or Standing Stones	Culvacullion
TYR 018:012	Franciscan Friary and Graveyard: Corick Abbey	Corickmore
TYR 019:010	Counterscarp Rath Glenlark	

Scheduled Ancient Monuments

Listed Buildings

Heritage Asset Reference	Grade	Name/address	Description
HB01/01/011	B1	"Learmount Parish Church (C of I), Learmount Wood, Tireighter Road, Park, Co Londonderry BT47 4BA"	Church
HB01/01/012	B2	"Learmount School & Teacher's House, School Lane, 192 Learmount Road, Park Village, Co Londonderry BT47 4BA"	Hall
HB01/01/013 A	B1	"Lynch's Public House, 212 Learmount Road Park, Co Londonderry, BT47 4BA"	Public House
HB01/01/013 B	B1	"210 Learmount Road Park, Co Londonderry, BT47 4BA"	House
HB01/01/019	B1	"Laurel Hill, 195 Learmount Road Park, Co Londonderry, BT47 4BA"	House

124



Heritage Asset Reference	Grade	Name/address	Description
HB01/01/020	B1	"Tamnagh Lodge, Tamnagh Road, Tamnagh Park, Co Londonderry, BT47 4DN"	House
HB01/01/023	B2	"Millbrook Mill, 350 Longland Road, Killycor, Claudy, Co Londonderry, BT47 4AJ "	Mill
HB01/01/034	B1	"Tireighter Road, Tireighter, Park, Co Londonderry"	House
HB01/01/038	B1	"Cottage behind 34 Ballyrory Road, Claudy, Co. Londonderry, BT47 4AW"	House
HB01/02/024 A	B1	"Comber House, Comber, Claudy, Co. Londonderry "	Country House
HB01/02/027	B2	"St. Eugenius Church, Cumber Road, Cumber, Claudy, County Londonderry"	Church
HB01/02/030	B1	"Glenalla House, Lower Alla, Claudy, Co. Londonderry"	House
HB01/02/033	B2	"Scutch Mill, Ballyartan Road, Claudy, Co. Londonderry"	Mill
HB01/02/040	B+	"Cumber Bridge, Gregg Road, Claudy, Londonderry, Co. Londonderry, BT47"	Bridge
HB01/02/041	B2	"24 Lower Ballyaron Road, Lower Alla, County Londonderry, BT47 4HZ"	House
HB01/02/042	B2	"110 Cumber Road, Claudy, Londonderry, Co. Londonderry, BT47 4JB "	Gates/ Screens/ Lodges
HB10/05/002	B2	"St Patrick's RC Church, Glenelly Road, Cranagh, Plumbridge, Co Tyrone, BT78 8LR"	Church
HB10/05/004	B1	"St Patrick's C of I Church, Upper Badoney Parish, Glenroan Burn, Glenelly Road, Plumbridge, Co Tyrone, BT79 8BN"	Church
HB10/09/001	B1	"St James Parish Church (C of I), Longland Road, Donemana, Strabane, Co Tyrone, BT82 OPH "	Church
HB10/09/002	B1	"St James' Old Rectory (AKA Earls Gift), Claudy Road, Donemana, Strabane, Co Tyrone, BT82 OPH"	House
HB10/09/005	B2	"Donemana Presbyterian Church, Church View, Donemana, Strabane, Co Tyrone, BT82 OPB"	Church
HB10/09/028	B2	"6 Balbane Road, Donemana, Strabane, Co. Tyrone, BT82 ORW"	House
HB11/16/005	B2	"St. Patrick's Church, Glen Park Road, Gortin, Co.Tyrone, BT78 4PF"	Church
HB11/16/009 A	B2	"St Patrick's Roman Catholic Church, 15 Chapel Lane, Gortin, Co Tyrone, BT79 8ND "	Church
HB11/16/010	B2	"Ulster Bank, 2 & 4 Main Street, Gortin, Omagh, Co Tyrone, BT78 8PH"	Bank
HB11/16/013 B	B+	"Beltrim Castle, 86 Killymore Road, Gortin, Co Tyrone, BT79 8PL"	House



Heritage Asset Reference	Grade	Name/address	Description
HB11/16/019	B2	"Former Beltrim National School, Glenpark Road, Gortin, Omagh, Co. Tyrone, BT79 8TL"	Recreational Club

