Unshinagh Wind Farm, County Antrim, Northern Ireland

Cultural Heritage Baseline Assessment



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LANDGAGE HERITAGE LIMITED

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Non-technical summary

This cultural heritage baseline assessment considers the proposed Unshinagh Wind Farm, in County Antrim, Northern Ireland (Fig. 1). The purpose of the assessment is to provide a baseline appraisal to inform a forthcoming Environmental Statement. 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. This has comprised a staged assessment process, consisting of a detailed consideration of 163 designated built and archaeological heritage assets in the wider area around the study site, followed by the detailed assessment of 47 designated heritage assets provided in Appendix 1.

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 eight such assets were identified, as follows:

- ANT 029:004 Doonan Fort scheduled monument
- ANT 029:031 The Stone House scheduled monument
- ANT 029:092 Court Tomb scheduled monument
- ANT 029:039 Wedge Tomb scheduled monument
- HB06/01/020 Lemnalary House, Grade B+
- HB06/01/055 House near Ballymena Road, Grade B2
- Carnlough Conservation Area
- AN/121 Cleggan Lodge Registered Park

This process has found that in most cases, the degree of effect which would result from the proposed development would be no more than slight 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 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 these assets. However, due to the sensitivity of the assets in question, it is recommended that all 8 of the assets assessed in full detail in this report should be assessed within the ES cultural heritage chapter in Volume 2 of the ES. These, relatively low levels of effect should also be capable of being made acceptable, provided sufficient benefits flow from the proposed development. 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.

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 8 of the assets assessed in full detail in the main body of this report should be assessed within the ES cultural



heritage chapter. The remaining assets already assessed in detail in Appendix do not require additional assessment within the ES chapter, as it is clear that the effect of the proposed development on them would not lead to any significant effects.

A review of the available evidence has suggested that the study site has a known potential to contain the remains of an abandoned farmstead, two sheepfolds and a moderate potential for the presence of the remnants of agricultural activity from the Post-Medieval period. There is also a general potential for the study site to contain as yet unknown prehistoric remains. This assessment has concluded that the archaeological remains known to be present within the study site, and those potentially present, are likely to be of low interest as defined in Table 1, meaning remains which make a meaningful contribution to local research objectives.

The proposed development comprises a wind farm, with 14 turbines measuring up to 180m in height, together with a Battery Energy Storage Solution (BESS). The turbines will be set on foundations and will be accessed using a modest track, which will make use of existing routes. 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. There will also be a cable route leading from the turbines to connect them to the grid. The cable route trench would make use of existing road routes.

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, BESS, 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. These works would also provide clarity of the potential date and significance of the some remains, such as the cropmarks noted above. 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 policy RE1 of PPS 18 and paragraph 6.224 of the SPPS.



1.0 Introduction

1.1 The Study Site

- 1.1.1 This cultural heritage baseline assessment considers land at Unshinagh Wind Farm, Mid and East Antrim, Northern Ireland (Figure 1). It has been researched and prepared by Landgage Heritage on behalf of Renewable Energy Systems.
- 1.1.2 The site (hereinafter referred to as the "Study Site") is located at grid reference 325627, 414705.

Location, Geology and Topography

1.1.3 The study site is located at Unshinagh, approximately 2km to the south and west of Carnlough 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 north and east, and dropping in the southwestern part of the study site (see plate 1, below).

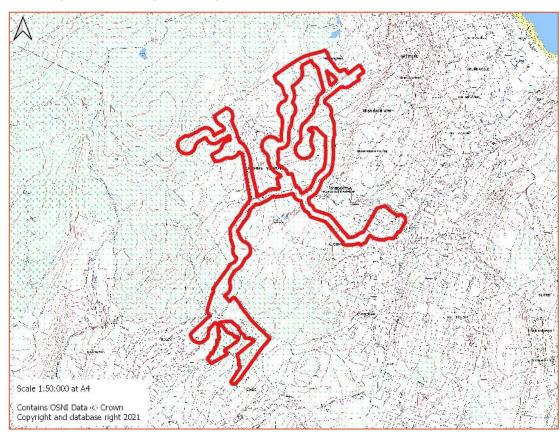


Plate 1 Site location plan, including general topography of the study site and surrounding area

- 1.1.4 The highest point is a hill along the northern boundary with a height above ordnance datum (aOD) of approximately 340m, with the lowest point at 170m aOD at the southern tip of the study site (see plate 1, above).
- 1.1.5 The underlying geology of the study site comprises unnamed extrusive rocks of the Paleogene Mafic Lava and Mafic Tuff. No superficial deposits were recorded at the time of writing (BGS geology of Britain viewer 2021).

1.2 The Proposed Development

1.2.1 The proposed development comprises a wind farm, with 14 turbines measuring to a max of 180m in height, to be placed across the study site, together with a BESS, access roads and associated infrastructure.



- 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. Full details of the proposed development are provided under a separate cover, in the Environmental Statement, Volume 2, Chapter 1.

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

Planning Policy Statements (PPS)

- 2.2.1 In March 1999 the Planning Service (an agency within the Department of the Environment for Northern Ireland) published Planning Policy Statement 6 (PPS 6), 'Planning, Archaeology and the Built Heritage'.
- 2.2.2 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.
- 2.2.3 PPS 6 sets out the DoE's planning policies for the protection and conservation of archaeological remains and built heritage.
- 2.2.4 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.
- 2.2.5 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:

- 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.
- 2.2.6 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.
- 2.2.7 Planning policy relating to renewable energy is set out in PPS 18: Renewable Energy. The relevant policies are presented below.
- 2.2.8 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)

- 2.2.9 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.
- 2.2.10 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).
- 2.2.11 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).
- 2.2.12 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.

2.2.13 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.
- 2.2.14 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

- 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

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.
- 2.2.15 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 Larne Area Plan 2010, until the adoption of the emerging Local Development Plan to 2030. The 2010 plan contains the following policy relating to archaeology and cultural heritage:

Policy MAN EN1

The department will protect areas of significant archaeological interest from inappropriate development.

The designation of the overall setting in which a number of individual and related monuments are located, or an area of historic landscape, as an Area of Significant Archaeological Interest, is intended to protect the individual sites or monuments and their setting from inappropriate development. An upland area containing a number of prehistoric and later archaeological sites and monuments in the townlands of Dunteige, Ballycoos, Drains Bog, Linford, Loughduff, Sallagh and Ballyhackett and known as Knockdhu, is designated as an Area of Significant Archaeological Interest. (map 1)



Policy MAN EN2

The Department will protect sites and the settings of monuments in state care or which may be taken into state care. Proposals for development in the vicinity of these monuments which would be likely to have an adverse affect on the sites or their settings will not be permitted. Particular attention will be paid to the impact of the proposal on:—

- 1) the area of historic landscape in which the site or monument functioned
- 2) critical views of and from the site or monument
- 3) the access and public approaches to the site or monument
- 4) the understanding and enjoyment of the site or monument by visitors.

Larne Borough has at present two monuments in state care, Olderfleet Castle on Curran Point, Larne, the remains of a tower house and Ballylumford Dolmen, a portal tomb.

Policy MAN EN4

The Department will protect the following historic parks, gardens and demesnes in Larne Borough:—

Garron Point, Glenarm Castle, Carnfunnock, Drumalis, Magheramorne, Red Hall, Kilwaughter.

Country Houses set in landscaped parkland or within demesnes are an important part of the landscape in Larne Borough. The Department has identified a number of these parks, gardens and demesnes which are considered to represent a significant historic and landscape resource.

Other parks, gardens and demesnes retain only some elements of their original form. In the event of development being approved within these, the co-operation of developers in arranging the evaluation and recording of particular features or landscaped areas may be sought, so that knowledge of this part of our landscape heritage is not lost.



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 schedule of 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 National Heritage List for England (NHLE) database held by Historic England, 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 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.
- 3.3.3 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.



- 3.3.4 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.
- 3.3.5 The scope of study and assessment of effects 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 as part of this assessment, and used to illustrate the scale of a heritage asset from a particular viewpoint have been taken with a Canon EOS 1200D camera with a fixed 50mm lens. General photographs have been taken with a variable lens. The camera has an 18MP APS-C CMOS sensor, which is 1.6 times smaller than a full frame sensor. With the fixed 50mm lens, the smaller APS-C sensor provides an effective focal length of 80mm due to the smaller area of a scene it provides relative to a standard full frame sensor (Landscape Institute Technical Guidance Note 06/19).
- 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 assessment does not consider landscape impacts, it does consider views of heritage assets with their setting, including distant key views, in which similar considerations apply (for instance, one of the receptors considered in the 2012 study was Urquhart Castle, a scheduled monument in Scotland). As such the photographs within this assessment will provide an accurate representation of the scale of a heritage asset within any view presented.
- 3.4.3 The lens may be changed to one with a wider angle in certain circumstances, for example in urban contexts, in order to provide better context for a view, or understanding of the setting of the asset, if appropriate. The focal length of the image will be provided with all photographs. Focal lengths will be given as full frame equivalent values.
- 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.
- 3.5.2 The levels of significance used in this assessment are defined in table 1, below.

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. 		

3.6 Assessment of the effects 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 effects

- 3.6.3 Assessments of the degree of adverse effects 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 effect 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 effects is provided in Table 2, below, along with brief descriptions of the terms used. Where this assessment determines that an adverse effect 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 heritage assets	for determining the degree of adverse effects on the significance of
Level of effect	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.
Slight Adverse	 A slight effect to the significance of a heritage asset. An example would be limited disturbance of an archaeological asset, but which does not actually damage the archaeological interest of the asset in any way. A limited degree of effect through changes to setting, but the degree of effect would not be readily discernible, or meaningfully affect appreciation.
Negligible	 A change to a heritage asset or its setting that involves no loss of significance or harm.
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.		
Slight benefit	 Benefits that provide a minor benefit to peripheral elements of the asset's significance. Examples would include limited improvements to the setting of a heritage asset which allow for a small enhancement in appreciation of the asset's significance. 		

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	Slight Adverse
Slight Adverse	Moderate/Minor Adverse	Minor Adverse	Slight Adverse	Neutral
Negligible/No impact	Neutral	Neutral	Neutral	Neutral
Slight beneficial	Moderate/Minor Beneficial	Minor Beneficial	Slight Beneficial	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, although some, such as Glenarm Castle, are discussed further in relation to broader designations which they are a part of. 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. Two additional listed buildings fell into this category, McCartney's Bridge (HB06/02/083, listed B2) and a milepost (HB06/02/099, listed B2). Both of these have enclosed settings and would be completely screened from the proposed development by intervening landscape features. and were also therefore excluded from further assessment. The ZTV also suggested that some of the eastern part of the Glenarm Conservation Area could be intervisible with the proposed turbines; the location was visited and visibility modelled in Heritage Viewpoint 6, which showed that only the tips of the turbine blades might be visible from this area on a "bare earth" assumption of visibility. In practice trees and other vegetation in the intervening landscape would completely screen the proposed development from the conservation area. As such this has also been excluded from assessment. All of these heritage assets are also listed in Appendix 2.
- 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:

- ANT 029:004 Doonan Fort scheduled monument
- ANT 029:031 The Stone House scheduled monument
- ANT 029:092 Court Tomb scheduled monument
- ANT 029:039 Wedge Tomb scheduled monument
- HB06/01/020 Lemnalary House, Grade B+
- HB06/01/055 House near Ballymena Road, Grade B2
- Carnlough Conservation Area
- AN/121 Cleggan Lodge Registered Park
- 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 ANT 029:004 - Doonan Fort scheduled monument

- 4.3.1 Doonan Fort is located 220m to the east of the study site, but the nearest proposed turbine would be located 1.9km to the west. The monument comprises a large, oval mound, 6m in height (see plate 2, below).
- 4.3.2 The fort is of high significance, as is evidenced by its designation. It has high archaeological interest, and the monument will contain considerable associated artefactual and environmental evidence of high research value. The fort also has both architectural and historic interest.
- 4.3.3 The fort is well preserved and highly visible from the immediate vicinity. It is located on the west facing slope of a valley of the Glencloy River, with rising topography to the west and east. The setting of the fort comprises the experience provided by the immediately surrounding area, in particular by views from the farm track immediately to the east, in which the archaeological and architectural interest of the fort can be readily appreciated. There is also an information board in a layby off the Carnlough Road which provides information on the monument. The fort is also a public attraction and an information board is located in a layby on the Carnlough Road, located between the monument and the study site (see plate 3).
- 4.3.4 The proposed turbines would be largely screened and distant from the immediate setting of the fort, and the position of the turbines was amended to be set further back from the setting of the fort during the design stage in order to protect its setting.



4.3.5 The blade tips of 2 to 5 of the turbines may be visible in the distant backdrop in views from the layby with the information board, however these would be partially screened by intervening vegetation, and would not meaningfully affect appreciation of the fort's significance (see HVP 1).



Plate 2 Looking S towards Doonan Fort from small lane off of Slane Road (88mm)



Plate 3 Looking S towards information boards and layby adjacent to Slane Road (29mm)

4.3.6 The entrance to the proposed development would be located off the Carnlough Road, 265m north of the monument. However, the entrance would also include substantive new planting, in an area which already has a number of trees. As such, this would not materially

change the character of the lane. Therefore, 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 of the fort'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 **slight adverse**, with a **minor adverse** significance of effect (Table 4), due to the high significance of the monument. This is not considered to be a significant effect.

4.4 ANT 029:031 - The Stone House scheduled monument

- 4.4.1 The Stone House scheduled monument is a portal tomb located on a gradual south facing slope of Ticloy Hill, with extensive views across the Braid River Valley to southwest. The tomb is located approximately 1.75km to the west of the nearest turbine location.
- 4.4.2 The remains of this portal tomb consist of the two side stones, one on the north side and one on the southern side, plus a slightly gabled backstone. This single chamber is roofed by 2 large capstones, of which the western stone appears partly displaced. There is no visible trace of a cairn (see plate 4, below).



Plate 4 Looking east forwards Stone House portal tomb (88mm)

- 4.4.3 The tomb 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 the public footpath located to the west (see plate 4 above). Views of the tomb provide appreciation of the preservation and archaeological interest of the tomb, however the partly displaced stones somewhat obscure the orientation of the tomb from publicly accessible areas. As is noted in the description of the tomb in the HERONI, the tomb has commanding views to the south-west, across the Braid River Valley, when viewed from the entrance to the tomb.
- 4.4.4 Two of the proposed turbines would be visible in the distance behind the tomb when seen from the public footpath to the west, and so the proposed development would change the



- setting of the tomb (see HVP 3). The turbines would not affect the view towards the tomb's entrance, nor affect appreciation of its archaeological and architectural interest. Intervening vegetation in the vicinity would also provide 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 tomb.
- 4.4.5 Therefore, the proposed development would not affect any of the key elements of the significance of the tomb, and would only have a slight 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 **slight adverse**, with a **minor adverse** significance of effect (Table 4), due to the high significance of the monument. This is not considered to be a significant effect.

4.5 ANT 029:092 - Court Tomb scheduled monument

- 4.5.1 This court tomb is located approximately 2km to the south of the nearest proposed turbine location. It is situated in a field of heather and rough grazing on northwest facing slope of a hill, with extensive views in an arc from west to east. The tomb consists of a large trapezoidal cairn of boulders aligned ENE/WSW, and is preserved to a maximum height of 2.2m. The cairn measures 70m long by 12.6m wide at the front tapering to approximately 4m in width at the rear. The forecourt is formed by fourteen upright slabs and one toppled slab. The exact length of the gallery or number of chambers could not be discerned due to cairn material. 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.
- 4.5.2 The tomb is orientated ENE to WSW, and the court opening preceding the burial chamber is at the eastern end. As such the key view of the tomb is looking into the court entrance, towards the burial chambers, looking west of southwest, which is a commanding prospect thanks to the local topography. This view is key to appreciation of the monument's archaeological interest. 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.
- 4.5.3 The proposed wind turbines would be visible in the wider area, and so would change the setting of the tomb. However, the turbines would not interfere with the view toward the entrance of the tomb, which faces away from the study site, nor would it affect appreciation of the archaeological and architectural interest provided by its immediate setting. Therefore, while the turbines may be noticeable in the wider area, they would not affect how the setting of the tomb contributes to its significance.
- 4.5.4 Therefore, the proposed development would not affect any of the key elements of the significance of the tomb, and would only have a slight 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 **slight adverse**, with a **minor adverse** significance of effect (Table 4), due to the high significance of the monument. This is not considered to be a significant effect.

4.6 ANT 029:039 - Wedge Tomb scheduled monument

4.6.1 This wedge tomb is located 2.9km to the south of the nearest proposed turbine location. It is situated in improved grassland on top of an eminence, with good views in all directions.



The monument comprises the well-preserved remains of a wedge tomb, however the SE side of the cairn has been removed when the hill was quarried. It comprises twelve upright slabs forming outer walling, which averages 1m in height. Outside the side stones of the gallery is formed by eleven slabs. The entrance to the tomb is at the north-eastern end, facing towards the southwest.

- 4.6.2 The tomb 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 tomb from the wider area, and public access to the monument was not possible during the site visit.
- 4.6.3 However, at close quarters the good preservation of the remains is evident as is its orientation, aligned SW-NE, 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 ANT 029:039). The entrance was located at the north-eastern end of the tomb, and so views towards the southwest are significant, and are aligned with the past experience of the monument.
- 4.6.4 The proposed wind turbines would be potentially visible in the distance to the north of the monument, 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.
- 4.6.5 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 a slight 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 **slight adverse**, with a **minor adverse** significance of effect (Table 4), due to the high significance of the monument. This is not considered to be a significant effect.

4.7 HB06/01/020 - Lemnalary House, Grade B+

- 4.7.1 Lemnalary House is a two-storey five-bay house with attics and basement, located approximately 3.77km to the northeast of the nearest proposed turbine location. The main frontage of the house faces eastwards, towards the Irish Sea. The house has high architectural and historic interest and is of high significance (Table 1)
- 4.7.2 The list description notes that the farmhouse is situated on an elevated location with distant views to the sea, to the east. The farmstead is surrounded by rural fields, and ruinous walls are present to the rear, which date to the 17th century construction of the house. The immediate setting provides the best experience of the farmhouses' architectural interest, and the group value it has with the nearby farm building and walls. 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.
- 4.7.3 The turbines would not affect the key views from the house towards the sea to the east. The upper sweep of a couple of the turbines would be potentially visible in the distance from the immediate setting of the house. However, several buildings and areas of vegetation are present in the intervening landscape, such that they are unlikely to be particularly noticeable. 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.
- 4.7.4 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 effect of the proposed development (Table 2) is considered to be **slight adverse**, with a **minor adverse** significance of effect (Table 4), due to the high significance of the building. This is not considered to be a significant effect.

4.8 HB06/01/055 - House near Ballymena Road, Grade B2

- 4.8.1 The listed house near Ballymena Road is located approximately 2.2km to the southeast of the nearest proposed turbine location, close to the Doonan Fort scheduled monument. It consists of a two-storey vernacular farmhouse, of probable pre-1832 construction but which is likely to have assumed its present enlarged two-storey form in the early 1900s (HERONI HB06/01/055). The house is considered to be of medium significance, as evidenced by its designation at Grade B2.
- 4.8.2 Originally various outbuildings were attached to the house, enclosing a small farmyard. Some of these buildings have collapsed while others are in a state of advanced decay. To the immediate north there is a much later dwelling, now abandoned and entirely overgrown. The main façade of the house faces east, towards the Irish Sea, following the local topography. Views of the house from the surrounding area are very limited due to the presence of trees and other buildings. As a result views of the property from the surrounding area are limited (see plate 5, below).



Plate 5 Looking ESE along track towards listed house near Ballymena Road; listed building is just visible on the right. The study site is not visible, and would be in the opposite direction (88mm)

4.8.3 The proposed development would not affect key views from the house towards the Irish Sea to the east. Key views of the house would likewise not be materially affected, as the



- extent of its setting is limited by intervening vegetation and buildings. The turbines would be visible to the north from some parts of the setting of the house, which could lead to temporary distraction, but would not prevent or interfere with appreciation of the building's special interest.
- 4.8.4 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 small 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 effect of the proposed development (Table 2) is considered to be **minor adverse**, with a **minor adverse** significance of effect (Table 4), due to the medium significance of the building. This is not considered to be a significant effect.

4.9 Carnlough Conservation Area

- 4.9.1 The Carnlough Conservation Area includes the historic core of the settlement of Carnlough and is located approximately 2.2km to the northeast of the nearest proposed turbine location. The Carnlough Conservation Area (CA)guide from 1981 highlights the key features which give special character to the village such as the harbour piers, the railway bridge, former Town Hall and the former quarry office, which are all built in local stone. Key buildings noted in the appraisal are the large house at 58 High Street, the Londonderry Arms Hotel on Harbour Road, the Waterfall Bar at the end of High Street, and McAuley's Bar.
- 4.9.2 The CA has high architectural interest, and contains a number of historic buildings and structures, which have group value and contribute to the character and special interest of the area. The CA also has high historic interest, and the historic buildings and other structures also preserve physical evidence of key persons and events in local village history.
- 4.9.3 During the site visit the key views and approaches within the CA were considered, and are set out below:
 - The approach along the Harbour Road, which is flanked by historic buildings, as well as the listed bridge and telephone kiosk.
 - The approach along the High Street, which is also flanked by a number of historic buildings, including no 58, and has a grade B2 listed bridge.
 - The harbour area and nearby park and listed bridge, which provide elevated views of the historic building frontages along the Harbour Road, and an appreciation of the historic interest and development of the settlement (see plate 6, below).
- 4.9.4 The wider area provides a limited appreciation of the character and appearance of the area. The surrounding landscape does, however provide a rural context and backdrop to some views within the area, such as the harbour (see plate 7, below).
- 4.9.5 The hub of two of the proposed turbines, and the tips two other turbines of the proposed development would be visible in the distance from elevated views in the park near to the harbour (see HVP 2). The upper sweep of two turbines could also be visible in the background in elevated views from the bridge over the Harbour Road, and in some more open parts of the Harbour Road. This would not materially affect the experience within the conservation area, nor the ability to appreciate the architectural, historic or archaeological interest of the area, nor its character and appearance, nor the group value of its historic buildings.





Plate 6 Looking SW from listed bridge along the Harbour Road towards listed buildings there; study site is located in the distance behind the houses on the right (29mm)



Plate 7 Looking SW from park near harbour towards study site (29mm)

4.9.6 Therefore, while noticeable in the wider area, the proposed development would not meaningfully detract from the contribution the area's setting makes to its significance, nor the integrity of the setting. While the proposed turbines would be noticeable, they would not change the character or appearance of the conservation area, nor affect appreciation of its architectural, historic or archaeological interest, or the group value of its historic buildings. Therefore, while noticeable in the wider area, the proposed development would

- not meaningfully detract from the contribution the area's setting makes to its significance, nor the integrity of the setting. This effect is considered a slight effect to the setting.
- 4.9.7 On this basis the overall assessment of the degree of effect of the proposed development (Table 2) is considered to be **minor adverse**, with a **minor adverse** significance of effect (Table 4), due to the medium significance of the building. This is not considered to be a significant effect.

4.10 AN/121 - Cleggan Lodge Registered Park

- 4.10.1 Cleggan Lodge registered park was first built as a shooting lodge for Shane's Castle. The park dates to before 1777, and has a number of areas of landscaping as well as extensive tree planting. The main house dates to 1830 and is located on a fine site with views of Slemish (HB07/05/006). The park contains a ha-ha, a pond which dates to before 1859, a glen and rockery which date to after 1927, as well as a cultivated productive garden with herbaceous borders and a gate lodge. The scheduled multivallate rath is located in the eastern part of the park (ANT 029:033). As such the park has a moderate architectural and historic interest, and high archaeological interest due to the presence of the scheduled monument. The park is therefore considered to be of high significance.
- 4.10.2 Key views within the park are from the main house to the south towards Slemish, and the main elevation of the house is to the south. Views to the south of the house also include the pond and ha-ha, reinforcing the importance of this view. 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 arable 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.
- 4.10.3 The proposed turbines would not be visible from the setting of the lodge in the centre of the park due to the presence of the substantive wood immediately to the east of the lodge, meaning that they would not materially affect the setting or significance of the lodge, or the key views from the lodge to the south towards the pond and ha-ha. The ZTV suggests that a few turbines may be visible in peripheral areas of the park, however much of the parkland is also bounded by areas of woodland, meaning that most views would be filtered even in winter views, and the turbines not discernible. However, some turbines would be visible in more open peripheral parts of the park.
- 4.10.4 Therefore the proposed development would not affect the architectural, historic or archaeological interest of the park, nor would it significantly affect the experience provided within the park, or its setting. Views of the proposed development in the distance would be noticeable in some peripheral areas, but not in key parts of the park. Also, any views of the turbines in peripheral parts of the park would not interfere meaningfully with appreciation of the park's heritage interest.
- 4.10.5 It is therefore considered that the proposed development would not affect any of the key elements of the significance of the park, and would only have a slight 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 **slight adverse**, with a **minor adverse** significance of effect (Table 4), due to the high significance of the park. 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:

ANT 029:001 - In rough grazing and rock outcrop very high up on level ground on top of a SE facing slope of a hill, in a very remote location. This is poorly preserved remains of a small, circular sheepfold with a diameter of 10m which is no longer used. The remains comprise basalt boulders and slabs forming an enclosing wall, with no visible trace of an original entrance. This appears to be a relatively modern feature, which may be associated with the abandoned farm to SE.

ANT 029:002 - In rough grazing and improved grassland high up on level ground, at the foot of a SE facing slope. This is the remains of a large, circular sheepfold approximately 35m in diameter, which is enclosed by a well preserved modern drystone wall of boulders and slabs. It is adjoined at NE and NW by a modern field boundary. The sheepfold appears to be still in use.

ANT 029:042 - In improved grassland and rough grazing on the summit of Carnafannoge commanding majestic views in all directions. The hill is designated 'Slane' on 1st ed OS map and 'Carnafannoge' thereafter. There are no visible remains of this possible cairn, the existence of which was suggested by the carn element of the placename. The present landowner had no knowledge of a cairn at this location. (The actual summit of the hill is a large oval area of rock outcrop, could this be the carn element?)

ANT 029:084 - This is an extensive and complicated field system spreading across a widespread area of now uncultivated mountain slopes. The site was identified from APs taken in 1983. Some of the features may be relatively recent, but at least a few of the enclosures and associated field complexes may be of some antiquity.

ANT 025:022 - In rough grazing very high up on a S facing slope of Binnagee, with extensive views in an arc from SE-S-W, and traversed NE/SW by the townland boundary. There are no visible remains of these possible antiquities, which were identified from APs taken in 1983 as a possible field system [see ANT 029:084]. The area of the site incorporates a large outcrop of basalt adjacent to which is a number of modern drains and tractor tracks. The latter features may have been picked up on APs.

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 a number of stone-built field boundaries were noted, many of which are in current use, and whose antiquity is questionable.



5.3.2 The large circular sheepfold recorded under ANT 029:002 was noted (see plate 8).



Plate 8 Looking S towards ANT 029:002 close to the approximate centre of the study site (29mm)

5.3.3 An abandoned farmstead was also noted during the site visit, which is not specifically recorded in the NISMR, but is referred to in passing in record ANT 029:001, which can be seen fairly clearly in aerial imagery for the study site (see plate 9, below).



Plate 9 Aerial image of abandoned farm located close to the central northern part of the study site, with associated small enclosures and potential remnants of ridge and furrow visible (study site denoted by red line)



5.3.4 The remains of the buildings are present, along with a number of associated field boundaries and a potential area of ridge and furrow.

5.4 Review of archaeological evidence by period

Prehistoric

- 5.4.1 The NISMR does not record any known evidence of prehistoric remains within the study site. The location of a potential cairn is noted in the southern part of the study site (ANT 029:042), however this is based only on place name evidence. The NISMR record notes that no trace of the feature is visible, and during the site visit no evidence of a cairn was noted.
- 5.4.2 However, some records of known prehistoric remains are present in the wider area, such as the scheduled remains of the court tomb located approximately 1.1km to the south of the southern tip of the study site (ANT 029:092), and the potential prehistoric base to the Doonan Fort. Also, the complex of cropmarks recorded by aerial photos in the northern part of the study site may contain elements which are from this period, although the evidence suggests that many of the features identified are later (ANT 025:022 and ANT 029:084).
- 5.4.3 Given this, and the lack of archaeological field investigations within the study site, the potential for the presence of some buried remains from this period cannot be completely discounted. As such it is considered that the study site has a general potential to contain buried remains of interest from this period.

Early Christian and Medieval

- 5.4.4 The upper part of the scheduled Doonan Fort, while potentially built on an earlier base, may date to the early Christian era, and was used into the Medieval period (ANT 029:004). The location of the fort next to the Doonan Water would have proved an attractive location for settlement during this period, as well as during earlier periods. Another rath is located 2.4km to the southwest of the study site (ANT 029:033), which is located close to the Cleggan River.
- 5.4.5 The available evidence suggests that settlement activity in the vicinity during this period was focussed to the south and southwest, on lower elevations nearer to larger waterways. As such it is unlikely that the study site contains settlement evidence of significance from this period.
- 5.4.6 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. There is a general potential for the presence of the remnants of agricultural practices such as field boundaries.

Post-Medieval/Modern

- 5.4.7 As has been noted above, the study site contains the known remains of sheepfolds and field boundaries of Post-Medieval date, many of which remain in use today (ANT 029:001 and 029:002). In addition, this assessment has located the abandoned farmstead referred to by record ANT 029:001, as well as a number of associated features.
- 5.4.8 Historic mapping of this area has been reviewed and the 2nd edition OS from 1860 (the 1st edition OS map for this area was not available at the time of writing) and the field system and building are present at the time of the production of this map (see plate 10, below). It is therefore certain that this farmstead dates to the 19th century, and it could well date to earlier in the Post-Medieval period.



5.4.9 In addition to the recorded remains and the abandoned farmstead, the study site contains several field boundaries that date to the Post-Medieval period and several of the features identified by the examination of the aerial photographs from 1983 are also likely to date to this period (ANT 025:022 and ANT 029:084).

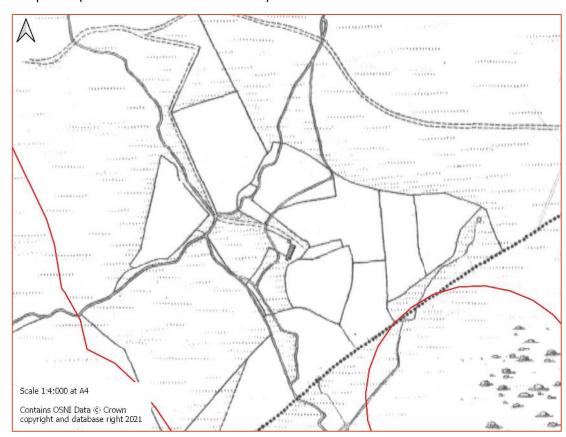


Plate 10 1st Edition OS map c. 1860 showing farmstead noted close to the study site

5.4.10 Therefore, the study site has a known potential to contain remains from the Post-Medieval period. In addition, there is a moderate potential for the study site to contain additional remnants of Post-Medieval agricultural activity, such as field boundaries.

5.5 Summary of archaeological potential and assessment of significance

- 5.5.1 A review of the available evidence has suggested that the study site has a known potential to contain the remnants of agricultural activity from the Post-Medieval period. There is also a general potential for the study site to contain as yet unknown prehistoric remains. There is a low potential for the presence of buried remains of archaeological interest from other periods.
- 5.5.2 There is no evidence of well-preserved prehistoric remains of high significance within the study site, such as a cairn, or tomb. As such it is considered that the remains present and likely to be present within the study site are of low interest as defined in Table 1, meaning remains which make a meaningful contribution to local research objectives.

5.6 The Proposed Development

5.6.1 The proposed development comprises a wind farm, with up to 14 turbines measuring to a max 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. Full details of the proposed development are provided under a separate cover in ES Volume 2, Chapter 1. There will also be a cable route leading from the turbines to connect them to the grid. The cable route trench would make use of existing road routes.

5.7 Potential Impacts

5.7.1 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).

5.8 Mitigation Measures

Embedded mitigation

5.8.1 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, including the remains of the abandoned farmstead (see plate 11, below).

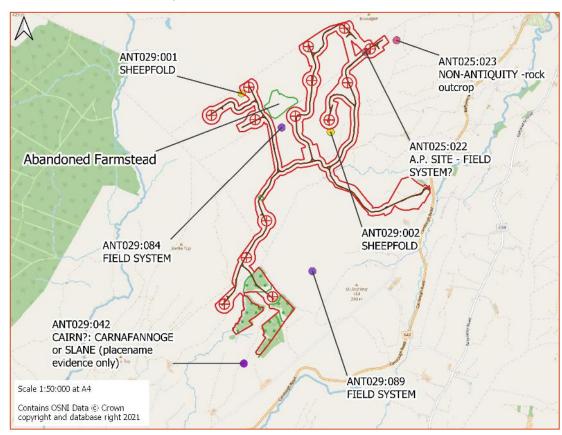


Plate 11 Plan showing final layout in relation to known archaeological remains

5.8.2 In this way, there would be no physical loss or harm to known, reliably located buried archaeological remains within the study site.



Archaeological recording

- 5.8.3 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. For example, one of the access tracks runs through an area of potential cropmarks known from an examination of aerial photographs taken in 1983 (ANT 025:022).
- 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. These works would also provide clarity of the potential date and significance of the some remains, such as the cropmarks noted above. 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.
- 5.8.5 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 the proposed Unshinagh Wind Farm, in County Antrim, Northern Ireland (Fig. 1). The purpose of the assessment is to provide a baseline appraisal to inform a forthcoming Environmental Statement.
- 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 8 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 known potential to contain the remains of an abandoned farmstead, two sheepfolds and a moderate potential for the presence of the remnants of agricultural activity from the Post-Medieval period. There is also a general potential for the study site to contain as yet unknown prehistoric remains. This assessment has concluded that the archaeological remains known to be present within the study site, and those potentially present, are likely to be of low interest as defined in Table 1, meaning remains which make a meaningful contribution to local research objectives.
- 6.1.5 The proposed development comprises a wind farm, with 14 turbines measuring up to 180m in height, together with a Battery Energy Storage Solution (BESS). The turbines will be set on foundations and will be accessed using a modest track, which will make use of existing routes. 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. There will also be a cable route leading from the turbines to connect them to the grid. The cable route trench would make use of existing road routes.
- 6.1.6 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).
- 6.1.7 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.



- 6.1.8 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. These works would also provide clarity of the potential date and significance of the some remains, such as the cropmarks noted above. 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.
- 6.1.9 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.
- 6.1.10 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 policy RE1 of PPS 18 and paragraph 6.224 of the SPPS.



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Appendix 1 - Assessment of indirect effects to heritage assets

Scheduled Ancient Monuments

Heritage Asset:	Name: Doonan Fort Designation: SAM Reference: ANT 029:004	
Description:	Distance: 1.9km SE from nearest turbine Description: This is a large, oval mound 6m high. Base is drystone revetted with a ditch on S seperated from mound by deliberate looking berm 4m wide. A small sub-rectangular annex adjoins the kerb at SW. The impression when viewed from below is that the site consists of a prehistoric kerbed monument with a secondary revetted mound built on top. Overall dimensions and stone revetting suggest this is not a motte.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Modest, flat platform and elements of original construction are still legible, but no complex architectural structures noted.	No effect on ability to appreciate architectural interest.
Historic interest:	Moderate, remains of the fort provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
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.
Artistic interest:	None known	No effect.
Setting and views:	The fort is well preserved and highly visible from the immediate vicinity. It is located on the west facing slope of a valley of the Glencloy River, with rising topography to the west and east. The setting of the fort comprises the experience provided by the immediately surrounding area, in particular by views from the farm track immediately to the east, in which the Archaeological and Architectural interest of the fort can be readily appreciated. There is also an information board in a layby off the Carnlough Road which provides information on the monument.	The proposed development would be largely screened and distant from the immediate setting of the fort. The blade tips of 2 to 5 of the turbines may be visible in the distant backdrop in views from the layby with the information board, however these would be partially screened by intervening vegetation, and would not meaningfully affect appreciation of the fort's significance. The entrance to the proposed development would be located off the Carnlough Road, 265m north of the monument. However, this would use an existing entrance, and would not materially change the situation.
Importance:	High: Scheduled 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): Slight 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: The Stone House Designation: SAM Reference: ANT 029:031	
Description:	Distance: 1.75km SW from nearest turbine Description: On a gradual S-facing slope of Ticloy Hill, with extensive views across the Braid River Valley to SW. The remains of this portal tomb consist of the N portal, 2 sidestones, one on the N and one on the S side, plus a slightly gabled backstone. This single chamber is roofed by 2 large capstones, of which the W stone appears partly displaced. A displaced slap 1.6m long on the S side of the entrance appears to be the S portal. The chamber entrance faces E the chambers is 1.4m long x 1.2m wide at E, narrowing to 0.9m at W. The upright portal is at least 1.7m high, while the sidestones are 1.1m & 1.7m high & the backstone 1.5m high. There is no visible trace of a cairn.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Moderate, stone elements of original construction are still legible, with surviving structural elements despite age.	No effect on ability to appreciate architectural interest.
Historic interest:	Moderate, remains of tomb provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
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.
Artistic interest:	None known.	No effect.
Setting and views:	The monument is legible and visible from the immediate vicinity and the public footpath located to the west. Views of the tomb provide appreciation of the preservation and archaeological interest of the tomb, however the partly displaced stones somewhat obscure the orientation of the tomb from publicly accessible areas. As is noted in the description of the tomb in the HERONI, the tomb has commanding views to the south-west, across the Braid River Valley, when viewed from the entrance to the tomb.	Two of the proposed turbines would be visible in the distance behind the tomb when seen from the public footpath to the west, and so the proposed development would change the setting of the tomb. The turbines would not affect the view towards the tomb's entrance, nor affect appreciation of its archaeological and architectural interest. Intervening vegetation in the vicinity would also provide 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 tomb.
Importance:	High: Scheduled 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): Slight 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. There would be a change to the wider setting of the tomb, but not one that would affect understanding or appreciation of the tomb's archaeological or architectural interest. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Court Tomb Designation: SAM Reference: ANT 029:092	
Description:	Distance: 2km S from nearest turbine Description: In heather and rough grazing on NW facing slope of a hill, with extensive views in an arc from W-N. This is a massive trapezoidal cairn of boulders aligned ENE/WSW and standing a maximum 2.2m high. The cairn measures 70m long x 12.6m wide at the front tapering to c 4m at the rear. The forecourt is formed by fourteen upright slabs and one toppled slab. The exact length of the gallery or number of chambers could not be discerned due to cairn material.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
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.
Historic interest:	Moderate, remains of tomb provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
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.
Artistic interest:	None known.	No effect.
Setting and views:	The monument is legible and its orientation is readily appreciated at present. The tomb is orientated ENE to WSW, and the court opening preceding the burial chamber is at the eastern end. As such the key view of the tomb is looking into the court entrance, towards the burial chambers, looking west of southwest, which is a commanding prospect. This view is key to appreciation of the monument's archaeological interest. The vicinity provides a good appreciation of the tomb as well.	The proposed wind turbines would be visible in the wider area, and so would change the setting of the tomb. However, the turbines would not interfere with the view toward the entrance of the tomb, nor affect appreciation of the archaeological and architectural interest provided by the immediate setting. Therefore, while the turbines may be noticeable in the wider area, they would not affect how the setting contributes to the significance of the tomb.
Importance:	High: Scheduled 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): Slight 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. There would be a change to the wider setting of the tomb, but not one that would affect understanding or appreciation of the tomb's archaeological or architectural interest. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Wedge Tomb at Tamybuck Designation: SAM Reference: ANT 029:039	
Description:	Distance: 2.9km S from nearest turbine Description: In improved grassland on top of an eminence, with good views in all directions. This is the quite well-preserved remains of a wedge tomb, however the SE side of the cairn has been removed when the eminence was quarried and the rest of the site is threatened by further quarrying. It comprises twelve upright slabs forming outer walling, on average 1m outside the sidestones of the gallery, which is formed by eleven slabs. The entrance to the tomb is at the NE end, facing the SW.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
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.
Historic interest:	Moderate, remains of tomb provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
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.
Artistic interest:	None known.	No effect.
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 SW-NE, 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 potentially 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 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): Slight 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. There would be a small change to the wider setting of the tomb, but not one that would affect understanding or appreciation of the tomb's archaeological or architectural interest. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Multivallate Rath Designation: SAM Reference: ANT 029:033	
Description:	Distance: 3km SW from nearest turbine Description: In improved grassland in Cleggan estate on a S facing slope of a hill. This is the well preserved remains of an unusual rath. The markedly dished interior is U-shaped and stands considerably above the surrounding land. It is enclosed by three banks and two ditches, except from NE-E-SE where the river may have formed the defences. There are no visible indications of structures or of an original entrance. See SM7 file for detailed	
Assessment of significance	description and measurements. Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Modest, elements of original construction are still legible, but no complex architectural structures noted.	No effect on ability to appreciate architectural 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.
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.
Artistic interest:	None known	No effect.
Setting and views:	The rath is located adjacent to the Cleggan River, and was clearly located here to take advantage of this watercourse. The rath is located within an area of dense woodland, meaning that no meaningful appreciation of its archaeological interest is possible from the wider area. Likewise, views out from the rath are limited due to the presence of the wood.	The proposed development would be largely screened and distant from the immediate setting of the fort. The proposed turbines could be theoretically visible from the immediate setting of the rath, however, the presence of the mature woodland surrounding the monument 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 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: Cashel and Souterrain Designation: SAM Reference: ANT 034:013	
Description:	Distance: 4.2km S from nearest turbine Description: Blackthorn, scrub and grass in interior. Cattle trampling in entrance and interior. Walls well maintained by owner. No lazy beds seen in interior. Large stone in interior said by owner to block entrance to souterrain. Small circular stone walls and slight hollow on top surface of wall made by children playing. Has also been called Groman's Tomb, after a man who was murdered near here in AD 1780.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Modest, surviving structural elements, but no complex architectural structures noted.	No effect on ability to appreciate architectural interest.
Historic interest:	Moderate, remains of souterrain provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
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.
Artistic interest:	None known	No effect.
Setting and views:	The cashel and souterrain are located on elevated ground in a pasture field. While the location is prominent, the monument is overgrown, and there is no meaningful appreciation of the archaeological interest of the monument from the wider area. The small walls and entrance to the monument are discernible at close quarters.	Modelling suggests that the turbines would be visible in the distance when looking north from the monument. However, the entrance to the monument is from the north, and so the presence of the turbines would not affect the experience of the entrance. Also, the souterrain is a below ground feature, and so the addition of the proposed development more than 4km to the north would not affect appreciation of its archaeological interest.
Importance:	High: Scheduled 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: Enclosure & field system - Buckna Designation: SAM Reference: ANT 034:035	
Description:	Distance: 5.42km S from nearest turbine Description: This is a Ballyutoag type field system and requires mapping. The site was identified from APs. It showed up as upstanding banks forming an enclosure, associated field system and possible hut sites. Situated on a rough hill slope, which rises a little to a NW-SE running ridge at the SW, and falls to the S and E. Views to the S and SE are very good. The land rises again beyond a small valley to the E. A.P.s showed a field system and enclosures formed by upstanding banks, with small circular features in the area. A series of field banks, enclosures and hut circles were identified on the ground. These generally consist of low, grassy banks 0.3-0.5m high, and of varying width, but average width is about 2.0m.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Modest, surviving structural elements, but no complex architectural structures noted.	No effect on ability to appreciate architectural interest.
Historic interest:	Moderate, remains of the field systems provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
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.
Artistic interest:	None known	No effect.
Setting and views:	The enclosure and field system is situated on the south-facing hillside, and can be appreciated from the Carnalbanagh Road, from the south. The character of the setting is rural, exemplified by views towards the S and SE from the monument, which provide expansive views across a rural landscape, which includes other scheduled enclosures (ANT 034:037), with which the monument has group value.	Modelling suggests that the turbines would be visible in the distance when looking north from the northernmost part of the monument. However, the views would mostly consist of the upper sweep of the turbines, at a considerable distance. This would not affect the appreciation of the monument provided from the Carnalbanagh Road, nor views to the south, nor would it materially alter the rural character of this setting, or its group value. As such, it is considered that the turbines would not materially affect the experience of the monument, due to the distance between them.
Importance:	High: Scheduled 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: Giant's Grave Designation: SAM Reference: ANT 029:019	
Description:	Distance: 6.7km SE from nearest turbine Description: This tomb is quite well preserved and is orientated SW. The outer walling of individual orthostats is fairly complete at sides and rear. The gallery is divided by a sill and is filled with collapse and grassed over. One lintel survives at the back of the gallery.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
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.
Historic interest:	Moderate, remains of tomb provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
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.
Artistic interest:	None known.	No effect.
Setting and views:	The monument is overgrown and from a distance its archaeological and architectural interest are not readily discernible. However, at close quarters the good preservation of the remains is evident as is its orientation, aligned SW-NE, which would have been a key part of experiencing the asset in the past as well as the present.	The proposed wind turbines would be potentially visible in the far 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 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. There would be a small change to the wider setting of the tomb, but not one that would affect understanding or appreciation of the tomb's archaeological or architectural interest. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Schirich, St. Patrick's Footmark Designation: SAM Reference: ANT 033:012	
Description:	Distance: 6.9km SW from nearest turbine Description: The church as it stands is of uncertain date, perhaps late or post medieval, built in the 16th or 17th centuries. The adjoining graveyard has many stones dating from the late 18th century. The hilltop setting has traces of other earthworks and marks in a rock known locally as 'St Patrick's Footmark'. These together are indicators of much earlier ecclesiastical activity.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Moderate, some survival of church building and associated structures.	No effect.
Historic interest:	High, remains of church and graveyard provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
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.
Artistic interest:	None known.	No effect.
Setting and views:	The above ground remains of the monument survive, although mostly as walls and traces of associated earthworks. The church is situated at the summit of Skerry Rock, a steep sided outcrop with commanding views to the S across the Braid Valley. The hilltop has a number of trees surrounding the monument. The condition of the monument and presence of the trees means that the experience of the monument from the surrounding area is limited. There are views out from the church to the surrounding area, in particular to the south as is noted in the description.	Modelling suggests that the upper sweep of four of the proposed turbines would be partially visible when looking north from the church. However, in practice the views to the north from the church are screened by trees present in the immediate setting of the monument. Furthermore, the key strategic view from the monument is to the S across the Braid Valley. Given this, and also the considerable distance of the church from the study site, it is considered that in practice the turbines would not be discernible, and would not materially affect the experience of the church.
Importance:	High: Scheduled 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 church. There would be a small, distant change to its wider setting, but not one that would affect understanding or appreciation of the church's archaeological or architectural interest. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: The Swine Craes Designation: SAM Reference: ANT 033:021/22	
Description:	Distance: 7km SW from nearest turbine Description: In damp rough grazing and improved grassland at the E end of an eminence on a N facing slope of Slemish Mountain. This poorly preserved, roughly circular cairn is	
	designated 'Rath' on the current IG. The cairn has been very badly damaged by quarrying which extends from N towards the centre and which has greatly reduced the height of the mound except at E, where it may survive to its original height. This enclosure is traditionally where St Patrick herded swine at night. It comprises a U-shaped section of stony bank from SW-N-S which is adjoined from S-SW by a modern field boundary. This modern field boundary may incorporate the enclosure bank.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Limited, some remains of the ring around the perimeter survive, providing some evidence of pervious construction.	No effect on ability to appreciate architectural interest.
Historic interest:	Moderate, remains of cairn provide appreciation of early cultural and lived experience. The enclosures have high historic interest due to their association with St Patrick.	No effect on ability to appreciate historic interest.
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.
Artistic interest:	None known.	No effect.
Setting and views:	The cairn has been heavily degraded, and as such it is not readily discernible from the wider landscape. However, the alignment of the historic field boundaries can be appreciated within the monument. Views out from the monument are dominated by Slemish Mountain.	Modelling suggests that the proposed development would be visible from the monument. However, in practice the turbines will be very distant, and not readily discernible, as is the case with other wind generation schemes already present in the landscape.
Importance:	High: Scheduled 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. There would be a small, distant change to its wider setting, but not one that would affect understanding or appreciation of the monument's archaeological or architectural interest. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Ring Barrow Designation: SAM Re	ference: ANT 034:022
Description:	Distance: 7.2km S from nearest turbine Description: Situated on a N/S gravel ridge, with a quarry close by across a fence to N and S. This ring barrow, identified from APs, consists of a bank 20.5m in diameter and 3m wide, with an internal ditch, 4m wide x 0.5m deep, surrounding a central mound, which stands 0.8m above the ditch.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Limited, some remains of the mound survive, providing some evidence of pervious construction.	No effect on ability to appreciate architectural interest.
Historic interest:	Moderate, remains of barrow provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Archaeological interest:	High, below ground 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.
Artistic interest:	None known.	No effect.
Setting and views:	The while the barrow is well-preserved, with a surviving central mound, it has been subject to ploughing during the late 20 th and early 21 st centuries, and the earthwork remains are relatively modest. As such, there is limited experience of the barrow from the surrounding area. The landscape around the barrow is rural in character, consisting of rural fields, farm buildings and occasional wind turbines. The barrows are located on a west-facing slope, and were positioned to have views across the Owencloughy Valley.	Modelling suggests that the proposed development would be visible from the monument. However, in practice the barrow would be screened by a small topographic rise immediately to the north, together with planting along the Drumcrow Road. Finally, the view would consist of the upper sweep of the turbines, at a distance of more than 7km. As such, it is considered that the turbines would not materially affect the experience of the barrow, due to the distance between them, and also the presence of intervening landscape features.
Importance:	High: Scheduled 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. There would be a small, distant change to its wider setting, but not one that would affect understanding or appreciation of the monument's archaeological or architectural interest. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Ring Barrow Designation: SAM Reference: ANT 034:021	
Description:	Distance: 7.5km S from nearest turbine Description: This ring barrow was identified from APs as a small circular bank, some 15m in diamet with an internal ditch. A brief inspection in 1982 showed that the barrow was reasonably well preserved. This recorded the bank around the barrow surviving as high as 0.45m above the ditch at the southern end of the monument, with lesser survival elsewhere.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Limited, some remains of the mound survive, providing some evidence of pervious construction.	No effect on ability to appreciate architectural interest.
Historic interest:	Moderate, remains of barrow provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
Archaeological interest:	High, below ground 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.
Artistic interest:	None known.	No effect.
Setting and views:	The while the barrow is well-preserved, with a surviving central mound, it has been subject to ploughing during the late 20 th and early 21 st centuries, and the earthwork remains are relatively modest, and may have been degraded further since the time of the site visit in the 1980s, and the subsequent visit undertaken in 2002. As such, there is limited experience of the barrow from the surrounding area. The landscape around the barrow is rural in character, consisting of rural fields, farm buildings and occasional wind turbines. The barrows are located on a west-facing slope, and has views across the Owencloughy Valley.	Modelling suggests that the proposed development would be visible from the monument. However, any views would consist of the upper sweep of the turbines, at a distance of more than 7km. Furthermore, the presence of the turbines would not affect the appreciation of the strategic positioning of the barrows in the landscape, nor would it materially alter the rural character of their setting. As such, it is considered that the turbines would not materially affect the experience of the barrow, due to the distance between them, and also the presence of intervening landscape features.
Importance:	High: Scheduled 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. There would be a small, distant change to its wider setting, but not one that would affect understanding or appreciation of the monument's archaeological or architectural interest. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Ring Cairn on Slemish Designation:	SAM Reference: ANT 033:023
Description:	Distance: 8km SW from nearest turbine Description:	
	In damp rough grazing on the narrow summit of Slemish Mountain. This very poorly preserved ring cairn was first reported by Mogey. The remains of a cairn enclosed by a ditch itself encircled by an outer bank survive in an arc from SW-W-NW. Elsewhere the site has been very badly damaged with the bedrock exposed at the dished and denuded centre and also at N where there are the remains of many recent fires. A triangulation pillar has been erected at the centre of the cairn.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Limited, some remains of the ring around the perimeter survive, providing some evidence of pervious construction.	No effect on ability to appreciate architectural interest.
Historic interest:	Moderate, remains of cairn provide appreciation of early cultural and lived experience. Slemish mountain is also the legendary home of St Patrick, however this association is not relevant to the cairn.	No effect on ability to appreciate historic interest.
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.
Artistic interest:	None known.	No effect.
Setting and views:	The cairn has been heavily degraded, and as such it is not readily discernible from the wider landscape.	Modelling suggests that the proposed development would be visible from the monument.
	It is, however, located atop Slemish Mountain, and so enjoys commanding views across the surrounding landscape. The surrounding landscape is varied, and includes a number of more recent elements, such as existing wind farms, as well as field systems and settlements that post-date the cairn.	However, in practice the turbines will be very distant, and not readily discernible, as is the case with other wind generation schemes already present in the landscape. Furthermore, the proposed turbines would not affect the appreciation of the strategic placement of the cairn, nor of the views of the surrounding landscape.
Importance:	High: Scheduled 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. There would be a small, distant change to its wider setting, but not one that would affect understanding or appreciation of the monument's archaeological or architectural interest. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: 17 th century/Neolithic settlement D	esignation: SAM Reference: ANT 034:054
Description:	Distance: 8.7km SE from nearest turbine Description: An area W of Loughdoo Road is laid out in broad cultivation ridges. The cultivation was found to date to the 17 th century and overlay Neolithic occupation which had been largely destroyed by the later cultivation. An intact bronze age round cairn was fully excavated and no longer exists.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Limited, available evidence suggests survival of any structural elements is either limited or non-existent.	No effect on ability to appreciate architectural interest.
Historic interest:	Moderate, remains provide evidence of multi-period use of an area over millennia.	No effect on ability to appreciate historic interest.
Archaeological interest:	High/Moderate, preservation is of 17 th century agricultural remains is good, but earlier remains have been largely destroyed and there is limited survival.	No effect on archaeological evidence, or on ability to appreciate archaeological interest.
Artistic interest:	None known.	No effect.
Setting and views:	The later, 17 th cultivation remains of the monument survive and can be appreciated within the scheduled area, as well as from the adjacent Loughdoo Road. The earlier remains cannot be appreciated from the setting of the monument, due to their poor survival. The surrounding rural setting contributes to the appreciation of the 17 th century cultivation remains by providing a context sympathetic with the monument's historic use.	The proposed wind turbines would be theoretically visible in the wider area, and so would change the setting of the monument. However, they would be at a distance of nearly 9km, and so the presence of the turbines would not interfere with the appreciation of the archaeological and historic interest provided by the setting of the monument, and would not detract from the rural character of the nearby fields. Therefore while the turbines may be theoretically visible in the wider area, in practice they would not be discernible nor affect how the setting contributes to the significance of the monument.
Importance:	High: Scheduled 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. There would be a small, distant change to its wider setting, but not one that would affect understanding or appreciation of the monument's archaeological or architectural interest. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Cross-incised boulder: Penal altar Designation: SAM Reference: ANT 035:001	
Description:	Distance: 8.75km SE from nearest turbine Description: Not a church site, no traditions of such. Polygonal flat topped basalt boulder 2ft 4ins high, with Latin cross on top and on N face. Very rough irregular work, may be recent (Hamlin, 1976) i.e. Penal. Confusion over name: `The Priest's Grave' (O'Laverty) `The Headless Cross' (OS Mem) and locally called `The Mass Rock'.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	None known	No effect on ability to appreciate architectural interest.
Historic interest:	Moderate, stone could provide evidence of Post-Medieval values and life.	No effect on ability to appreciate historic interest.
Archaeological interest:	High, preservation of the stone is good, with inscription legible. It is unknown whether there is additional buried evidence of interest as well.	No effect on archaeological evidence, or on ability to appreciate archaeological interest.
Artistic interest:	High, inscribed cross is an example of local Post-Medieval art.	No effect.
Setting and views:	The stone is situated on the southern slope of a hill, set among pastureland. The inscribed cross is on the top and northern face of the stone. The stone is not readily discernible from the surrounding area, and appreciation of its archaeological and artistic interest is only possible at close range. The surrounding landscape therefore does not provide a means of appreciating the heritage values of the stone.	The proposed wind turbines would be theoretically visible in the wider area, and so would change the setting of the monument. However, they would be at a distance of nearly 9km, and so the presence of the turbines would not interfere with the appreciation of the archaeological and historic interest provided by the setting of the monument, and would not detract from the rural character of the nearby fields. Therefore while the turbines may be theoretically visible in the wider area, in practice they would not be discernible nor affect how the setting contributes to the significance of the monument.
Importance:	High: Scheduled 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. There would be a small, distant change to its wider setting, but not one that would affect understanding or appreciation of the monument's archaeological or architectural interest. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Wedge tomb: Giant's Grave Designation: SAM Reference: ANT 035:002	
Description:	Distance: 8.75km SE from nearest turbine Description: Situated on a little eminence on a W slope. This is a well-preserved wedge tomb set within an oval cairn aligned NE-SW. An ante chamber is formed by two sidestones and a tall septal, behind which is an undifferentiated gallery with five stones on N side and five on S side. One roof slab lies fallen and overlies the septal stone. Outer walling is well preserved at N where ten substantial boulders lie almost contiguously. On S side six stones are just visible.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
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.
Historic interest:	Moderate, remains of tomb provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
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.
Artistic interest:	None known.	No effect.
Setting and views:	The wedge tomb is orientated SW to NE, and has an antechamber situated at the entrance at the south-western end of the grave. Therefore while the grave was clearly designed to look out towards the falling topography towards the west, the approach from the west towards the entrance is also important to understanding and appreciating the archaeological, architectural and historic interest of the tomb.	The proposed wind turbines would be theoretically visible in the wider area, and so would change the setting of the monument. However, they would be at a distance of nearly 9km, and so the presence of 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. Therefore, while the turbines may be theoretically visible in the wider area, in practice they would not be discernible nor affect how the setting contributes to the significance of the monument.
Importance:	High: Scheduled 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. There would be a small, distant change to its wider setting, but not one that would affect understanding or appreciation of the monument's archaeological or architectural interest. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Lindford Earthworks Designation: SAM Reference: ANT 035:004	
Description:	Distance: 9.8km SE from nearest turbine Description: These two earthworks are set immediately to W of steep slope down to coastal plain. Ground relatively flat to W, rises to N. The more northerly earthwork consists of a circular bank, internal ditch and central platform. An entrance 2.0m wide leads through the bank at E. The southerly earthwork similarly consists of a bank, internal ditch and central platform.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Moderate, earthwork remains survive, providing evidence of pervious construction.	No effect on ability to appreciate architectural interest.
Historic interest:	Moderate, remains of potential barrows provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
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.
Artistic interest:	None known.	No effect.
Setting and views:	As is noted in the description provided by the HERONI, the Linford Earthworks are set on an area of elevated ground on the south-facing side of a valley, providing commanding views to the south and east toward Knockdhu fort and the sea, and have a contextual association with the scheduled cairn to the north (ANT 35:003). The cairn can be experienced best within the scheduled area, from the nearby carpark, and along a stretch of the Ulster Way, which runs close by and provides an experience of the surviving ring around the cairn. Some views of the cairn are also afforded from the Ulster Way, from the south, although the archaeological and architectural interest of the cairn is not readily appreciated at this distance.	Modelling suggests that the proposed wind turbines would be theoretically visible in the wider area, and so would change the setting of the monument. However, they would be at a distance of nearly 10km, and so the presence of the turbines would not interfere with the appreciation of the archaeological and historic interest provided by the setting of the monument. Therefore, while the turbines may be theoretically visible in the wider area, in practice they would not be discernible nor affect how the setting contributes to the significance of the monument.
Importance:	High: Scheduled 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. There would be a small, distant change to its wider setting, but not one that would affect understanding or appreciation of the monument's archaeological or architectural interest. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Megalith Tomb; poss. Court Tomb [Designation: SAM Reference: ANT 035:030
Description:	Distance: 8.44km SE from nearest turbine Description: Set in rough pasture on a localized eminence. Monument consists of a ruinous long cairn c 19m long x 12m across E (front) end x 6m wide at W, with a trace of revetment 0.5m high. Several large stones visible although not in situ. Remains suggest a ruined entrance to E, with one portal stone at N with displaced capstone resting on it. Two sidestones apparently in situ at N. Long cairn and few stones in situ suggest that this is a ruined court tomb.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Modest, earth and stone elements of original construction are present, but legibility is reduced by past impacts.	No effect on ability to appreciate architectural interest.
Historic interest:	Moderate, remains of tomb provide appreciation of early cultural and lived experience.	No effect on ability to appreciate historic interest.
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.
Artistic interest:	None known.	No effect.
Setting and views:	The monument is legible and its orientation can be appreciated at present. The tomb is orientated E to W, with the opening to the tomb on the eastern side, where a chamber was present, which narrows to the west. As such the key view of the tomb is looking into the "court" entrance, towards the burial chambers, looking west, which is a commanding prospect across the valley. The placement of the tomb, on an elevated area on the west facing slope of Craigy Hill, lends weight to the key view being westwards. This view is key to appreciation of the monument's archaeological interest. The vicinity provides a good appreciation of the tomb's archaeological interest as well.	The proposed wind turbines would be theoretically visible in the wider area, and so would change the setting of the monument. However, they would be at a distance of nearly 9km, and so the presence of 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 tomb. Therefore, while the turbines may be theoretically visible in the wider area, in practice they would not be discernible nor affect how the setting contributes to the significance of the monument.
Importance:	High: Scheduled 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. There would be a small, distant change to its wider setting, but not one that would affect understanding or appreciation of the monument's archaeological or architectural interest. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Standing Stone Designation: SAM Reference: ANT 035:031	
Description:	Distance: 9.56km SE from nearest turbine Description: The 'monument' consists of a massive basalt block set on high ground. Area is rough sheep grazing terrain. The stone measures 2m high x 1.9m N/S x 0.85m E/W. There must be some doubt if this is an antiquity. It appears very large and natural looking.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	None known.	No effect on ability to appreciate architectural interest.
Historic interest:	Moderate/unknown, "standing stone" may provide appreciation of early use of landscape and demarcation of space.	No effect on ability to appreciate historic interest.
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.
Artistic interest:	None known.	No effect.
Setting and views:	The standing stone is set on the southwestern facing slope of a hill, with commanding views to the west, southwest and south. While there is some doubt expressed in the HERONI about the origin of the stone, it is interesting that it is located close to a series of potential and known holloways to the south within the ASAI (Hodges 1975), and may have served as a marker even if naturally occurring rather than deliberately erected. The stone is locally prominent, and is visible from the near vicinity.	The proposed wind turbines would be theoretically visible in the wider area, and so would change the setting of the monument. However, they would be at a distance of nearly 9km, and so the presence of the turbines would not interfere with the appreciation of the archaeological and historic interest provided by the setting of the monument. Therefore, while the turbines may be theoretically visible in the wider area, in practice they would not be discernible nor affect how the setting contributes to the significance of the monument.
Importance:	High: Scheduled 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. There would be a small, distant change to its wider setting, but not one that would affect understanding or appreciation of the monument's archaeological or architectural interest. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: LURIGETHAN Designation: SAM Reference: ANT 020:008	
Description:	Distance: 7.6km SE from nearest turbine Description: Situated on high ground used as grazing for sheep. An inland promontory cut off from the mainland by a series of banks. Six banks are visible in places, with a gap c 5m wide as recorded in PSAMNI. In places the banks appear to merge into one another so that only four banks are obvious at times. Six banks are plainly visible in the area just to S of the NE/SW townland boundary.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Moderate, the surviving banks which enclose the promontory are surviving built elements from the construction and use of the fort.	No effect on ability to appreciate architectural interest.
Historic interest:	Moderate, both standing and buried remains provide appreciation of early cultural and lived experience, and on historic settlement in the locality through time.	No effect on ability to appreciate historic interest.
Archaeological interest:	High, preservation is good, with banks still surviving.	No effect on archaeological evidence, or on ability to appreciate archaeological interest.
Artistic interest:	None known.	No effect.
Setting and views:	Views from within the fort provide understanding of its strategic positioning and defensive capabilities, evidenced by the commanding views provided across the wider landscape, with views far along the coast and out to sea. Views of the fort from the wider area primarily provide views of the promontory as a topographic feature, although it is possible to see the banks when approaching the fort on public footpaths nearby. This reinforces understanding of the prominence of the fort and its central role in local life over millennia.	The proposed turbines would be almost entirely screened from the fort by intervening topography. Modelling suggests that it is possible that the blade tips from 2 to 3 turbines could be theoretically visible from the southern part of the monument. However, in practice this limited view over a distance of nearly 10km means that the turbines would not be discernible, nor would they affect the current experience of the fort.
Importance:	High: Scheduled 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. There would be a very small change to the wider setting of the fort, but not one that would affect understanding or appreciation of the fort's archaeological or architectural interest. On this basis this effect is not considered to be a significant effect.	



Areas of Significant Archaeological Interest (ASAIs)

Heritage Asset:	Name: Knockdhu Designation: ASAI Reference: N/A	
Description:	Distance: 9.8km N from nearest turbine Description: The Knockdhu ASAI is a designation covering a sizable area (approximately 650 ha. The ASAI is centred on a valley, the alignment of which runs close to the route of the Feystown Road, which runs roughly east-west through the centre of the ASAI, before turning north and forming the western boundary. The ASAI is dominated by the prominent hills in the east of the area, in particular the promontory hill of Knock Dhu in the south-eastern part of the ASAI.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Moderate, the ASAI contains areas with surviving built elements, such as the triple rampart at Knockdhu Fort, and the cairn and barrows in the centre of the area.	No effect on ability to appreciate architectural interest.
Historic interest:	Moderate, both standing and buried remains provide appreciation of early cultural and lived experience, and on historic settlement in the locality through time.	No effect on ability to appreciate historic interest.
Archaeological interest:	High, preservation is good, and aerial photographic and lidar analysis shown a number of additional archaeological features in the ASAI, which will contain associated artefactual and environmental evidence of high research value.	No effect on archaeological evidence, or on ability to appreciate archaeological interest.
Artistic interest:	None known.	No effect.
Setting and views:	The key views within the ASAI are largely confined to the designated area, which is designed to include many features and their environs. Within the ASAI a number of features are visible and a key means of experiencing these is from the car park, which provides key views of the Knock Dhu Fort and the Irish Sea, and from the Ulster Way, which allows a good prospect of the Fort's ramparts in the south of the ASAI and runs past a number of features, including the scheduled earthworks and cairn in the centre of the ASAI, before climbing up the hills and moving north along the ridge. The ASAI is more difficult to experience from further afield, as the features it contains mostly comprise earthworks and megaliths which are difficult to pinpoint from a distance. The exception to this is the Knock Dhu Fort, which is topographically prominent with views afforded from the east, with views of the ramparts limited to those from the Ulster Way.	The proposed wind turbines would be theoretically visible in the wider area, and so would change the setting of the monument. However, they would be at a distance of between 7km and 9km, and so the presence of the turbines would not interfere with the appreciation of the archaeological and historic interest provided within the ASAI. Furthermore, key monuments within the ASAI have also been individually assessed and it has been found that the proposed development would have no more than a negligible effect on their significance. Therefore, while the turbines may be theoretically visible in the wider area, in practice they would not be discernible nor affect how the setting contributes to the significance of the ASAI.



Heritage Asset:	Name: Knockdhu Designation: ASAI Reference: N/A	
Importance:	High: Area of Significant Archaeological Interest.	The proposed development would not result in any loss to the level of importance of the ASAI.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables Significance of effect (Table 4): Neutral Comments: The proposed development would not affect of the ASAI. There would be a very small chaone that would affect understanding or apprinterest. On this basis this effect is not considered to	t any of the key elements of the significance nge to the wider setting of the ASAI, but not reciation of the ASAI's archaeological

Listed Buildings

Heritage Asset:	Name: House at 53 Deerpark Road Designation: Grade B+ Reference: HB06/02/082	
Description:	Distance: 5.98km SE from nearest turbine Description: Two storey vernacular farm house of c.1840s-50s, with projecting gabled single storey porch and a long (attached) lean-to outbuilding. The house, which is now largely abandoned, forms part of a group of farm buildings at the end of a long (170m) farm lane, to the W side of the Deerpark Road, roughly 5 miles S of Glenarm. The front elevation faces approximately N and is roughly symmetrical.	
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 E. Spatial Organisation H Alterations detracting from building I. Quality and survival of Interior J. Setting (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	Z. Rarity X. Local Interest (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	Modest, vicinity of the house may have some buried remains which add to understanding of the significance of the house.	No effect on archaeological evidence, or on ability to appreciate archaeological interest.
Artistic interest:	None known.	No effect.
Setting and views:	The list description notes that the farmhouse is situated with a group of farm buildings within a farmstead, which comprises the immediate setting of the farmhouse. The farmstead is surrounded by rural fields. The immediate setting provides the best experience of the farmhouses' architectural interest, and the group value it has with the nearby farm buildings. 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.	The proposed development would be potentially visible in the distance from the immediate setting of the farmhouse. However, the farmhouse is surrounded by farm buildings, and there are also several buildings and areas of vegetation in the intervening landscape, including a mature hedgerow to the northwest of the house, such that they are unlikely to be particularly noticeable. Finally, the proposed development would not affect the appreciation of the farmhouse provided by the wider rural setting. Therefore, the proposed development may be potentially visible in the distance, it would not affect the integrity of the setting of the farmhouse.
Importance:	High: Grade B+ Listed building.	The proposed development would not result in any loss to the level of importance of the building.
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 building, or its setting. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Lemnalary House Designation: Grade B+ Reference: HB06/01/020	
Description:	Distance: 3.77km NE from nearest turbine Description: A two-storey five-bay house with attics and basement, with rendered walls and slated roof. Main entrance faces east. East elevation: Roof of Bangor blue slates in regular courses, with a later metal flashing folded down over the verge to the south gable. Two chimneys, rendered as main walls, with modern red pots. Walls rendered with a wet dash of crushed stones, with a projecting plinth similarly rendered but with sandstone weatherings; moulded sandstone cornice. Rendering is now new and uniform, over previous harled finish which had spalled to reveal some rubble stonework in patches as well as brickwork of lintels and chimneys.	
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 (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	X. Local Interest (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	Modest, vicinity of the house may have some buried remains which add to understanding of the significance of the house.	No effect on archaeological evidence, or on ability to appreciate archaeological interest.
Artistic interest:	None known.	No effect.
Setting and views:	The list description notes that the farmhouse is situated on an elevated location with distant views to the sea, to the east. The farmstead is surrounded by rural fields, and ruinous walls are present to the rear, which date to the 17 th century construction of the house. The immediate setting provides the best experience of the farmhouses' architectural interest, and the group value it has with the nearby farm building and walls. 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.	The turbines would not affect the key views from the house towards the sea to the east. The upper sweep of a couple of the turbines would be potentially visible in the distance from the immediate setting of the house. However, several buildings and areas of vegetation are present in the intervening landscape, such that they are unlikely to be particularly noticeable. 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.
Importance:	High: Grade B+ Listed building.	The proposed development would not result in any loss to the level of importance of the building.
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): Minor Adverse Comments: The proposed development would not affect any of the 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: Cleggan Lodge Designation: Grade B Reference: HB07/05/006	
Description:	Distance: 3.5km SW from nearest turbine Description: Two Storey Hunting Lodge built in the orné style and is prettily situated and surrounded by plantations of a considerable extent. The house dates to 1830.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Architectural interest is derived from the distinctive orné style cottage style of the lodge, set in a considerable plantation.	No effect on ability to appreciate architectural interest.
Historic interest:	Local Interest due to association with Earl O'Neill, who used this as his hunting lodge.	No effect on ability to appreciate historic interest.
Archaeological interest:	Low: no known archaeological interest.	No effect on archaeological evidence, or on ability to appreciate archaeological interest.
Artistic interest:	None known.	No effect.
Setting and views:	The lodge is located within a sizeable plantation, with numerous areas of woodland and parkland throughout. This reinforces understanding and appreciation of the lodge's historic function as a hunting lodge. The Northern Ireland inventory of historic gardens notes that the lodge also has a good prospect of Slemish, to the south. Sizeable woodland is present to the east of the lodge.	The turbines would theoretically be visible from the immediate setting of the house, however in practice the turbines would be completely screened by the presence of the substantive wood immediately to the east of lodge, meaning that they would not materially affect the setting or significance of the lodge.
Importance:	Medium: Grade B Listed building.	The proposed development would not result in any loss to the level of importance of the building.
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 building, or its setting. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Bridge and Steps Harbour Rd Design	nation: Grade B1 Reference: HB06/01/011
Description:	Distance: 2.85km NE from nearest turbine Description: A segmental arched masonry bridge over the main roadway, originally carrying a railway but now a pedestrian way, incorporating a smaller and lower segmental archway to one end spanning the pavement, and a rectangular tower and flight of exterior steps to the other end. It is of special historic interest as an important element in the industrial development of the village, and has group value with other nearby historic buildings.	
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 K. Group value (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	V. Authorship X. Local Interest Y. Social, Cultural or Economic Importance (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	Low: no known archaeological interest.	No effect on archaeological evidence, or on ability to appreciate archaeological interest.
Artistic interest:	None known.	No effect.
Setting and views:	The list description notes that the bridge stands in the main street of the town built between the gables of an adjoining terrace house on the south side at the west end (HB06/01/010A) and the former town hall at the north side (HB06/01/012) with the tower of the town hall also built against it and rising above it. The carriageway, now with the original railway tracks removed and replaced by a pedestrian path, continues to the east to an elevated grassed area above the harbour. Views along the carriageway provide an appreciation of the architectural interest and group value of the bridge. Views from the bridge provide an elevated view of the sea and along the frontages of the historic buildings to the north and south.	The proposed development would not affect views of the bridge from along the carriageway, which are enclosed by the historic buildings to the west. As such the turbines would not affect appreciation of the bridge's architectural interest. The turbines would also not affect appreciation of the group value of the bridge which is provided when crossing over the carriageway, although the upper sweep of two turbines may be visible behind the settlement in the distance.
Importance:	Medium: Grade B1 Listed building.	The proposed development would not result in any loss to the level of importance of the bridge.
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 bridge, 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: Main quay, N & S pier Designation: Grade B1 Reference: HB06/01/034	
Description:	Distance: 2.9km NE from nearest turbine Description: A harbour constructed mainly of limestone rubble, with some basalt rubble also used, comprising an inner basin and an outer basin, lined by substantial quays, with a concrete slipway at the north end, and a crescent shaped landing station with steps constructed in limestone on the main quay. This is a mid-19th century harbour of sound construction and attractive appearance which occupies a pleasant coastal setting. It is of considerable local historical interest due to its role in the 19th century industrial development of the village and is of considerable social importance as a local amenity.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	D. Plan Form J. Setting K. Group value (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	Y. Social, Cultural or Economic Importance V. Authorship X. Local Interest (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	Low: no known archaeological interest.	No effect on archaeological evidence, or on ability to appreciate archaeological interest.
Artistic interest:	None known.	No effect.
Setting and views:	The harbour is located at the northern end of the village. The key association of the harbour is with the sea, and views are also afforded to the historic properties along the Harbour Road, with which the harbour has a historic association.	The upper sweep of two turbines may be visible in some views from the harbour and the vicinity, located behind the settlement in the distance. The proposed development would not affect the legibility of the association of the harbour with the sea, nor views within the harbour itself. These views of the turbines would not affect appreciation of the group value of the harbour with the historic buildings in the historic core of Carnlough, which is provided by views along the carriageway.
Importance:	Medium: Grade B1 Listed building.	The proposed development would not result in any loss to the level of importance of the harbour.
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 harbour, 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: St Mary's C of I Church Designation: Grade B1 Reference: HB06/01/021	
Description:	Distance: 4.2km NE from nearest turbine Description: A church built in 1837 in a Neo-Norman style, of masonry construction, consisting of a nave, small chancel, entrance tower, and robing room. The church is aligned north to south with the main entrance facing west. This is an early 19th century church in a Neo-Norman style which retains original features and enjoys an unspoiled rural setting.	
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 (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	X. Local Interest Y. Social, Cultural or Economic Importance V. Authorship (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	None known.	No effect on archaeological evidence
Artistic interest:	None known.	No effect.
Setting and views:	The church stands in a very rural area, facing the main road but set back from it within its own grounds, with distant views toward the sea. No memorials of special interest are present in the churchyard. The setting of the church consists of the experience provided within the churchyard, and adjacent Largy Road. The views from the Largy Road in provide a particularly good appreciation of the church's architectural interest, its context with the nearby churchyard, with the sea in the backdrop.	The turbines would be visible from the churchyard to the south 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:	Medium: Grade B1 listed building.	The proposed development would not result in any loss to the level of importance of the building.
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: Drumnasole House Lodge Designation: Grade B1 Reference: HB06/01/023	
Description:	Distance: 5.85km NE from nearest turbine Description: A single storey gate lodge of masonry construction and slated roofs, with a cast iron gatescreen adjacent. Main entrance front to lodge faces south; main entrance gateway faces east. Main entrance front is 3-bay with one window to each side of a central projecting entrance porch. A mid-Victorian gate lodge in an unusual style which, together with its associated gate screen, enjoys an unspoiled setting and provides an attractive and interesting feature on a scenic stretch of the Antrim Coast Road.	
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 H Alterations detracting from building J. Setting K. Group value (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	X. Local Interest (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	Low: no known archaeological interest.	No effect on archaeological evidence, or on ability to appreciate archaeological interest.
Artistic interest:	None known.	No effect.
Setting and views:	The group stands in a very rural location next to the main road with lodge set back slightly from the road within its own small grassed plot. Driveway surfaced with beach pebbles and crushed limestone. The garden of the lodge is closed off from the driveway by a new wire and wooden post fence, containing a new wooden post pedestrian gate of rustic design. Ground to inland side of lodge and to rear rises steeply, contained by a low dry stone retaining wall.	The turbines would theoretically be visible from the immediate setting of the lodge, however in practice the turbines would be completely screened by the presence of the substantive wood immediately to the south of the lodge, meaning that they would not materially affect the setting or significance of the lodge.
Importance:	Medium: Grade B1 Listed building.	The proposed development would not result in any loss to the level of importance of the building.
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 building, or its setting. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: St MacNissi's College Designation: Grade B1 Reference: HB06/01/027	
Heritage Asset: Description:	Distance: 8km NE from nearest turbine Description: A A towered and crenellated building of masonry construction, in 'castle style' with parapet roofs, comprising a long two-storey central range with a conjoined three and four-storey tower group at one end, and a three-storey towered gatehouse wing returning forward at the other end. Main entrance faces south. A romantic but austere mid-19th century building in a picturesque 'castle style', originally a country house but now a school, with contributions by a number of prominent architects. It retains many of its original exterior features and its original general appearance to the front, as well as a number of original interior features. It enjoys a largely unspoiled setting and together with various original associated exterior elements, and a later college chapel it forms part of an important and attractive group.	
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 H Alterations detracting from building I. Quality and survival of Interior J. Setting K. Group value (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	V. Authorship Y. Social, Cultural or Economic Importance X. Local Interest (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	Low: no known archaeological interest.	No effect on archaeological evidence, or on ability to appreciate archaeological interest.
Artistic interest:	None known.	No effect.
Setting and views:	The building stands in a very rural and scenic area, on a headland above the Antrim Coast Road, with distant views over the sea to the east, and a steep wooded escarpment rising above it to the west. It stands well back from the main road within its own extensive grounds, approached by a tarmac driveway marked by a main entrance gateway with a gate lodge adjacent.	The tips of a few turbines would theoretically be visible from the immediate setting of the building, however in practice the turbines would be completely screened by the presence of the substantive wood immediately to the south of the building, meaning that they would not materially affect the setting or significance of the lodge.
Importance:	Medium: Grade B1 Listed building.	The proposed development would not result in any loss to the level of importance of the building.
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 building, or its setting. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: House near No 156 Ballymena Road Designation: Grade B2 Reference: HB06/01/055	
Description:	Distance: 2.2km SE from nearest turbine Description:	
	Two-storey vernacular farmhouse with byre and hay loft/store, of probable pre-1832 construction but which is likely to have assumed its present enlarged two-storey form in the early 1900s. This house is an interesting and largely original example of two-storey 'developed' vernacular which retains a certain degree of individuality due to its integral byre and loft, sturdy outside stair, and unusually located porch. The interior layout remains intact and most of the detailing survives and the setting has not been compromised. Once common, larger vernacular dwellings such as this are an increasingly scarce commodity.	
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 (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	X. Local Interest (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	Modest, vicinity of the house may have some buried remains which add to understanding of the significance of the house.	No effect on archaeological evidence, or on ability to appreciate archaeological interest.
Artistic interest:	None known.	No effect.
Setting and views:	Originally various outbuildings were attached to the house, enclosing a small farmyard. Some of these buildings have collapsed while others are in a state of advanced decay. To the immediate north there is a much later dwelling, now abandoned and entirely overgrown.	The proposed development would not affect key views from the house towards the Irish Sea to the east. Key views of the house would likewise not be materially affected, as the extent of its setting is limited by intervening vegetation and buildings.
	Main façade of the house faces east, towards the Irish Sea, following the local topography. Views of the house from the surrounding area are very limited due to the presence of trees and other buildings.	The turbines would be visible to the north from some parts of the setting of the house, which could lead to temporary distraction, but would not prevent or interfere with appreciation of the buildings special interest.
Importance:	Medium: Grade B2 Listed building.	The proposed development would not result in any loss to the level of importance of the building.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables 2 and 3): 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 building, and would only have a minor effect on the setting, which would not significantly affect appreciation. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: St John's School, Carnlough Designation: Grade B2 Reference: HB06/01/004	
Description:	Distance: 2.35km NE from nearest turbine Description: A single-storey T-shaped building with hipped roofs surmounted by a bell turret. Main front elevation faces south while there are twin entrances in the rear return facing to east and west. A Victorian school of distinctive proportioned style which retains most of its original exterior and interior features and its original character, but it has fallen into disrepair.	
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 H Alterations detracting from building I. Quality and survival of Interior (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	Y. Social, Cultural or Economic Importance X. Local Interest (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	None known.	No effect on archaeological evidence
Artistic interest:	None known.	No effect.
Setting and views:	The building stands within the built-up area of the town facing onto a lane off the main road but set back from it within its own grounds. The experience of the building is focussed on the immediate surroundings, including the grounds of the former school, and the nearby cemeteries. Views out from the former school building are focussed on the Drumourne Road, and towards the Irish Sea to the east.	The proposed development would not affect key views from the building towards the Irish Sea to the east. Key views of the building would likewise not be materially affected, as the extent of its setting is limited by intervening buildings. The tips of two of the turbines could be visible to the SE from some parts of the setting of the building, which may be noticeable, but would not prevent or interfere with appreciation of the
		buildings special interest.
Importance:	Medium: Grade B2 Listed building.	The proposed development would not result in any loss to the level of importance of the building.
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 building, and would only have a slight effect on the setting, which would not materially affect appreciation. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Lime Kiln, Carnlough Designation: Grade B2 Reference: HB06/01/015 B	
Description:	Distance: 2.82km NE from nearest turbine Description: This is a mid-19th century lime kiln of distinctive form and unusual structural system, of considerable local interest as a relic of the former industry of the village with added importance as this is now a rare survival of the type following the loss of other brick-flue kilns in the area. Together with the nearby bridges of the former mineral railway and the embankment to which it is attached it forms part of an interesting group.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	D. Plan Form F. Structural System K. Group value (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	X. Local Interest Z. Rarity (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	Moderate potential for associated buried remains nearby.	No effect on archaeological evidence
Artistic interest:	None known.	No effect.
Setting and views:	The structure stands in a walled yard in Herbert Street, and is built up against the north embankment of the former mineral railway and separated from the pedestrian path on the embankment by modern steel fencing along the path. The yard is surfaced in grass and contains derelict single storey sheds. Embankment walling to west of kiln structure is of limestone rubble with trees and overgrowth growing on top. Front boundary walling to yard is of basalt and limestone rubble, containing a pair of corrugated iron doors mounted between a rendered square pier and a roughly squared limestone rubble garage. A short distance to the east along the former railway embankment are the former railway bridges over High Street and Harbour Road	The setting of the structure is focussed on the yard in which it is situated, views of the flue from the adjacent footpath, where this is possible over the steel security fencing. In theory a few of the turbines would be visible from the vicinity of the former kiln, however in practice the setting of the kiln is very constrained and the turbines would not be noticeable, nor would their presence in the distance affect appreciation or understanding of the heritage interest of the structure.
Importance:	Medium: Grade B2 Listed building.	The proposed development would not result in any loss to the level of importance of the building.
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 kiln, and would not materially affect its setting, or significance. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Telephone Kiosk, Carnlough Designation: Grade B2 Reference: HB06/01/035	
Description:	Distance: 2.85km NE from nearest turbine Description: A telephone kiosk of K6 type, manufactured in cast-iron, with small-paned sides and door, glazed with perspex and a shallow domed roof. It stands in front of a former railway arch on the main street of the village. An example of a pre-war model of telephone kiosk which has been generally superseded by a modern type but which has been retained for some particularly sensitive or historic settings.	
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 (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	Z. Rarity V. Authorship X. Local Interest (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	None known.	No effect on archaeological evidence
Artistic interest:	None known.	No effect.
Setting and views:	The kiosk is located on the roadside, adjacent to the Bridge over Harbour Road (HB06/01/011), on the southern side of the bridge. The setting of the kiosk consists of the views along the Harbour Road, south of the bridge, in which its architectural and historic interest can be appreciated, as can its group value with the nearby listed bridge and historic buildings. The setting is constrained to the nearby stretch of the Harbour Road.	The setting of the kiosk is focussed on the roadside in which it is situated. The ZTV suggests that there could be some intervisibility between the kiosk and the proposed development, however the site visit confirmed that in practice the proposed development would be completely screened by intervening buildings. The proposed development would therefore have no effect on the setting of the kiosk.
Importance:	Medium: Grade B2 Listed building.	The proposed development would not result in any loss to the level of importance of the building.
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 significance or the setting of the kiosk. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: 58 High Street, Carnlough Designation: Grade B2 Reference: HB06/01/014	
Description:	Distance: 2.87km NE from nearest turbine Description: A two-storey gabled house comprising a long rectangular main block with a large two- storey half octagonal canted projection to the east containing the main entrance. This is a house which dates from at least as early as the 18th century which has lost some of its original features in the course of refurbishment, with a consequent loss of original architectural character, but it still stands as a structure of local historical 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 H Alterations detracting from building (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	X. Local Interest V. Authorship (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	None known.	No effect on archaeological evidence
Artistic interest:	None known.	No effect.
Setting and views:	The building stands within the built-up area of the village facing onto High Street; the doorway in the entrance bay opens directly onto the road, without pavement, but the main block is set back from it. To the rear is a roughly grassed plot with a yard area to the north side of the house, approached by a gateway between the north gable and the front boundary wall to the side yard area; a temporary tubular steel gate closes the opening. The setting of the building is limited to views of the building from the High Street and also from within its curtilage, from where its architectural and historic interest can be appreciated.	The setting of the house is focussed on the roadside and plot in which it is situated. 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 buildings. The proposed development would therefore have no effect on the setting of the house.
Importance:	Medium: Grade B2 Listed building.	The proposed development would not result in any loss to the level of importance of the building.
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 significance or the setting of the house. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Bridge, High Street, Carnlough Designation: Grade B2 Reference: HB06/01/015 A	
Description:	Distance: 2.83km NE from nearest turbine Description: A segmental arched masonry bridge over the roadway, originally carrying a railway but now a pedestrian way. Built of snecked white limestone rubble, with shaped voussoirs originally exposed but now obscured by later cement render to the extrados on each face of the arch. This is a mid-19th century bridge in a plain but clearly proportioned style, of local historical interest as an important element in the industrial development of the village. Together with the associated bridge to the east over Harbour Road and a lime kiln nearby to the west it forms part of an interesting group.	
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 D. Plan Form H Alterations detracting from building K. Group value (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	Y. Social, Cultural or Economic Importance V. Authorship X. Local Interest (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	None known.	No effect on archaeological evidence
Artistic interest:	None known.	No effect.
Setting and views:	The bridge stands within the built-up area of the village, spanning a street lined on both sides with terrace houses which adjoin three faces of the abutments; the exception is the south face on the east side where the abutment continues on eastwards beyond a modern corrugated metal gate as a retaining wall to the embankment, exposed for much of the length of the rear plot of a house in Harbour Road except where obscured by a modern lean-to garage. Views along the High Street provide an appreciation of the architectural interest and group value of the bridge. Views from atop of the bridge provide an elevated of the frontages of the historic buildings to the north and south.	The proposed development would not affect views of the bridge from along the carriageway, which are enclosed by the historic buildings on both sides. As such the turbines would not affect appreciation of the bridge's architectural interest. The turbines would also not affect appreciation of the group value of the bridge which is provided when crossing over the carriageway, although the upper sweep of two turbines may be visible behind the settlement in the distance.
Importance:	Medium: Grade B2 Listed building.	The proposed development would not result in any loss to the level of importance of the building.
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 bridge, 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: 30/32 Harbour Road, Carnlough Designation: Grade B2 Reference: HB06/01/010	
Description:	Distance: 2.8km NE from nearest turbine Description: A two-storey, three-bay building with a shop incorporated in part of the ground floor. Main entrance faces east. This is a mid-19th century building in a plain style which has lost some original features but together with other buildings in the terrace it makes a positive contribution to the essentially 19th century character of the main street of the village.	
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 H Alterations detracting from building (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	X. Local Interest (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	None known.	No effect on archaeological evidence
Artistic interest:	None known.	No effect.
Setting and views:	The building stands in the main street of the village, at one end of a terrace with a former railway bridge abutting it on the other side up to eaves level; small pedestrian archway over pavement and a telephone kiosk beside it both adjacent at front. At the rear there is a tarmac yard opening out to High Street. Lean-to garage in yard with rendered walls, corrugated iron roof and car-port. The key element of the setting of the house is provided by views from the Harbour Road, from which its architectural and historic interest can be appreciated, together with its group value with the nearby listed bridge and telephone kiosk. Views of the upper floor and roof of the house are also afforded from atop of the nearby listed bridge.	The proposed development would not affect key views from the building towards the Irish Sea to the east. Key views of the building would likewise not be materially affected, as the extent of its setting is limited by intervening buildings. The upper sweep of two to three of the turbines could be visible in the distance to the SE from in elevated views of the house from the nearby listed bridge. This would not affect appreciation of the building's architectural and historic interest, nor its group value. Furthermore the proposed development would not affect the key views of the house from the Harbour Road. As such, the turbines may be noticeable in the distance, but would not materially affect the integrity of the buildings setting.
Importance:	Medium: Grade B2 Listed building.	The proposed development would not result in any loss to the level of importance of the building.
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 building, and would only have a slight effect on the setting, which would not materially affect appreciation or significance. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: 26-28 Harbour Road, Carnlough Designation: Grade B2 Reference: HB06/01/009	
Description:	Distance: 2.78km NE from nearest turbine Description: A three-storey building, three windows wide, but not symmetrically arranged, with a lower two-storey wing to one side containing a vehicular entrance. Main entrance faces east. This is a mid-19th century building in a plain style which has lost some of its original features but together with other buildings in the terrace it makes a positive contribution to the essentially 19th century character of the main street of the village.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	A. Style H Alterations detracting from building K. Group value (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	Y. Social, Cultural or Economic Importance X. Local Interest (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	None known.	No effect on archaeological evidence
Artistic interest:	None known.	No effect.
Setting and views:	The building stands on the main street of the village within a terrace, facing directly on to the pavement, with the extreme rear of the property beyond the main front block, facing on to High Street. The key element of the setting of the house is provided by views from the Harbour Road, from which its architectural and historic interest can be appreciated, together with its group value with the nearby listed bridge and telephone kiosk. Views of the upper floor and roof of the house are also afforded from atop of the nearby listed bridge.	The proposed development would not affect key views from the building towards the Irish Sea to the east. Key views of the building would likewise not be materially affected, as the extent of its setting is limited by intervening buildings. The upper sweep of two to three of the turbines could be visible in the distance to the SE from in elevated views of the house from the nearby listed bridge. This would not affect appreciation of the building's architectural and historic interest, nor its group value. Furthermore the proposed development would not affect the key views of the house from the Harbour Road. As such, the turbines may be noticeable in the distance, but would not materially affect the integrity of the buildings setting.
Importance:	Medium: Grade B2 Listed building.	The proposed development would not result in any loss to the level of importance of the building.
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 building, and would only have a slight effect on the setting, which would not materially affect appreciation. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Londonderry Arms Hotel, Carnlough Designation: Grade B2 Reference: HB06/01/008	
Description:	Distance: 2.77km NE from nearest turbine Description: A two-storey, three-bay building in a classical style, with a plainer five-bay annex to one side. Main entrance faces east. This is a mid-19th century building in a distinctively proportioned classical style of some local historical interest, which forms part of an	
	important group along with other buildings i	n the terrace.
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 H Alterations detracting from building K. Group value (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	X. Local Interest (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	None known.	No effect on archaeological evidence
Artistic interest:	None known.	No effect.
Setting and views:	The building stands in the main street of the village, at one end of a terrace, facing the main street but with two small balustraded front enclosures to each side of the main entrance porch and along part of the south elevation. The key element of the setting of the house is provided by views from the Harbour Road, from which its architectural and historic interest can be appreciated, together with its group value with the nearby listed bridge and telephone kiosk. Views of the upper floor and roof of the house are also afforded from atop of the nearby listed bridge.	The proposed development would not affect key views from the building towards the Irish Sea to the east. Key views of the building would likewise not be materially affected, as the extent of its setting is limited by intervening buildings. The upper sweep of two to three of the turbines could be visible in the distance to the SE from in elevated views of the house from the nearby listed bridge. This would not affect appreciation of the building's architectural and historic interest, nor its group value. Furthermore the proposed development would not affect the key views of the house from the Harbour Road. As such, the turbines may be noticeable in the distance, but would not materially affect the integrity of the buildings setting.
Importance:	Medium: Grade B2 Listed building.	The proposed development would not result in any loss to the level of importance of the building.
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 building, and would only have a slight effect on the setting, which would not materially affect appreciation. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: McAuley's Hotel, Carnlough Designation: Grade B2 Reference: HB06/01/007	
Description:	Distance: 2.72km NE from nearest turbine Description:	
	A two-storey rendered building with attics, presenting a three-storey entrance gable of ornate appearance to the main road. Main entrance to the public house faces east, in the main gable, with an entrance to the hotel accommodation facing north. This is an early 20th century building in a plain style of modest architectural pretentions but the decoratively treated Art Nouveau inscriptions on the main gable provide an unusual and uncommon element of interest in the otherwise conventionally and traditionally detailed architectural fabric of the 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 H Alterations detracting from building I. Quality and survival of Interior (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	Y. Social, Cultural or Economic Importance X. Local Interest (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	None known.	No effect on archaeological evidence
Artistic interest:	None known.	No effect.
Setting and views:	The building stands on its own, adjacent to the river, abutted on its south side by the 19th century bridge carrying the main street of the village over the river, with its main entrance front overlooking the junction of the main street, Harbour Road, and Bridge Street, as well as views out to the Irish Sea. Setting to the rear is degraded by poor quality buildings. The key element of the setting of the house is provided by views from the Harbour Road, from which its architectural and historic interest can be appreciated.	The proposed development would not affect key views of the building, as the extent of its setting is limited by intervening buildings. The upper sweep of two of the turbines could be visible to the SE from some parts of the setting of the building, which may be noticeable, but would not prevent or interfere with appreciation of the buildings special interest.
Importance:	Medium: Grade B2 Listed building.	The proposed development would not result in any loss to the level of importance of the building.
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 building, and would only have a slight effect on the setting, which would not materially affect appreciation. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: 21 Marine Road, Carnlough Designation: Grade B2 Reference: HB06/01/005	
Description:	Distance: 2.73km NE from nearest turbine Description: A two-storey gabled house with rendered walls, with its first floor extending over a ground floor shop, and a lower two-storey return to the rear. Entrance faces east. This is a 19th century building in a plain but well proportioned style which retains most of its original features and together with its associated shop makes a positive contribution to the 19th century character of the village.	
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 H Alterations detracting from building I. Quality and survival of Interior (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	X. Local Interest (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	None known.	No effect on archaeological evidence
Artistic interest:	None known.	No effect.
Setting and views:	The building stands in the main street of the village, located on a corner site with a side road running directly alongside one gable; it faces the main road, with a view across it to the sea, set back from the pavement with a lawn in front, with a low front boundary plinth wall in red brick with concrete copings. The key element of the setting of the house is provided by views from the Harbour Road, from which its architectural and historic interest can be appreciated.	The proposed development would not affect key views from the building towards the Irish Sea to the east. Key views of the building would likewise not be materially affected, as the extent of its setting is limited by intervening buildings. The upper sweep of two or three of the turbines could be visible to the SE from some parts of the setting of the building, which may be noticeable, but would not prevent or interfere with appreciation of the buildings special interest.
Importance:	Medium: Grade B2 Listed building.	The proposed development would not result in any loss to the level of importance of the building.
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 building, and would only have a slight effect on the setting, which would not materially affect appreciation. On this basis this effect is not considered to be a significant effect.	



Heritage Asset:	Name: Burnside Bridge Designation: Grade B2 Reference: HB06/01/022	
Description:	Distance: 5.65km NE from nearest turbine Description: A single-arched bridge over the Black Burn River, built of squared basalt rubble set in irregular courses, with dressed sandstone voussoirs to the segmental arch. This is an early Victorian bridge in a plain but clearly proportioned style designed by an important Irish architect and engineer, which stands in an unaltered condition in an unspoiled setting.	
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 (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	V. Authorship X. Local Interest (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	None known.	No effect on archaeological evidence
Artistic interest:	None known.	No effect.
Setting and views:	The bridge stands in a very rural area on the coastline, with a rocky foreshore on the coastal side and steep wooded banks on the inland side. 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 beach nearby in which the arch can be appreciated.	The setting of the bridge is focussed on the roadside and nearby coastline 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:	Medium: Grade B2 Listed building.	The proposed development would not result in any loss to the level of importance of the building.
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: Feystown RC Church Designation: Grade B2 Reference: HB06/02/084	
Description:	Distance: 7.1km ESE from nearest turbine Description: Small, plain, single storey gabled and stuccoed RC church of 1828, with vestry projectic and chancel of 1878 and porch of c.1920. The church, which serves an overwhelmingly rural parish, is set in on a slight rise to the east of Feystown Road, roughly 4 miles S of Glenarm and is surrounded by a graveyard. It replaced an earlier smaller church of 1810, which originally stood roughly half a mile to the east.	
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 H+. Alterations enhancing the building (from list description).	No effect on ability to appreciate architectural interest.
Historic interest:	X. Local Interest (from list description).	No effect on ability to appreciate historic interest.
Archaeological interest:	None known.	No effect on archaeological evidence
Artistic interest:	Moderate, the list entry notes that the church has ornamentation, and there are artistic elements both on the exterior and interior of the church.	No effect.
Setting and views:	The setting of the church comprises three key elements. Firstly, the graveyard adjacent to the church; secondly, the experience of the church on a short stretch of the approach along the Feystown Road, and thirdly the experience of the church from the wider area. The graveyard provides a strong appreciation of the church's architectural interest, communal value, and the rural landscape setting of the church. The roadside setting provides appreciation of the church's local prominence and contextual relationship with nearby small settlements from which it derives parishioners. The wider setting provides a limited appreciation of the building's architectural and historic interest, as it is of modest scale.	The proposed development would not affect views of the church from the Feystown Road, nor from within the churchyard. The proposed development would be visible in the distance from the western part of the churchyard (see HVP 7). This would not affect the appreciation of the church's architectural and historic interest, which is provided by its setting, nor would it materially affect the integrity of its setting. The turbines would be noticeable in the distance in some views, but would not prevent or interfere with appreciation of the buildings special interest.
Importance:	Medium: Grade B2 listed building.	The proposed development would not result in any loss to the level of importance of the building.
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 building, and would only have a negligible effect on the setting, which would not materially affect the significance of the church. On this basis this effect is not considered to be a significant effect.	



Conservation Areas

Heritage Asset:	Name: Carnlough Conservation Area Designation: CA Reference: N/A	
Description:	Distance: 2.2km NE from nearest turbine Description: The Carnlough Conservation Area includes the historic core of the settlement of Carnlough. The Carnlough Conservation Area guide from 1981 highlights the key features which give special character to the village such as the harbour piers, the railway bridge, former Town Hall and the former quarry office, which are all built in local stone. Key buildings noted in the appraisal are the large house at 58 High Street, the Londonderry Arms Hotel on Harbour Road, the Waterfall Bar at the end of High Street, and McAuley's Bar.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	High: The CA contains a number of historic buildings and structures, which have group value and contribute to the character and special interest of the area.	No effect on ability to appreciate architectural interest.
Historic interest:	High: The historic buildings and other structures also preserve physical evidence of key persons and events in local village history.	No effect on ability to appreciate historic interest.
Archaeological interest:	Moderate: There will be buried remains of archaeological interest within the area, which contribute to its heritage interest. The current form of the settlement also preserves earlier alignments.	No effect on archaeological evidence
Artistic interest:	Limited: Some decorative elements are noted, but no prominent artwork or ornamentation is noted.	No effect.
Setting and views:	 The key views and approaches within the conservation area are: The approach along the Harbour Road, which is flanked by historic buildings, as well as the listed bridge and telephone kiosk. The approach along the High Street, which is also flanked by a number of historic buildings, including no 58, and has a grade B2 listed bridge. The harbour area and nearby park, which provides elevated views of the historic building frontages along the Harbour Road, and an appreciation of the historic interest and development of the settlement. The wider area provides a limited appreciation of the character and appearance of the area. The surrounding landscape does, however provide a rural context and backdrop to some views within the area, such as the harbour. 	The hub of two of the proposed turbines, and the tips two other turbines of the proposed development would be visible in the distance from elevated views in the park near to the harbour (see HVP 2). The upper sweep of two turbines could also be visible in the background in elevated views from the bridge over the Harbour Road, and in some more open parts of the Harbour Road. This would not materially affect the experience within the conservation area, nor the ability to appreciate the architectural, historic or archaeological interest of the area, nor its character and appearance, nor the group value of its historic buildings. Therefore, while noticeable in the wider area, the proposed development would not meaningfully detract from the contribution the area's setting makes to its significance, nor the integrity of the setting.



Heritage Asset:	Name: Carnlough Conservation Area Designation: CA Reference: N/A	
Importance:	High: Conservation Area	The proposed development would not result in any loss to the level of importance of the conservation area.
Summary and assessment of effect and significance of effect:	Overall assessment of adverse effect (Tables Significance of effect (Table 4): Minor adverse Comments: As has been noted, the hub of two of the proturbines of the proposed development woul views in the park near to the harbour (see H'could also be visible in the background in ele Harbour Road, and in some more open partse While the proposed turbines would be notice or appearance of the conservation area, nor historic or archaeological interest, or the growhile noticeable in the wider area, the proposed terract from the contribution the area's settintegrity of the setting. This effect is conside would result in a minor adverse significance the area. This effect is not considered to be a significance.	oposed turbines, and the tips two other d be visible in the distance from elevated VP 2). The upper sweep of two turbines evated views from the bridge over the stoff the Harbour Road. The eable, they would not change the character affect appreciation of its architectural, and value of its historic buildings. Therefore, assed development would not meaningfully ing makes to its significance, nor the red a slight effect to the setting, which of effect due to the level of importance of



Registered Parks, Gardens and Demesnes

Heritage Asset:	Name: Cleggan Lodge Designation: Registered Site Reference: AN/121	
Description:	Distance: 2.1km SW from nearest turbine Description: Shooting lodge for Shane's Castle. Site pre 1777 with landscaping and extensive tree planting. Present house dates to 1830 and is located on a fine site with views of Slemish. Ha-ha. Pond is pre-1859 in date. Glen and rockery are post-1927 in date. Cultivated productive garden with herbaceous borders. Gate lodge.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	Moderate: the historic park contains a historic property which is listed Grade B (HB07/05/006), and contains the remains of a Rath (ANT 029:033).	No effect on ability to appreciate architectural interest.
Historic interest:	Moderate: the park preserves the grounds of an 18 th century park, surrounding a house of local interest.	No effect on ability to appreciate historic interest.
Archaeological interest:	High; the park contains a scheduled monument.	No effect on archaeological evidence, or on ability to appreciate archaeological interest.
Artistic interest:	Limited: no recorded artistic interest	No effect.
Setting and views:	Key views within the park are from the main house to the south towards Slemish, and the main elevation of the house is to the south. Views to the south of the house also include the pond and ha-ha, reinforcing the importance of this view. 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 arable 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.	The turbines would not be visible from the setting of the lodge due to the presence of the substantive wood immediately to the east of the lodge, meaning that they would not materially affect the setting or significance of the lodge, or the key views from the lodge to the south towards the pond and ha-ha. The ZTV suggests that a few turbines may be visible in peripheral areas of the park, however much of the parkland is also bounded by areas of woodland, meaning that most views would be filtered even in winter views, and the turbines not discernible. However, some turbines would be visible in more open peripheral parts of the park.
Importance:	High: Registered site with high archaeological interest and moderate architectural and historic interest.	The proposed development would not result in any loss to the level of importance of the park.
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): Minor adverse Comments: The proposed development would not affect the architectural, historic or archaeological interest of the park, nor would it significantly affect the experience provided within the park, or its setting. Views of the proposed development in the distance would be noticeable, but would not occur in key parts of the park, nor interfere meaningfully with appreciation of the parks heritage interest. This effect is not considered to be a significant effect.	



Heritage Asset:	Name: Glenarm Castle Designation: Registered Site Reference: AN/033	
Description:	Distance: 4km SE from nearest turbine Description: Extensive demesne following Glenarm River to sea. Picturesque site below heavily wooded slopes. Present house from 1750 incorporating 1603 house. Lawns to parkland with mature trees. Late 19th-c formal gardens on north side gone. Lime tunnel. Beech walk. Arboretum. W/gdn cultivated with lawns and shrubs from 1950s; glasshouse, bothies and garden house. Barbican gate and bridge 1825. Deer park. Gate lodge. Forest planting DANI (FS). Public access. House private.	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	High; the park contains numerous historic buildings of high architectural interest, including the grade A listed castle.	No effect on ability to appreciate architectural interest.
Historic interest:	High; the park is the site of battles and events of historical significance, and of known individuals.	No effect on ability to appreciate historic interest.
Archaeological interest:	High; the park has a number of known areas of archaeological interest, including three scheduled monuments.	No effect on archaeological evidence, or on ability to appreciate archaeological interest.
Artistic interest:	High; 18th century house was depicted in panoramic oil paintings dating to the 1770s, as well as by John Nixon in c. 1785 and Milton (published 1793) (from Register of Parks, Gardens and Demesne of Special Historic Interest in Northern Ireland)	No effect.
Setting and views:	The park comprises an area of more formal gardens and landscaping in the north of the park, near to Glenarm Castle, and the large area of remnant deer park which occupies much of the land to the south of the castle. The setting of the northern part of the park is dominated by the castle, and views of this, and between the castle and the walled garden. Key views are looking south from the southern elevation of the house, and west towards the walled garden. Views of the house from the south and west are also key, and provide appreciation of the architectural interest of the park. The southern part of the park comprises largely areas of woodland, but with pockets of open space, often with historic buildings or archaeological areas. Key views within the park are largely contained within the designated area, which provides the best experience of all of the key areas of interest of the park's significance. The Munie Road, which runs	The proposed turbines would not be visible from the castle, nor from the Glenarm Conservation Area. The only area that is modelled as having any potential intervisibility with the proposed development is the eastern boundary of the park. However, most of the eastern boundary of the parkland is located within a dense wood, such that no views of the proposed development would be possible. There are more open areas along the eastern boundary in the southern quarter of the park, however modelling suggests that no more than the blade tips would be visible here. On that basis it is considered that the proposed development would not materially affect the setting or key views within the park.



Heritage Asset:	Name: Glenarm Castle Designation: Registe	ered Site Reference: AN/033
	along the western boundary of the park, also provides a key means of appreciating the wider deer park landscape as it runs on higher ground and, where views are not blocked by woodland, provide occasional views into the parkland which provide appreciation of the historic interest of the park.	
	The northern part of the park provides the best appreciation of the park's architectural, historic and artistic interest, as this is where the key buildings within the park are situated. The southern part of the park, and the views along the Munie Road provide a good appreciation of the historic landscape which surrounds the key buildings, and of the extent of the park, which is a reflection of the importance of the castle and its residents over the centuries.	
Importance:	High: Registered site with high architectural, historic, archaeological and artistic interest.	The proposed development would not result in any loss to the level of importance of the park.
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 the architectural, historic, artistic or archaeological interest of the park, nor would it affect the experience provided within the park, or its setting This effect is not considered to be a significant effect.	

Heritage Asset:	Name: Drumnasole House Designation: Registered Site Reference: AN/025	
Description:	Distance: 5.2km NE from nearest turbine Description: Early 19th-century house and garden. The main house is Grade B+ listed (HB06/01/025). The park and garden consist of a heavily wooded site, with planting contemporary with house. Also contains a schoolhouse and Gate Lodge (HB06/01/023).	
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance
Architectural interest:	High: contains the Grade B+ listed building	No effect on ability to appreciate architectural interest.
Historic interest:	High: the park preserves the grounds of an 19 th century park.	No effect on ability to appreciate historic interest.
Archaeological interest:	Limited: no known archaeological interest.	No effect on archaeological evidence, or on ability to appreciate archaeological interest.
Artistic interest:	Limited: no recorded artistic interest	No effect.
Setting and views:	Key views within the park are focussed on the main house, which is positioned to have commanding views to the east towards the Irish Sea. Key approach is from the east, from the Gate House up to the main house, which is via a small lane lined by mature trees. The boundaries of the park are heavily wooded and there is limited appreciation of its heritage interest from the surrounding area.	The ZTV suggests that the southern part of the park would be intervisible with the proposed development. However, the site visit confirmed that the southern boundary of the park is in fact heavily wooded, so that in practice no intervisibility would be possible. As such the proposed development would not affect either the setting of the park, or the key views within it.
Importance:	High: Registered site with high archaeological interest and moderate architectural and historic interest.	The proposed development would not result in any loss to the level of importance of the park.
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 the architectural, historic or archaeological interest of the park, nor would it affect the experience provided within the park, or its setting. This effect is not considered to be a significant effect.	



Heritage Asset:	Name: Garron Tower Designation: Registered Site Reference: AN/031			
Description:	Distance: 6.7km NE from nearest turbine Description:			
	Built as a summer residence in 1848 on the plateau above the County Antrim coast. A belt of shelter trees is present to the east, and a noted Eucalyptus Globulus tree is present which dates to 1857. Park includes formal lawns above sham battlements, a gate lodge and St MacNissi's College.			
Assessment of significance	Description of heritage interest and significance	Description of effects of proposed development on elements of significance		
Architectural interest:	High: contains two Grade B1 listed buildings (HB06/01/038 and HB06/01/027)	No effect on ability to appreciate architectural interest.		
Historic interest:	High: the park preserves the grounds of an 19 th century park.	No effect on ability to appreciate historic interest.		
Archaeological interest:	High: Contains scheduled remains of Dunmaul promontory fort.	No effect on archaeological evidence, or on ability to appreciate archaeological interest.		
Artistic interest:	Limited: no recorded artistic interest	No effect.		
Setting and views:	Key views within the park are focussed on the listed college and chapel buildings, which are positioned to have commanding views to the east towards the Irish Sea. Key approach is from the south, along Tower Road, which is a small lane lined by mature trees. The boundaries of the park are heavily wooded and there is limited appreciation of its heritage interest from the surrounding area.	The ZTV suggests that the southern part of the park would be intervisible with the proposed development. However, the site visit confirmed that the southern boundary of the park is in fact heavily wooded, so that in practice no intervisibility would be possible. As such the proposed development would not affect either the setting of the park, or the key views within it.		
Importance:	High: Registered site with high archaeological interest and moderate architectural and historic interest.	The proposed development would not result in any loss to the level of importance of the park.		
Summary and assessment of effect and significance of effect:	Significance of effect (Table 4): Neutral Comments:			



Appendix 2 - Heritage assets that do not required detailed assessment

Heritage assets located completely outside of ZTV for the proposed development

Scheduled Ancient Monuments

Heritage Asset Reference	Name/address	Location
ANT 029:044	Henge	GLENARM DEMESNE
ANT 034:037	Enclosure and Structures	BUCKNA
ANT 029:014	Mound	GREAT DEER PARK
ANT 020:003	Promontory Fort 'Dunmaul'	GALBOLY LOWER
ANT 020:005	Old Graveyard with cross-carved stone	DRUMNACUR
ANT 020:500	Pump-house	GALBOLY LOWER
ANT 020:001	Church and graveyard	ARDCLINIS
ANT 028:018	Stone Enclosure	BALLYMENA
ANT 033:008	Motte and bailey: Ballymena Fort	BALLYMENA
ANT 024:010	Church (site of) and graveyard: Deschart or Diskert	CARGAN
ANT 024:500	Iron smelter	NEWTOWN CROMMELIN
ANT 028:019	Court tomb	BALLYMENA
ANT 030:003	Church and graveyard	SOLAR
ANT 030:004	Standing stone	BALLYGILBERT
ANT 035:003	Round cairn	LINFORD
ANT 030:017	Court Tomb	LISNAHAY SOUTH
ANT 025:001	Mound	NAPPAN
ANT 035:053	Round cairn	BALLYGAWN
ANT 035:007	Raised rath	BALLYGAWN
ANT 035:009	Church (site of)	SAINT CUNNING
ANT 034:049	Wedge Tomb	BUCKNA
ANT 028:037	Circular structure and ancillary features	LOUGHLOUGHAN
ANT 029:009	Church and graveyard, 'Glore Church'.	GLEBE
ANT 028:083	PREHISTORIC ENCLOSURE, POSSIBLY BARROWS (3)	RATHSHERRY
ANT 020:010	Tower House	RED BAY
ANT 029:006	Franciscan Friary	CLONEY (GLENARM)
ANT 020:008	Promonory Fort: Lurigethan	KNOCKANS NORTH; KNOCKANS SOUTH; FORIFF
ANT 035:036	Passage tomb: Cloughogan	BALLYGAWN
ANT 035:010	Motte	BALLYRUTHER
ANT 035:061	Flint Quarry BALLYCOOS	



Listed Buildings

Heritage Asset Reference	Grade	Name/address	Description
HB05/01/003	B1	"ARDCLINIS BRIDGE, ARDCLINIS TL, Glenariff, Ballymena, CO.ANTRIM"	BRIDGE
HB05/01/004	B2	"White Arch, opposite 172 Garron Road, Glenariff, Ballymena, Co Antrim, BT44"	Bridge
HB05/01/007	B1	"CHURCH OF ST. PATRICK AND ST. BRIGID, GARRON ROAD, MILLTOWN, CO.ANTRIM"	CHURCH
HB05/01/010	B1	"GREENAGHAN COTTAGE, GLEN ROAD, GREENAGHAN, GLENARIFF, Ballymena, CO.ANTRIM"	HOUSE
HB05/01/012	B+	"KILMORE HOUSE, KILMORE, WATERFOOT, Ballymena, CO.ANTRIM"	HOUSE
HB05/01/020	B2	"BRIDGE, Main Street, WATERFOOT, Ballymena, CO.ANTRIM"	BRIDGE
HB05/01/021	B2	"RED ARCH, RED BAY TL, Ballymena, CO.ANTRIM"	TUNNEL
HB06/01/025	B+	Drumnasole House	House
HB06/01/038	B1	St MacNissi's College Chapel	Church
HB05/01/029	B1	"176 Garron Road, Glenahilt, Co.Antrim, BT44 ORA"	House
HB05/01/032	B2	"Kiln Beside 98 Glen Road, Glenariff, Ballymena, Co. Antrim"	Rural Industry
HB06/01/033 A	B2	85 Garron Road	House and boundary walls.
HB06/01/033 B	B2	87 Garron Road	House and boundary walls.
HB06/01/033 C	B2	89 Garron Road	House and boundary walls.
HB06/01/033 D	B2	91 Garron Road	House and boundary walls.
HB06/02/001 A	А	"Glenarm Castle, (off Straidkilly Road), Glenarm Demesne, Glenarm, Ballymena, Co Antrim, BT44 OBD"	Country House
HB06/02/001 B	B1	"Former coach house, courtyard, buildings and gate screen, Glenarm Castle, (off Straidkilly Road), Glenarm, Ballymena, Co Antrim, BT44 0BD (Also known as 1, 2&3 Castle Demesne)"	Estate Related Structures
HB06/02/001 C	B1	"Greenhouse and Store at Glenarm, Castle, Glenarm Demesne, (off Straidkilly Road), Glenarm, Ballymena, Co Antrim, BT44 0BD"	Estate Related Structures
HB06/02/001 D	B2	"4-5 and 6 Castle Demesne, Glenarm Castle, (off Straidkilly Road), Glenarm, Ballymena, Co Antrim, BT44 0BD"	House
HB06/02/001 E	B2	"South courtyard, Castle Demesne, Glenarm, Co Antrim"	Outbuildings
HB06/02/001 G	B1	"Barbican Lodge, Glenarm Castle, Glenarm Demesne, Glenarm, Ballymena, Co Antrim, BT44 0AJ"	Gates/ Screens/ Lodges



Heritage Asset Reference	Grade	Name/address	Description
HB06/02/001 H	B1	"Barbican Bridge, Castle Street, Glenarm, Ballymena, Co Antrim"	Bridge
HB06/02/001 I	B1	"Gate at town lodge, Altmore Street, Glenarm, Ballymena, Co Antrim"	Gates/ Screens/ Lodges
HB06/02/001 J	B2	"Ice house, Glenarm Demesne, Glenarm, Ballymena, Co Antrim"	Ice House
HB06/02/001 L	B1	"1 Castle Lane, Glenarm Demesne, Glenarm, Ballymena, County Antrim, BT44 8BQ"	House
HB06/02/001 M	B2	"Former Bull's House, 8 Castle Demesne, Glenarm Demesne	Office
HB06/02/001 N	B2	"Cottage in Glenarm Castle Estate, ('Lord Antrim's Cottage'), Great Deer Park, Glenarm, County Antrim, BT44 OBD"	House
HB06/02/001 O	B2	"Castle Farm, 3 Castle Lane, Glenarm Demesne, Glenarm, Ballymena, Co Antrim, BT44 0BQ"	House
HB06/02/001 Q	B1	"Gardener's house at Glenarm Castle Glenarm Demesne, (off Straidkilly Road), Glenarm, Ballymena, Co Antrim, BT44 0BD"	House
HB06/02/005	B1	"Former primary school, Castle Street, Glenarm, Co Antrim, BT44 0AT"	House
HB06/02/007 C	B2	"16 Castle Street, Glenarm, Ballymena, Co Antrim, BT44 OAT"	House
HB06/02/008 A	B2	"7 Castle Street, Glenarm, Ballymena, Co Antrim, BT44 0AT"	House
HB06/02/008 C	B2	"11 Castle Street, Glenarm, Ballymena, Co Antrim, BT44 OAT"	House
HB06/02/015	B2	"19 Altmore Street, Glenarm, Ballymena, Co Antrim, BT44 OAR"	House
HB06/02/016	B2	"21 Altmore Street, Glenarm, Co Antrim, BT44 OAR"	House
HB06/02/017	B2	"23 Altmore Street, Glenarm, Ballymena, Co Antrim, BT44 OAR"	House
HB06/02/019	B+	"27-29 Altmore Street, Glenarm, Ballymena, Co Antrim, BT44 OAR"	House
HB06/02/021	B1	"Town Lodge, 38 Altmore Street, Glenarm, County Antrim, BT44 OAR"	House
HB06/02/023	B2	"36 Altmore Street, Glenarm, Ballymena, Co Antrim, BT44 OAR"	House
HB06/02/024	B2	"Presbyterian Church, 34 Altmore Street, Glenarm, Ballymena, Co Antrim, BT44 0AR"	Church
HB06/02/025 A	B2	"28 Altmore Street, Glenarm, Ballymena, Co Antrim, BT44 OAR"	House - Terrace



Heritage Asset Reference	Grade	Name/address	Description
HB06/02/025 B	B2	"30 Altmore Street, Glenarm, Ballymena, Co Antrim, BT44 0AR"	House - Terrace
HB06/02/025 C	B2	"32 Altmore Street, Glenarm, Ballymena, Co Antrim, BT44 OAR"	House - Terrace
HB06/02/026	B2	"26 Altmore Street, Glenarm, Ballymena, Co Antrim, BT44 OAR"	House
HB06/02/027	B2	"24 Altmore Street, Glenarm, Ballymena, Co Antrim, BT44 OAR"	House
HB06/02/028	B1	"22 Altmore Street, Glenarm, Ballymena, Co Antrim, BT44 OAR"	House
HB06/02/029	B2	"20 Altmore Street, Glenarm, Ballymena, Co Antrim, BT44 OAR"	House
HB06/02/030	B2	"16-18 Altmore Street, Glenarm, Ballymena, Co Antrim, BT44 OAR"	House
HB06/02/032 A	B1	"10 Altmore Street, Glenarm, Ballymena, Co Antrim, BT44 OAR"	Hotel
HB06/02/034	B2	"6 Altmore Street, Glenarm, Ballymena, Co Antrim, BT44 OAR"	Shop
HB06/02/037	B+	"Former court house (now Glenarm Baptist Church), 43-45 Toberwine Street, Glenarm, Ballymena, Co Antrim, BT44 0AP"	Church
HB06/02/038	B1	"39-41 Toberwine Street, Glenarm, Ballymena, Co Antrim, BT44 OAP"	Shop
HB06/02/039	B2	"35-37 Toberwine Street, Glenarm, Ballymena, Co Antrim, BT44 OAP"	House
HB06/02/042	B2	"27 Toberwine Street, Glenarm, Ballymena, Co Antrim, BT44 OAP"	House
HB06/02/050	B2	"'The Coast Road Inn' public house, 3 Toberwine Street, Glenarm, Ballymena, Co Antrim, BT44 OAP"	Public House
HB06/02/053	B1	"10-12 Toberwine Street, Glenarm, Ballymena, Co Antrim, BT44 OAP"	House
HB06/02/062	B1	"50 Toberwine Street, Glenarm, Ballymena, Co Antrim, BT44 0AP"	House
HB06/02/064	B2	"Former Antrim Arms Hotel, 54 Toberwine Street, Glenarm, Ballymena, Co Antrim, BT44 0AP"	House
HB06/02/065	B2	"56 Toberwine Street, Glenarm, Ballymena, County Antrim, BT44 OAP"	House
HB06/02/066	B1	"62 Toberwine Street, Glenarm, Ballymena, Co Antrim, BT44 0AP"	House
HB06/02/068 A	B2	"1-3 The Vennel, Glenarm, Ballymena, Co Antrim, BT44 0AN"	House
HB06/02/068 C	B2	"11 Vennel Street (The Vennel), Glenarm, Ballymena, County Antrim, BT44 0AS"	House - Terrace



Heritage Asset Reference	Grade	Name/address	Description
HB06/02/068 D	B2	"13 Vennel Street (The Vennel), Glenarm, Ballymena, Co Antrim, BT44 0AS"	House - Terrace
HB06/02/068 E	B2	"15 Vennel Street (The Vennel), Glenarm, Ballymena, Co Antrim, BT44 0AS"	House - Terrace
HB06/02/068 F	B2	"17 Vennel Street (The Vennel), Glenarm, Ballymena, Co Antrim, BT44 0AS"	House
HB06/02/068 G	B2	"19 Vennel Street (The Vennel), Glenarm, Ballymena, Co Antrim, BT44 0AS"	House
HB06/02/068 H	B2	"21-23 Vennel Street (The Vennel), Glenarm, Ballymena, Co Antrim, BT44 0AS"	House
HB06/02/068 P	B2	"14 The Vennel, Glenarm, Ballymena, Co Antrim, BT44 OAN"	House
HB06/02/068 Q	B2	"16 The Vennel, Glenarm, Ballymena, Co Antrim, BT44 OAN"	House
HB06/02/068 V	B2	"24 The Vennel, Glenarm, Ballymena, Co Antrim, BT44 OAN"	House
HB06/02/068 W	B2	"26-28 The Vennel, Glenarm, Ballymena, Co Antrim, BT44 OAN"	House
HB06/02/070	B2	"Church of the Immaculate Conception (RC), New Road, Glenarm, Ballymena, Co Antrim, BT44 OAA"	Church
HB06/02/071	B+	"St Patricks ((C of I) parish church, The Cloney, Glenarm, Ballymena, Co Antrim, BT44 0AB"	Church
HB06/02/073	B1	"Non-subscribing Presbyterian Church, Straidkilly Road, Cloney, Glenarm, Ballymena, BT44 OAJ"	Church
HB06/02/080	B2	"Owencloghy Bridge, Deer Park Road, Deer Park Farms, Glenarm, Ballymena, Co Antrim"	Bridge
HB06/02/086	B2	"Glenarm Harbour, Glenarm, Ballymena, Co Antrim"	Harbour/ Pier
HB06/02/087	B2	"Telephone Kiosk, near 13 Altmore Street, Glenarm, Ballymena, Co Antrim"	Telephone Kiosk
HB06/02/099	B2	"Milepost, Munie Road, Demesne Upper, Glenarm, Ballymena, Co Antrim"	Milestone
HB06/02/100	B2	"Milepost, Munie Road, Munie south, Glenarm, Ballymena, Co Antrim"	Milestone
HB06/02/102	B1	"Former Rectory, 60 Munie Road, Glebe, Glenarm, Ballymena, Co Antrim, BT44 0BL"	House
HB07/01/015 A	B2	"POST OFFICE, 3 OLD CUSHENDUN ROAD, NEWTOWNCROMMELIN, CO.ANTRIM"	POST OFFICE
HB07/01/015 B	B2	"POST BOX OUTSIDE POST OFFICE, 3 OLD CUSHENDUN ROAD, NEWTOWNCROMMELIN, CO.ANTRIM"	POST BOX
HB07/01/015 C	B2	"TELEPHONE KIOSK OUTSIDE POST OFFICE, 3 OLD CUSHENDUN ROAD, NEWTOWNCROMMELIN, CO.ANTRIM"	TELEPHONE KIOSK



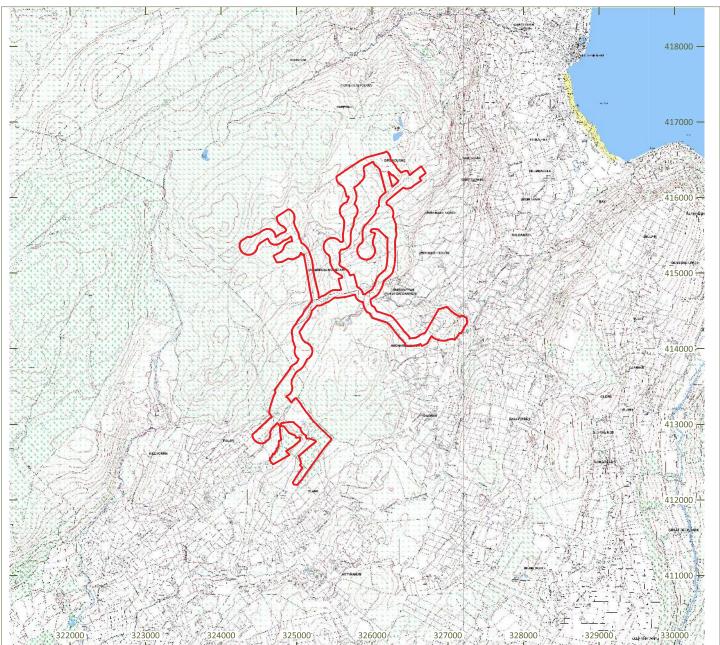
Heritage Asset Reference	Grade	Name/address	Description
HB07/04/013	В	"WHITEHALL, 24 TULLYMORE ROAD, BROUGHSHANE, BALLYMENA, CO.ANTRIM"	HOUSE
HB07/05/008	B1	"GLENCAIRN (NOW CARNCAIRN LODGE), 40 CARNLOUGH ROAD, BROUGHSHANE, CO.ANTRIM"	HOUSE
HB06/02/083	B2	McCartney's Bridge	BRIDGE

Conservation Areas

Heritage Asset Reference	Grade	Name/address	Description
N/A	N/A	Glenarm Conservation Area	Historic settlement



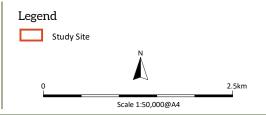






Project No: PR0034 Date: 0
Drawing No: PR0034_10

Date: 07/12/2021

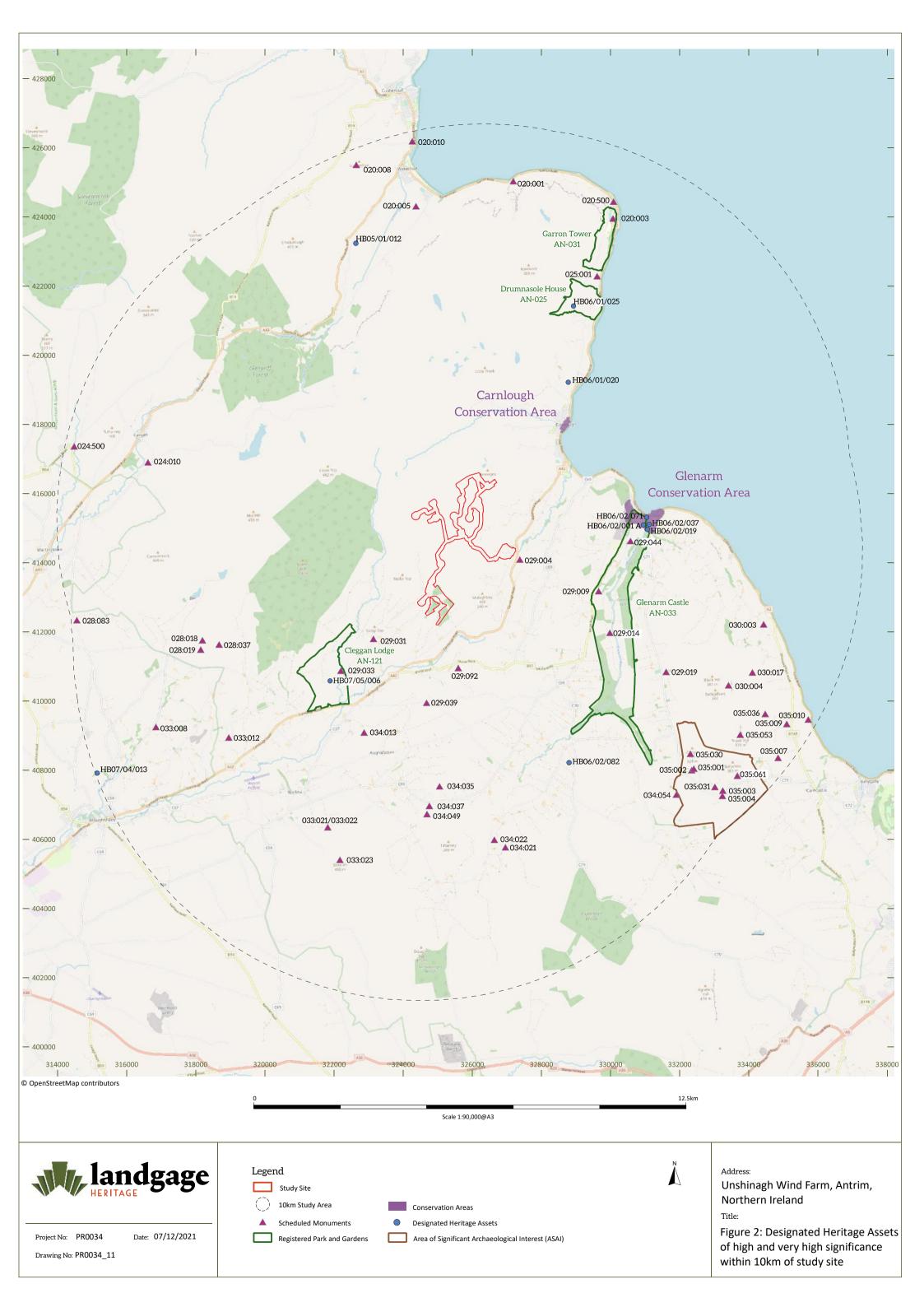


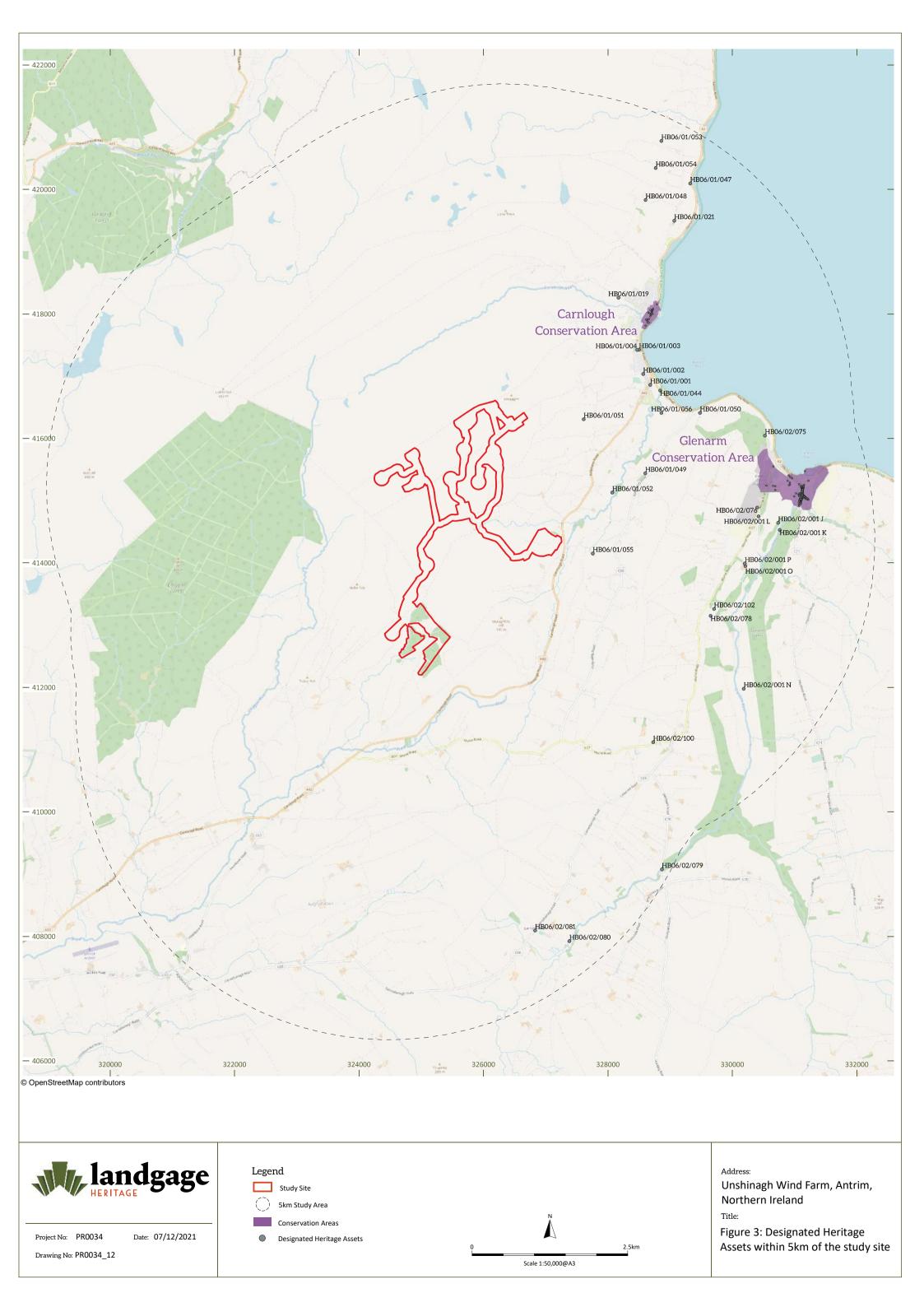
Addres

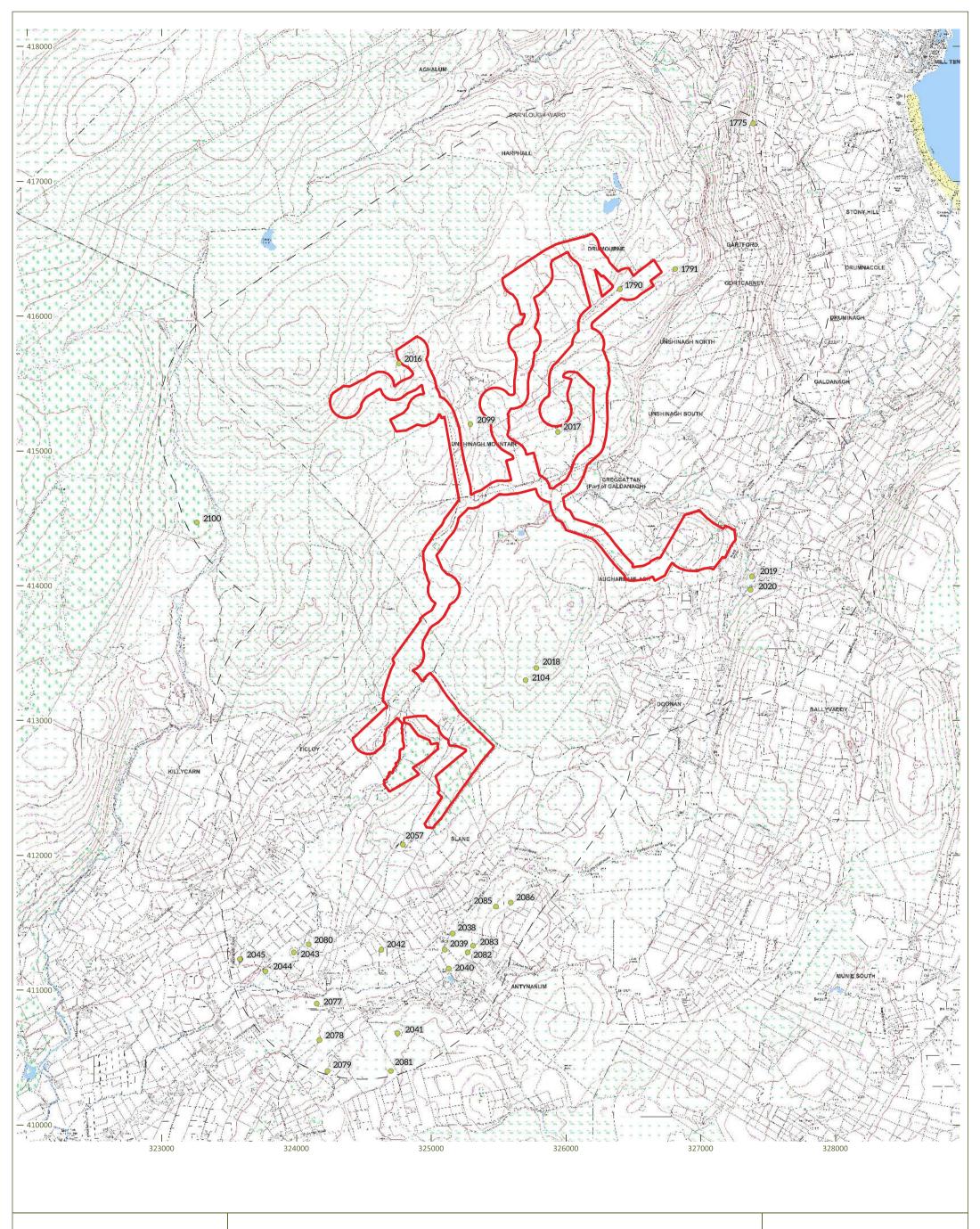
Unshinagh Wind Farm, Antrim, Northern Ireland

Title

Figure 1: Site Location









Project No: PR0034

Date: 07/12/2021

Drawing No: PR0034_13

Legend

Study Site

1km Study Area

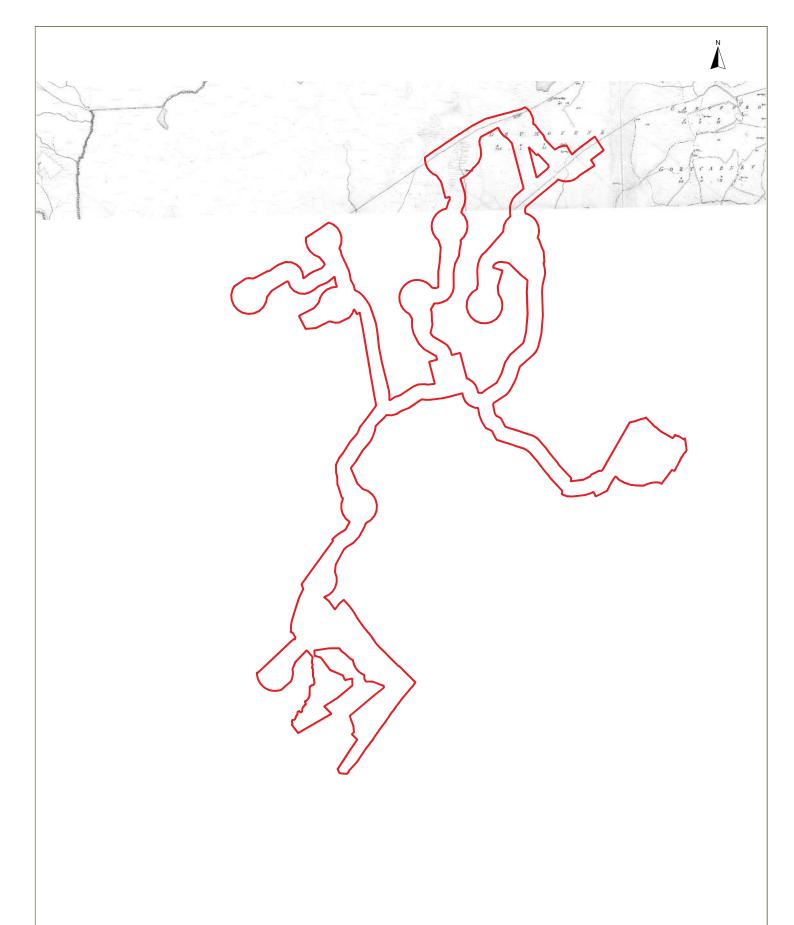
NISMR - Points

0 1km Scale 1:25,000@A3 ddress:

Unshinagh Wind Farm, Antrim, Northern Ireland

Title:

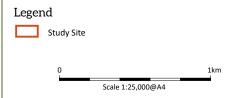
Figure 4: NISMR Data within 1km of study site





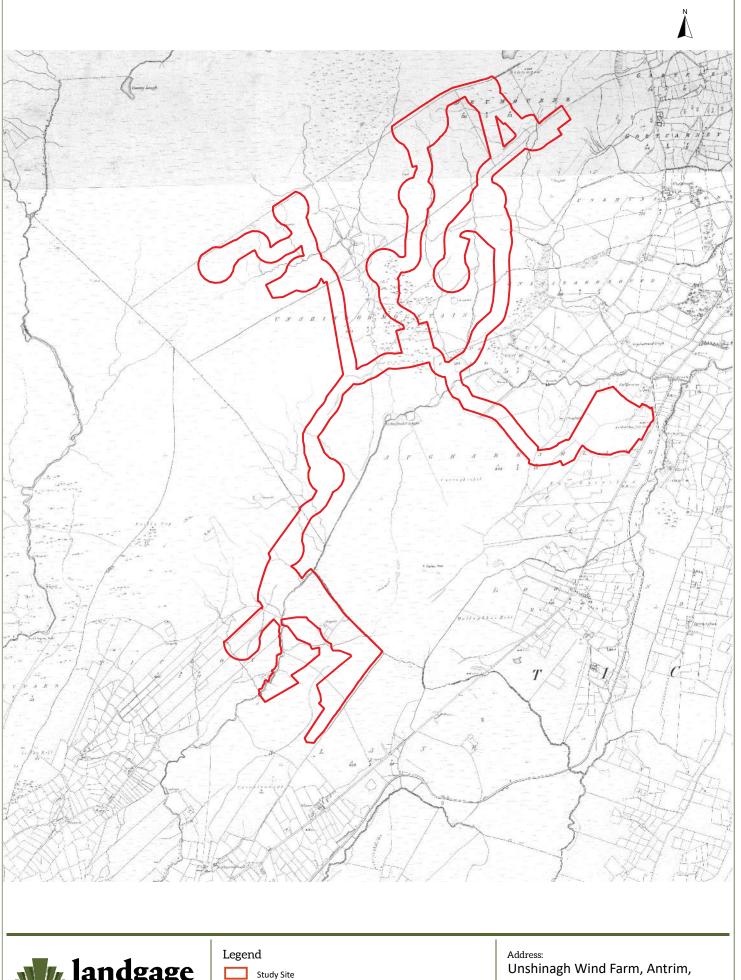
PR0034 Project No: Drawing No: PR0034_14

Date: 07/12/2021



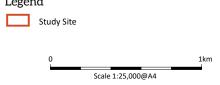
Address: Unshinagh Wind Farm, Antrim, Northern Ireland

Figure 5: 1st Edition OSNI maps 1832



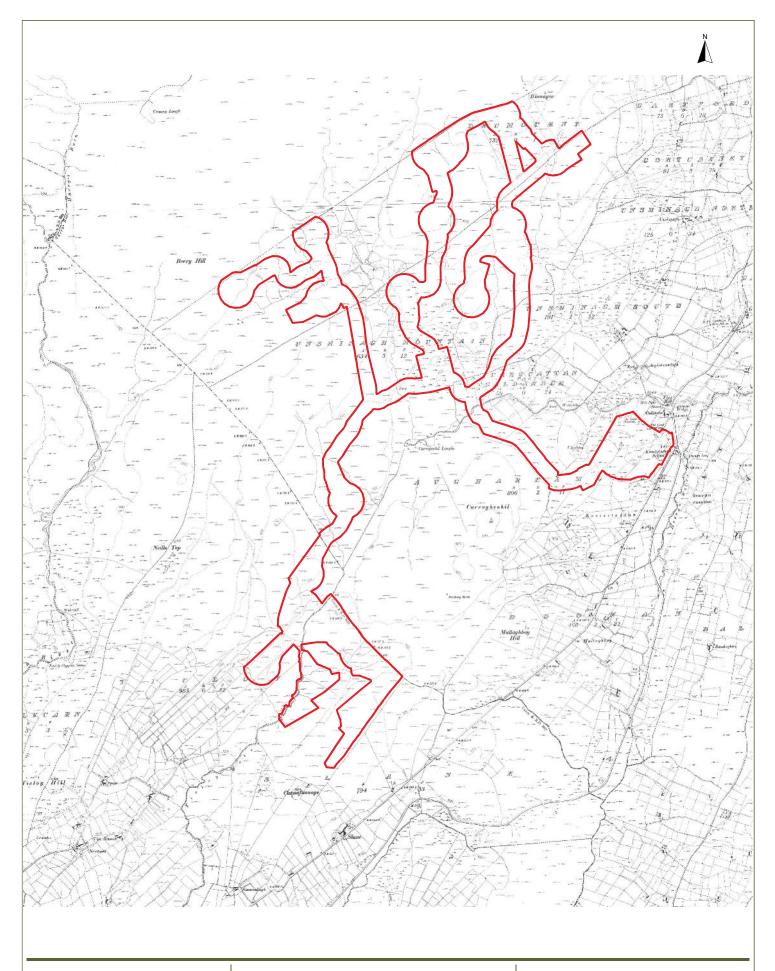


Project No: PR0034 Drawing No: PR0034_15 Date: 07/12/2021



Northern Ireland

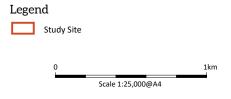
Figure 6: 2nd Edition OSNI maps 1857





Project No: PR0034
Drawing No: PR0034_16

Date: 07/12/2021

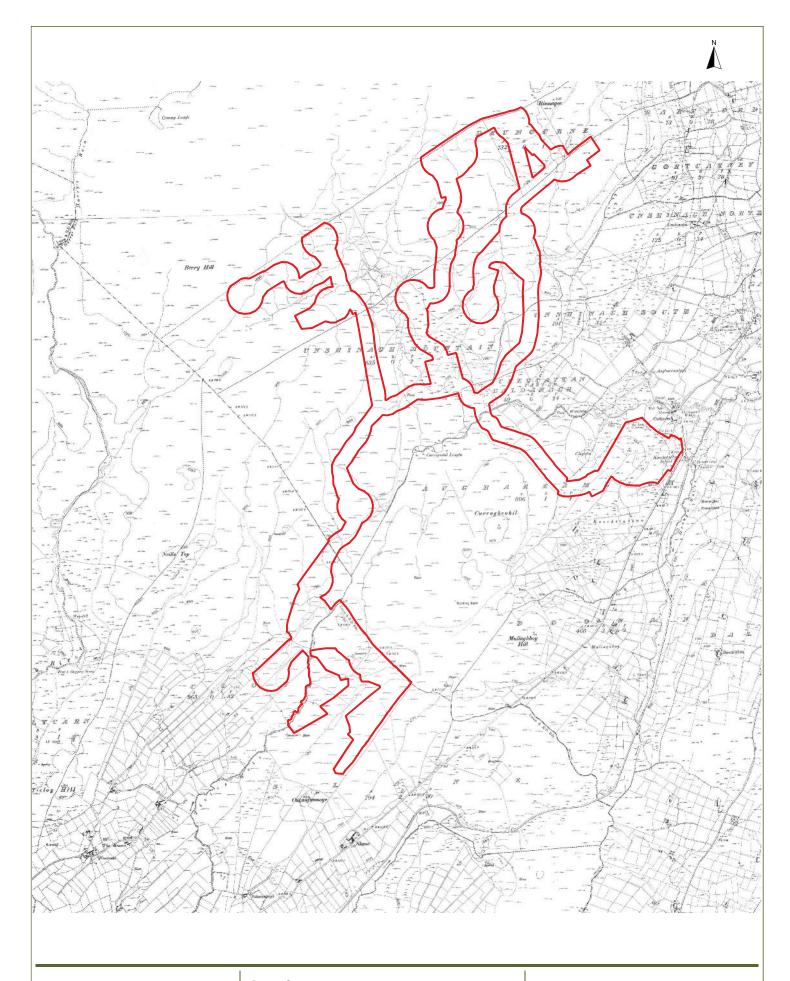


Address

Unshinagh Wind Farm, Antrim, Northern Ireland

Title

Figure 7: 3rd Edition OSNI maps 1903





Project No: PR0034
Drawing No: PR0034_17

Date: 07/12/2021

Legend
Study Site

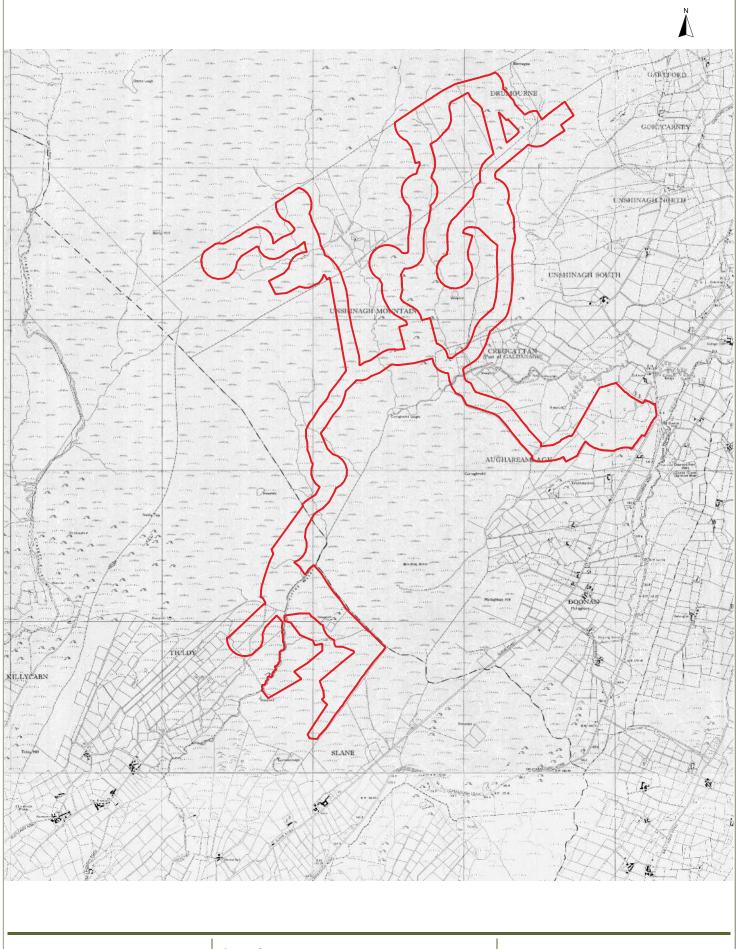
O 1km
Scale 1:25,000@A4

Addres

Unshinagh Wind Farm, Antrim, Northern Ireland

Title

Figure 8: 4th Edition OSNI maps 1920-31





Project No: PR0034 In Drawing No: PR0034_18

Date: 07/12/2021

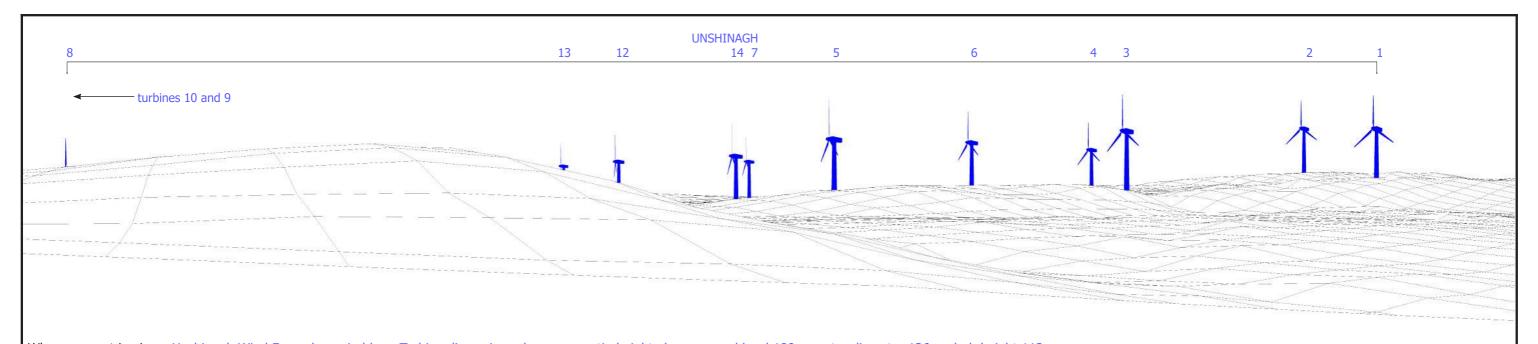


Address

Unshinagh Wind Farm, Antrim, Northern Ireland

Title

Figure 9: Metric Irish Grid 1972-73



Where present in view: Unshinagh Wind Farm shown in blue. Turbine dimensions shown: max. tip height above ground level 180 m; rotor diameter 136 m; hub height 112 m Existing wind farms in red; Consented wind farms in orange; Proposed wind farms in green; Single turbines in pink

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UNSHINAGH WIND FARM

HERITAGE VIEWPOINT 1

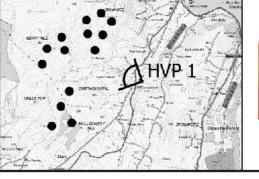
Doonan Fort

Wireline and Photomontage

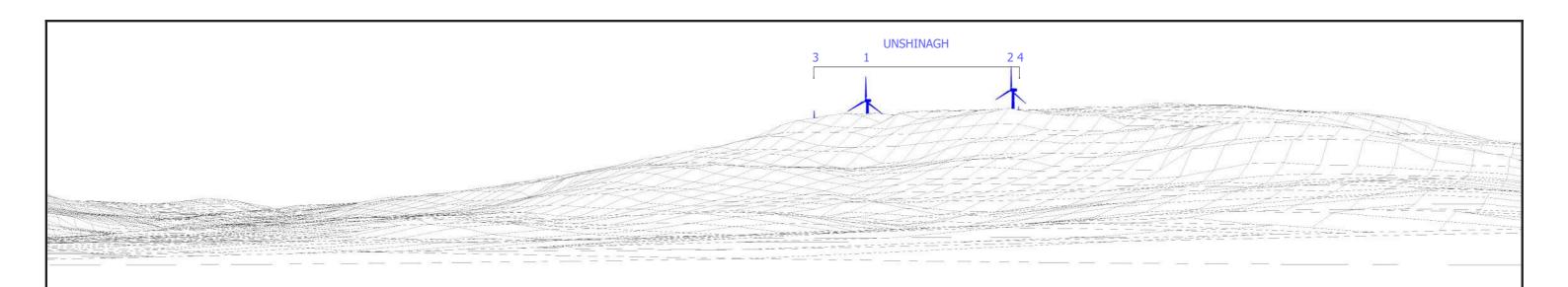
Easting: 327493
Northing: 414267
Elevation A.O.D 134 m
Bearing: 291.44 °
Approx. Included Angle: 80 °

Approx. distance to nearest

turbine: 1.86 km to T5







Where present in view: Unshinagh Wind Farm shown in blue. Turbine dimensions shown: max. tip height above ground level 180 m; rotor diameter 136 m; hub height 112 m Existing wind farms in red; Consented wind farms in orange; Proposed wind farms in green; Single turbines in pink



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UNSHINAGH WIND FARM

HERITAGE VIEWPOINT 2 Carnlough Harbour Park

Wireline and Photomontage

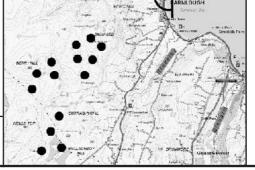
Easting: 328740 Northing: 417989 Elevation A.O.D 9 m Bearing: 228.99 °

Approx. distance to nearest

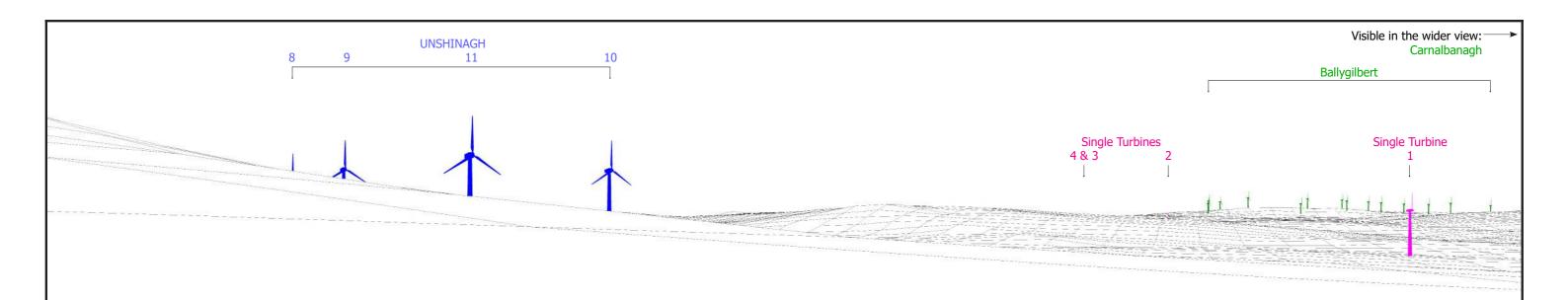
Approx. Included Angle:

turbine: 2.83 km to T1

80 °







Where present in view: Unshinagh Wind Farm shown in blue. Turbine dimensions shown: max. tip height above ground level 180 m; rotor diameter 136 m; hub height 112 m Existing wind farms in red; Consented wind farms in orange; Proposed wind farms in green; Single turbines in pink

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UNSHINAGH WIND FARM

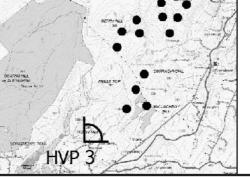
HERITAGE VIEWPOINT 3 Portal Tomb off Killycarn Road

Wireline and Photomontage

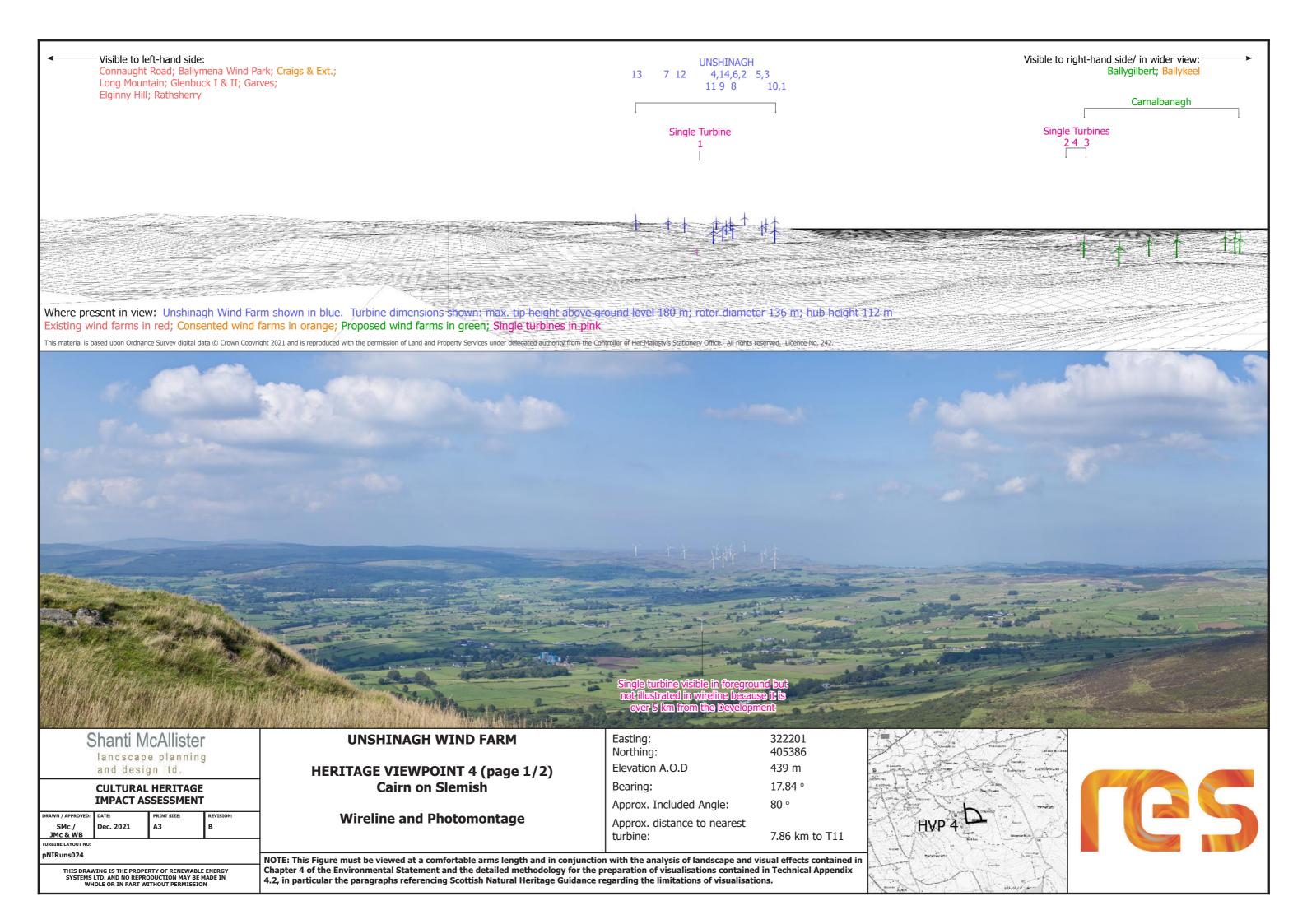
323108 Easting: 411720 Northing: Elevation A.O.D 196 m Bearing: 34.27 ° Approx. Included Angle: 80 °

Approx. distance to nearest

turbine: 1.86 km to T11







forestry to be removed near T8

Location of Location of forestry to be removed around T10



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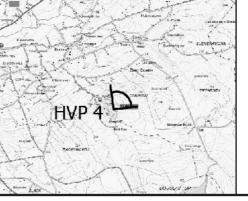
HERITAGE VIEWPOINT 4 (page 2/2) Cairn on Slemish

Baseline Photograph

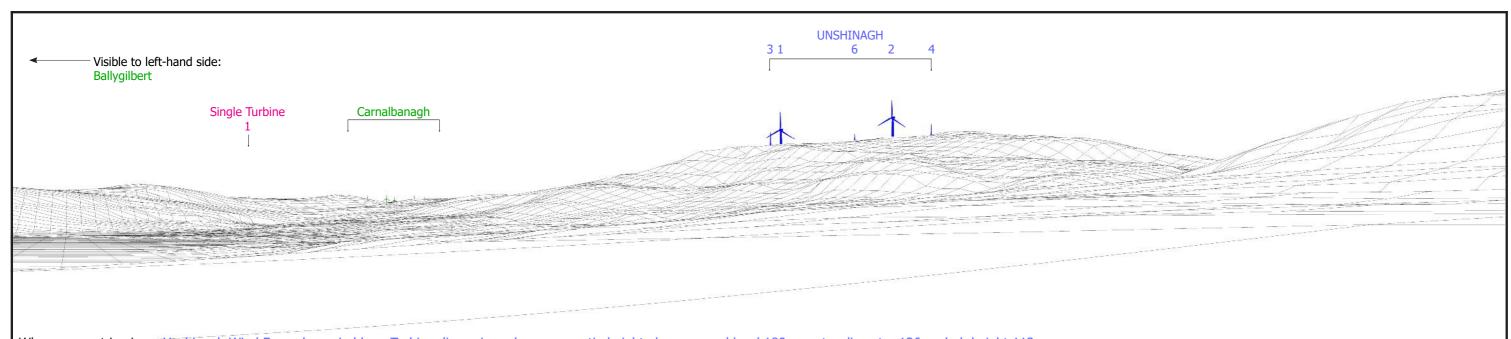
322201 Easting: 405386 Northing: Elevation A.O.D 439 m Bearing: 17.84 ° 80 ° Approx. Included Angle:

Approx. distance to nearest

turbine: 7.86 km to T11







Where present in view: Unshinagh Wind Farm shown in blue. Turbine dimensions shown: max. tip height above ground level 180 m; rotor diameter 136 m; hub height 112 m Existing wind farms in red; Consented wind farms in orange; Proposed wind farms in green; Single turbines in pink

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UNSHINAGH WIND FARM

HERITAGE VIEWPOINT 5 St Mary's Church of Ireland, Largy Road, Carnlough

Wireline and Photomontage

 Easting:
 329045

 Northing:
 419466

 Elevation A.O.D
 34 m

 Bearing:
 219.75 °

Approx. distance to nearest

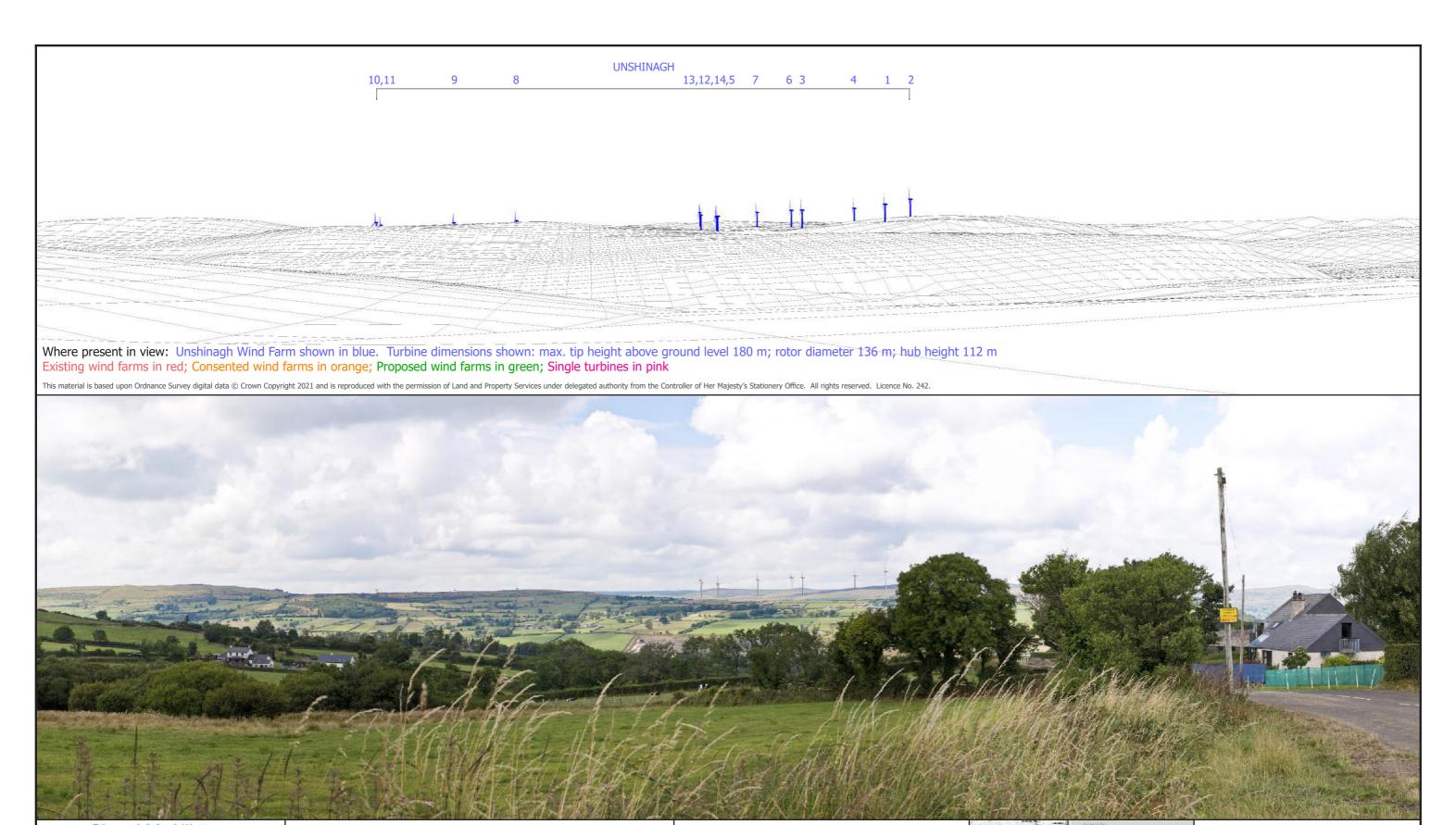
Approx. Included Angle:

turbine: 4.10 km to T1

80 °







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UNSHINAGH WIND FARM

HERITAGE VIEWPOINT 6 Dickeystown Road, Glenarm

Wireline & Photomontage

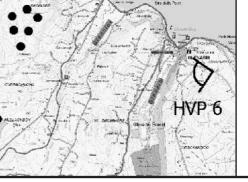
Easting: 332246
Northing: 414491
Elevation A.O.D 148 m
Bearing: 274.78 °

Approx. Included Angle:

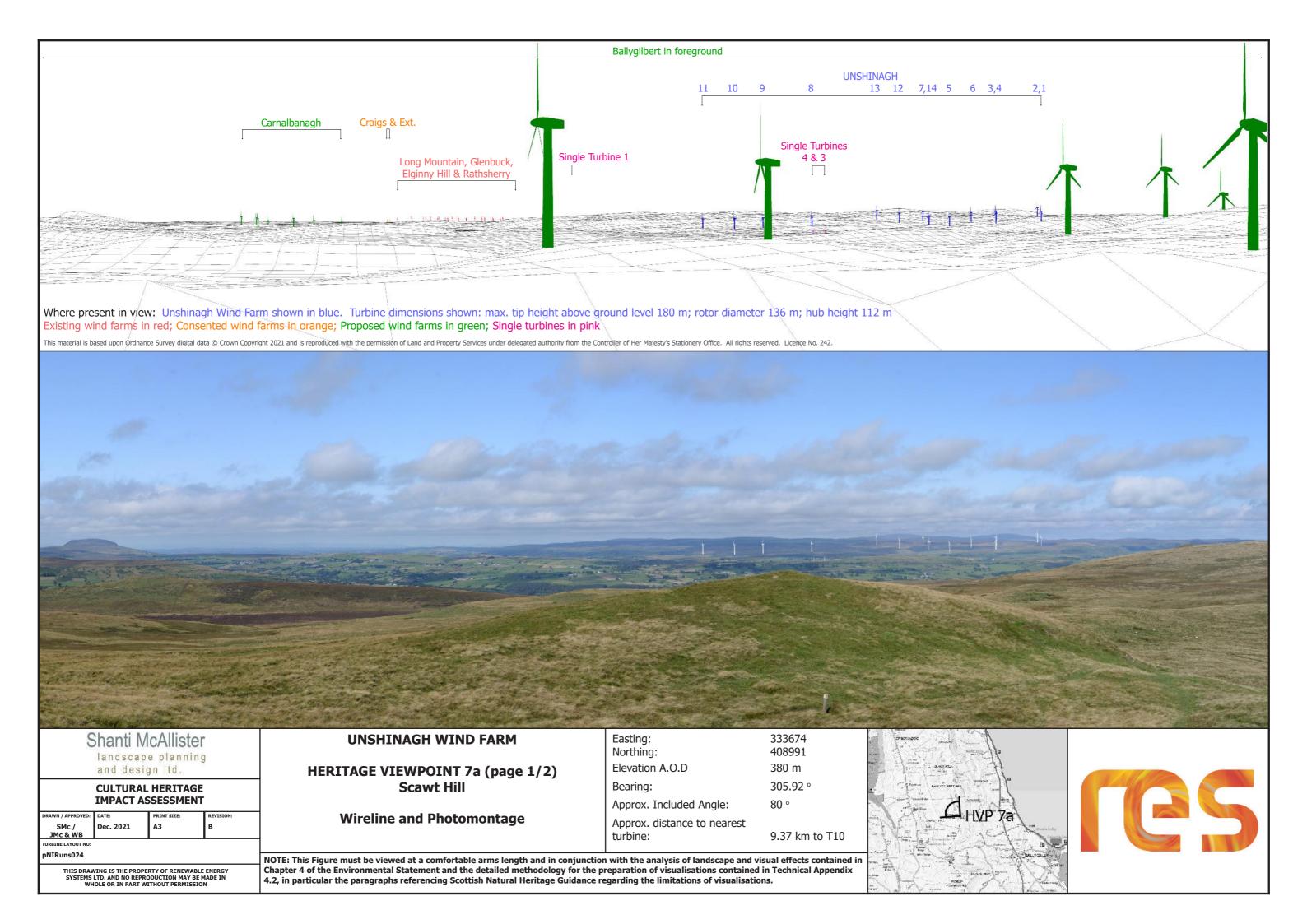
Approx. distance to nearest

turbine: 6.02 km to T1

80 °







Location of forestry to be removed around T10 Location of forestry to be removed near T8



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HERITAGE VIEWPOINT 7a (page 2/2) Scawt Hill

Baseline Photograph

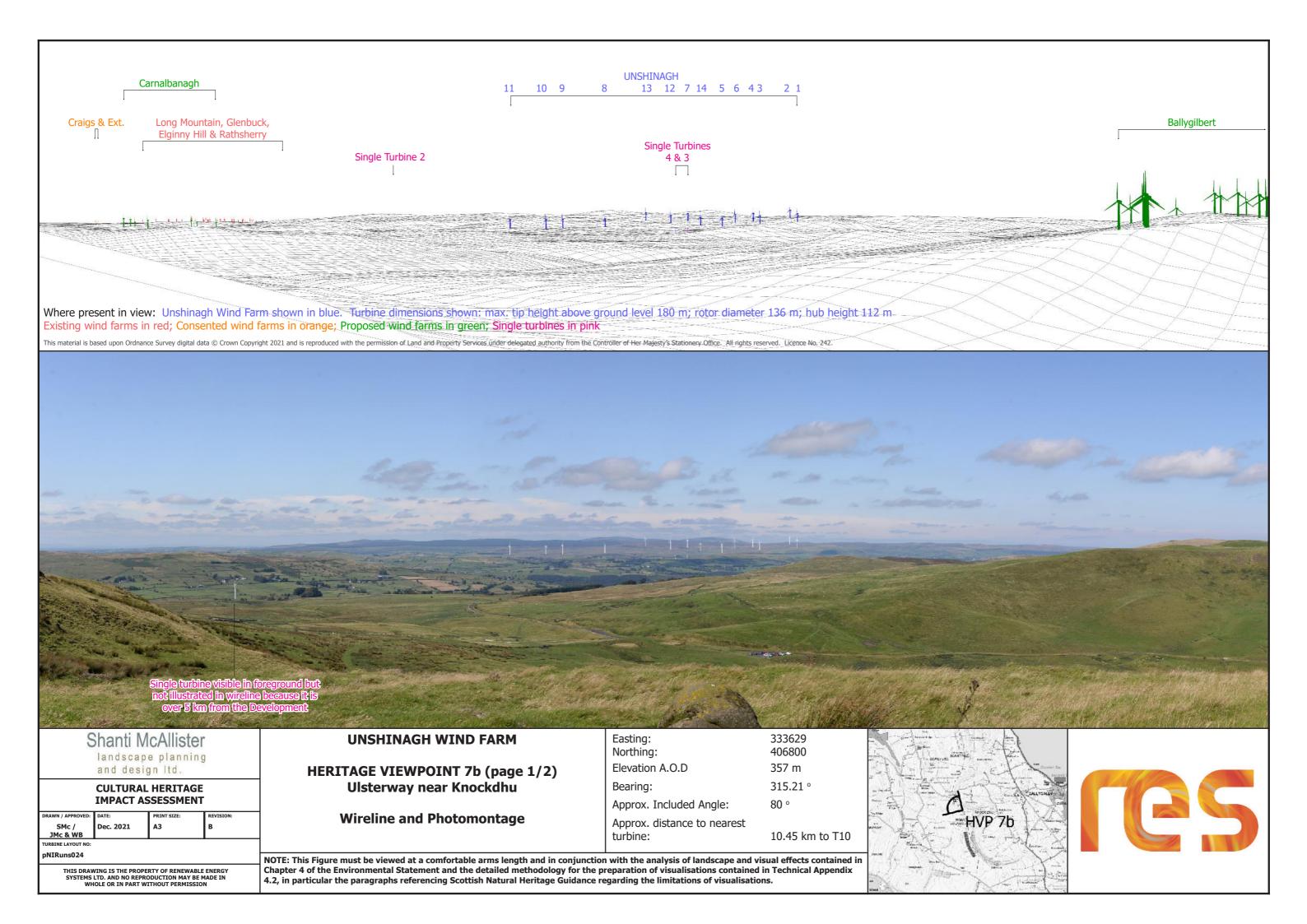
Easting: 333674
Northing: 408991
Elevation A.O.D 380 m
Bearing: 305.92 °
Approx. Included Angle: 80 °

Approx. Included Angle:
Approx. distance to nearest

turbine: 9.37 km to T10







Location of forestry to be removed around T10

Location of forestry to be removed near T8



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UNSHINAGH WIND FARM

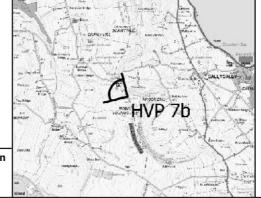
HERITAGE VIEWPOINT 7b (page 2/2) Ulsterway near Knockdhu

Baseline Photograph

333629 Easting: 406800 Northing: Elevation A.O.D 357 m Bearing: 315.21 ° 80 °

Approx. Included Angle: Approx. distance to nearest

turbine: 10.45 km to T10





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Wireline and Photomontage

Approx. Included Angle:

Approx. distance to nearest

NOTE: This Figure must be viewed at a comfortable arms length and in conjunction with the analysis of landscape and visual effects contained in Chapter 4 of the Environmental Statement and the detailed methodology for the preparation of visualisations contained in Technical Appendix

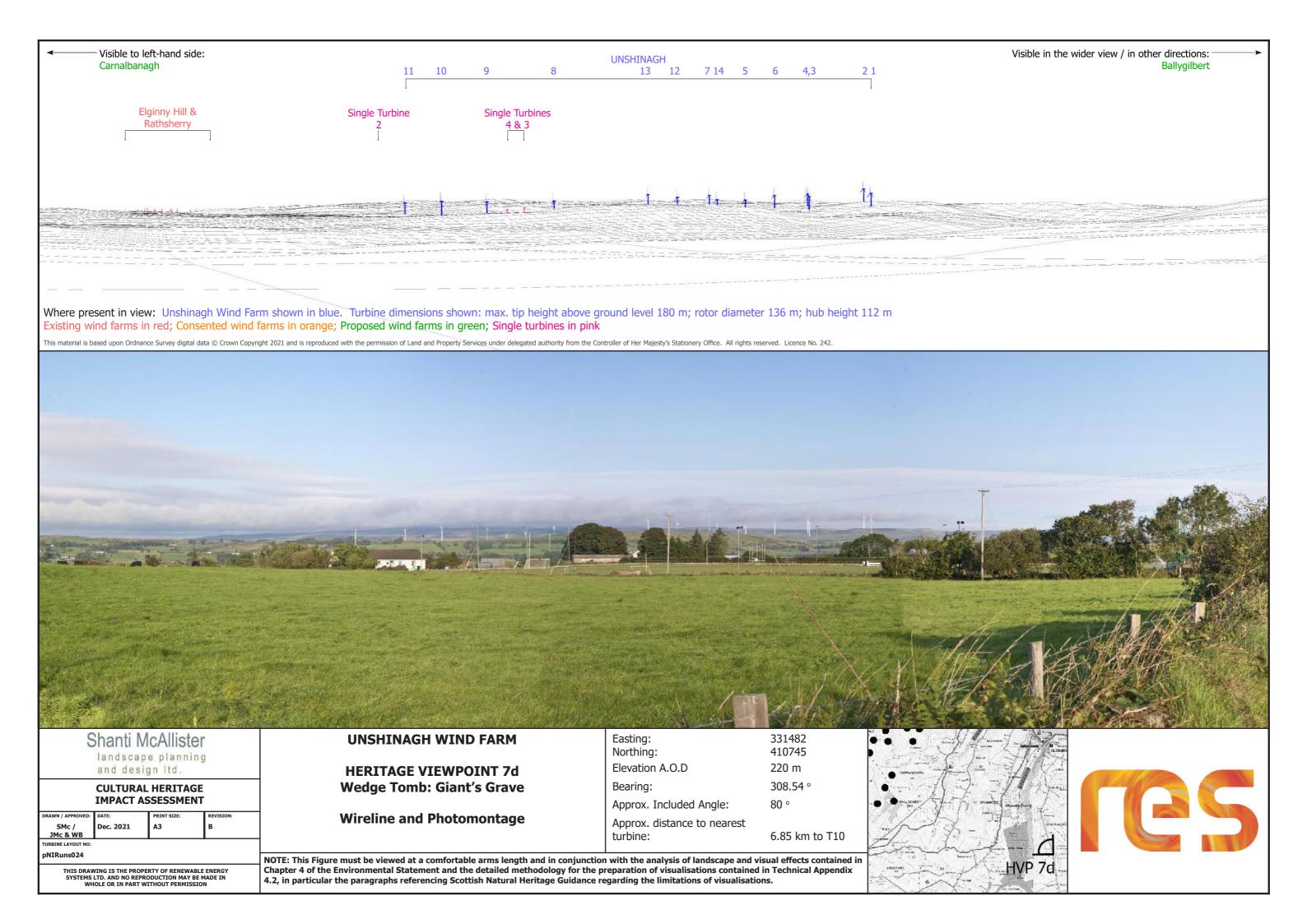
4.2, in particular the paragraphs referencing Scottish Natural Heritage Guidance regarding the limitations of visualisations.

turbine: 7.04 km to T10

80 °







UNSHINAGH

11 10 9 8 13 12 7 14 5 6 43 2 1

Elginny Hill & Rathsherry

Single Turbine Single Turbines

2 4 & 3

Carnalbanagh

Where present in view: Unshinagh Wind Farm shown in blue. Turbine dimensions shown: max. tip height above ground level 180 m; rotor diameter 136 m; hub height 112 m Existing wind farms in red; Consented wind farms in orange; Proposed wind farms in green; Single turbines in pink

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UNSHINAGH WIND FARM

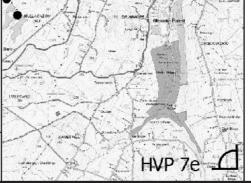
HERITAGE VIEWPOINT 7e (page 1/2) Southern Wedge Tomb: Giant's Grave

Wireline and Photomontage

Easting: 332345
Northing: 407975
Elevation A.O.D 271 m
Bearing: 315.69 °
Approx. Included Angle: 80 °

Approx. distance to nearest

turbine: 8.72 km to T10





Location of forestry to be removed around T10



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UNSHINAGH WIND FARM

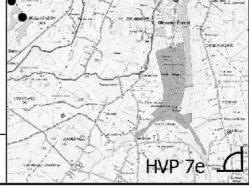
HERITAGE VIEWPOINT 7e (page 2/2) Southern Wedge Tomb: Giant's Grave

Baseline Photograph

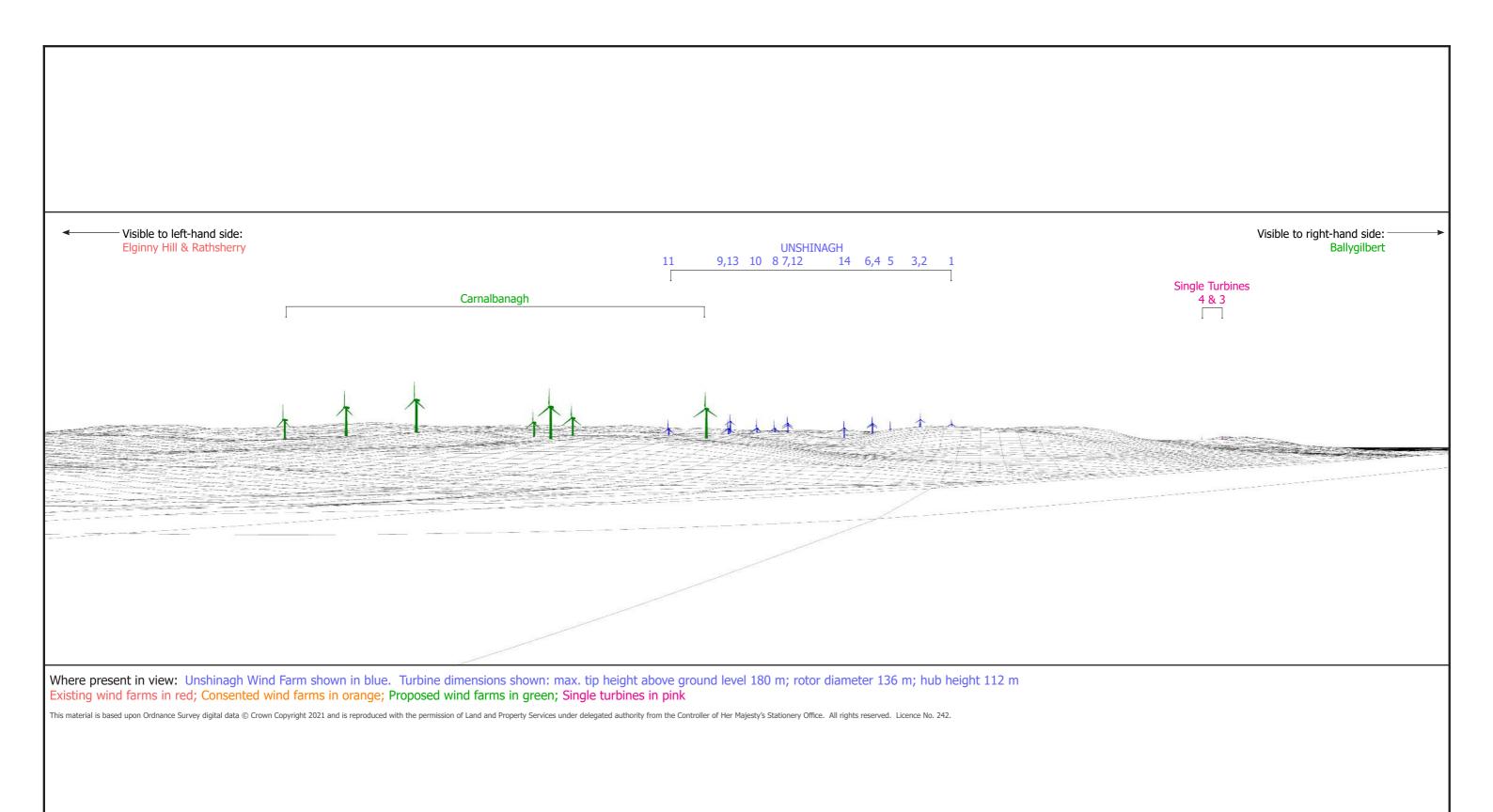
Easting: 332345
Northing: 407975
Elevation A.O.D 271 m
Bearing: 315.69 °
Approx. Included Angle: 80 °

Approx. Included Angle:
Approx. distance to nearest

turbine: 8.72 km to T10







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UNSHINAGH WIND FARM

HERITAGE VIEWPOINT WF 1 Barrows

Wireline

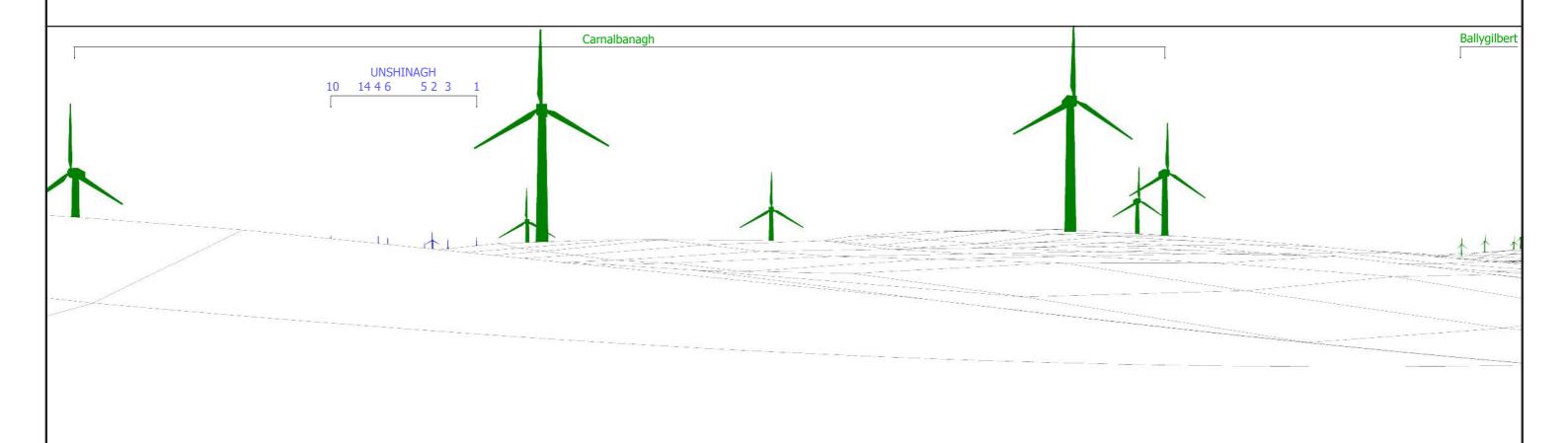
Easting: 326805
Northing: 405852
Elevation A.O.D not measured
Bearing: 351.36 °
Approx. Included Angle: 80 °

Approx. distance to nearest

turbine: 7.31 km to T10







Where present in view: Unshinagh Wind Farm shown in blue. Turbine dimensions shown: max. tip height above ground level 180 m; rotor diameter 136 m; hub height 112 m Existing wind farms in red; Consented wind farms in orange; Proposed wind farms in green; Single turbines in pink

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UNSHINAGH WIND FARM

HERITAGE VIEWPOINT WF 2 Field Systems

Wireline

Easting: 325054 Northing: 407480 Elevation A.O.D not measured

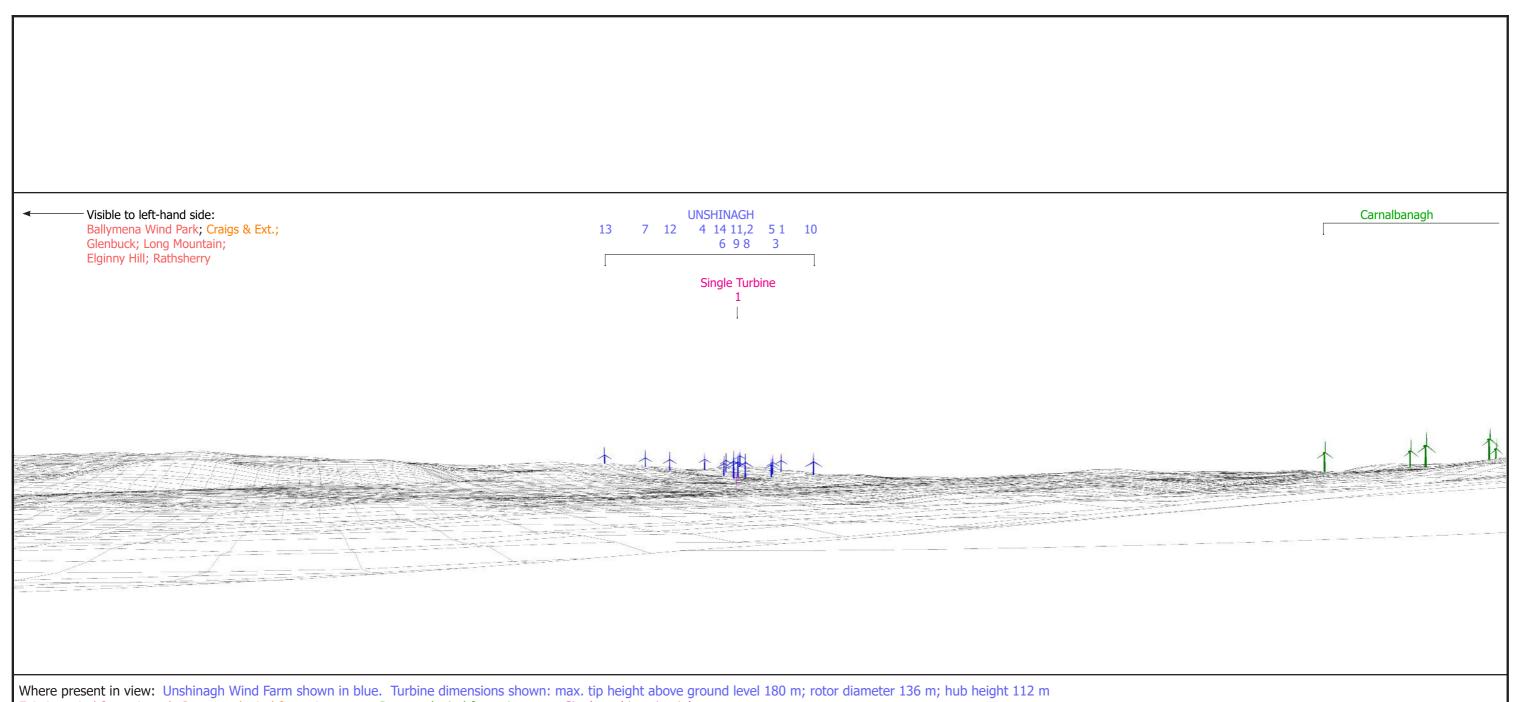
Bearing: 1.95 $^{\circ}$ Approx. Included Angle: 80 $^{\circ}$

Approx. distance to nearest

turbine: 5.42 km to T11







Existing wind farms in red; Consented wind farms in orange; Proposed wind farms in green; Single turbines in pink

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UNSHINAGH WIND FARM

HERITAGE VIEWPOINT WF 3 Rath and Field Systems

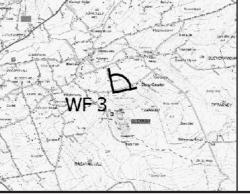
Wireline

321832 Easting: 406350 Northing: Elevation A.O.D not measured

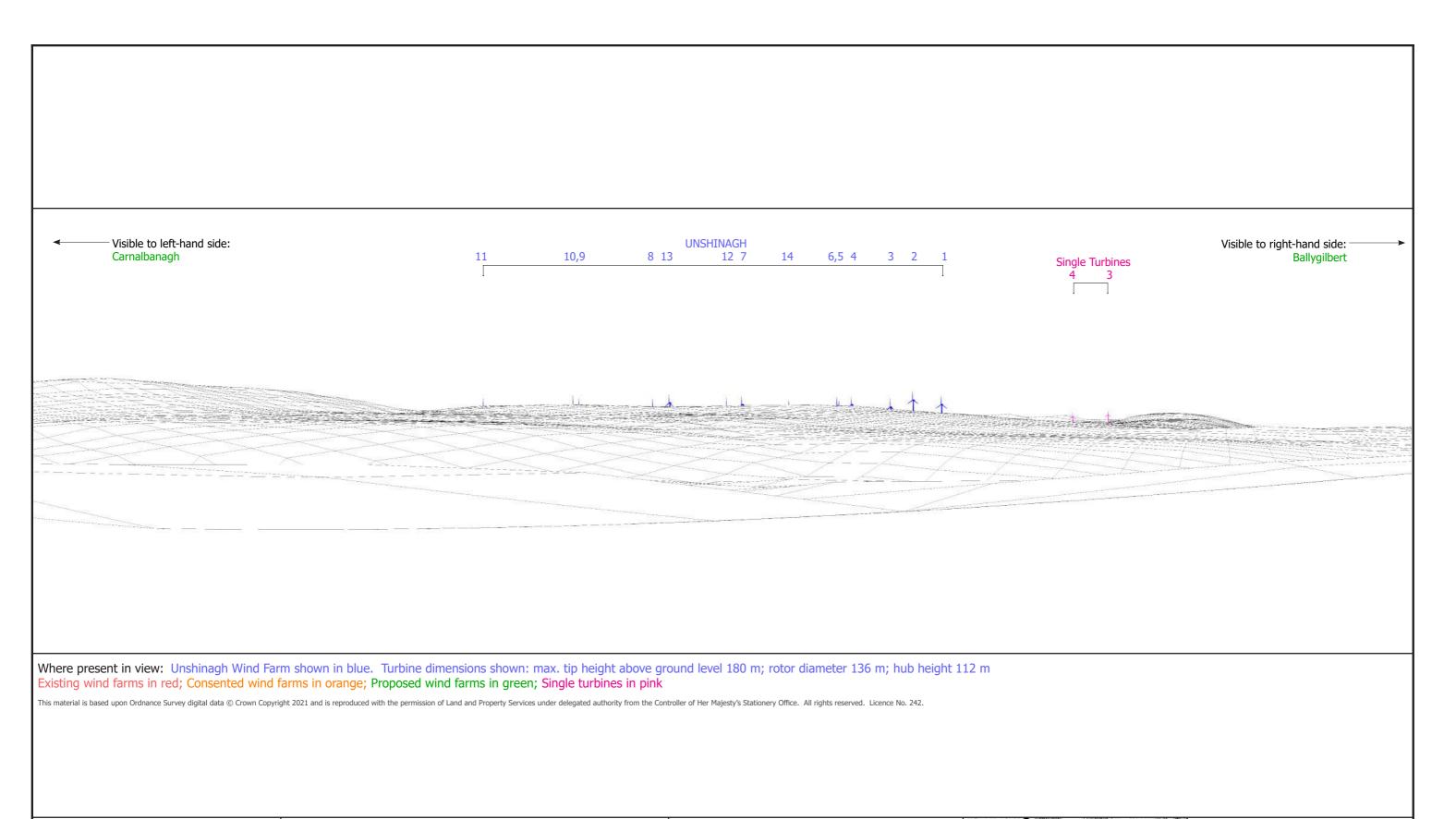
22.22 ° Bearing: 80 ° Approx. Included Angle:

Approx. distance to nearest

turbine: 7.08 km to T11







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UNSHINAGH WIND FARM

HERITAGE VIEWPOINT WF 4 Listed House

Wireline

4.2, in particular the paragraphs referencing Scottish Natural Heritage Guidance regarding the limitations of visualisations.

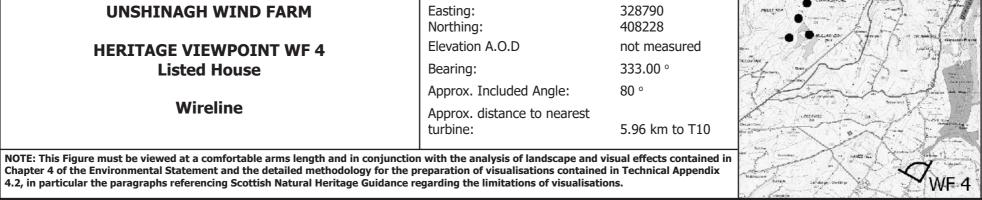
328790 Easting: 408228 Northing: Elevation A.O.D not measured Bearing: 333.00 °

Approx. Included Angle:

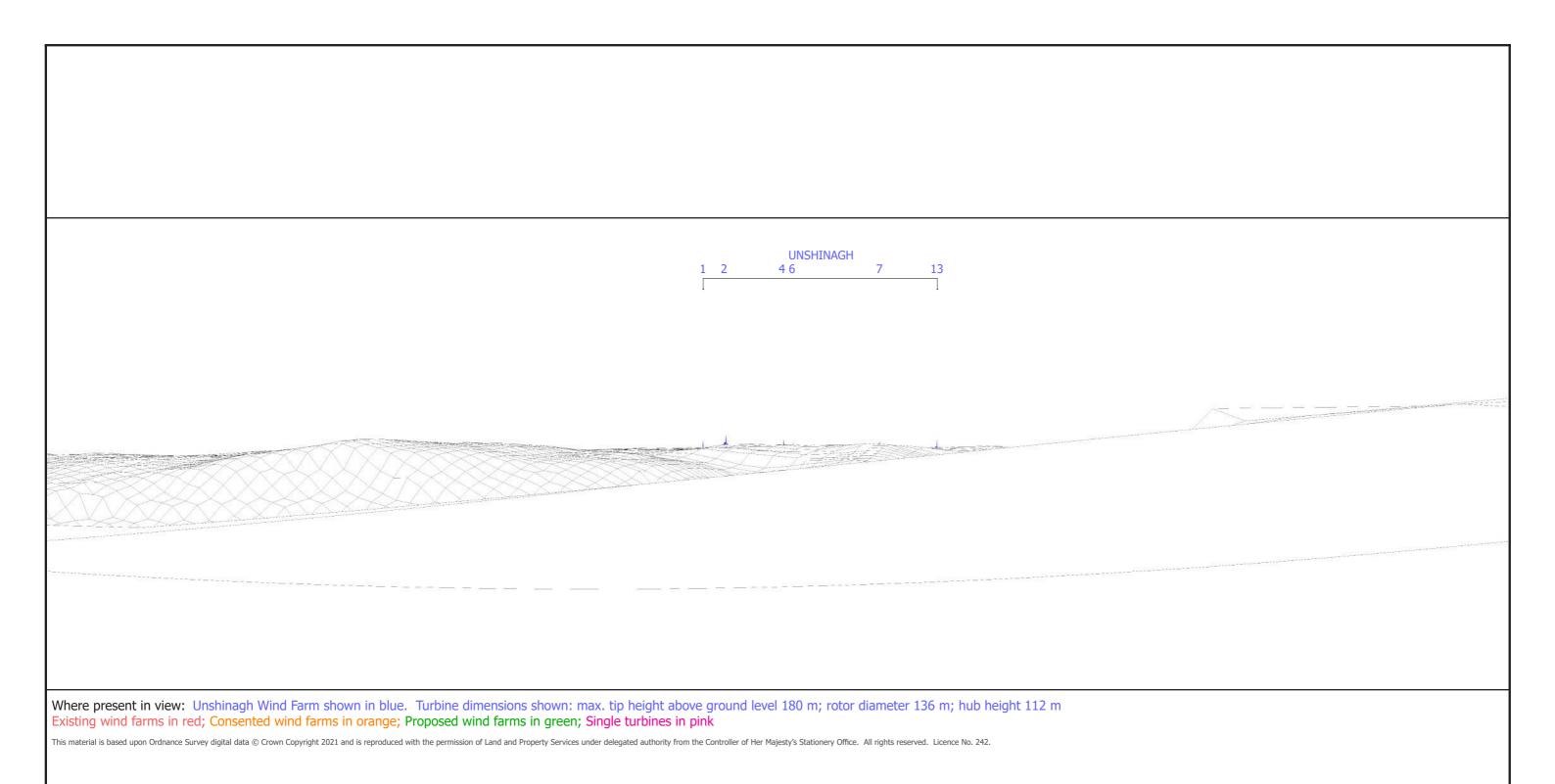
Approx. distance to nearest

turbine: 5.96 km to T10

80°







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UNSHINAGH WIND FARM

HERITAGE VIEWPOINT WF 5 Promontory Fort on Lurigethan

Wireline

Easting: 322721
Northing: 425611
Elevation A.O.D not measured
Bearing: 165.70 °

80°

Approx. Included Angle:

Approx. distance to nearest

turbine: 9.70 km to T2



