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## **Mochrum Fell Wind Farm**

### **Cultural Heritage**

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## **Mochrum Fell Wind Farm**

### **Cultural Heritage**

# 7 Archaeology & Cultural Heritage

## Introduction

- 7.1 This chapter provides an assessment of the potential impacts from the construction and operation of the proposed Mochrum Fell wind farm on cultural heritage interests. The assessment has been conducted in accordance with the Institute for Archaeologists Code of Conduct (IfA 2012<sup>1</sup>) and Standards and Guidance for Archaeological Desk-based Assessment (IfA 2012<sup>2</sup>) and has been informed by data and comments provided by Historic Scotland and Dumfries and Galloway (DGC) Archaeology Service.
- 7.2 Cultural heritage resources (hereafter 'heritage assets') include assets with statutory and non-statutory designations as set out in Scottish Historic Environment Policy<sup>3</sup> (SHEP) and in Scottish Planning Policy<sup>4</sup> (SPP).
- 7.3 The specific objectives of the cultural heritage assessment were to:
- identify the cultural heritage baseline within the Site;
  - assess the Site in terms of its archaeological and environmental potential;
  - consider the impacts of the proposed Mochrum Fell wind farm on the baseline cultural heritage resource, within the context of relevant legislation and planning policy guidelines;
  - identify measures, where appropriate, to mitigate any predicted significant adverse impacts and to assess residual impacts taking this mitigation into account;
  - consider the cumulative impacts of the proposed Mochrum Fell wind farm in combination with other existing or proposed developments, upon cultural heritage resources.
- 7.4 This chapter is supported by:
- Technical Appendix 7.1: Cultural Heritage Assets within the Site;
  - Technical Appendix- 7.2: Photographic Log;
  - Technical Appendix 7.3: Cultural Heritage Assets within 5 km of the proposed Mochrum Fell wind farm with predicted visibility of the proposed turbines;
  - Technical Appendix 7.4: Cultural Heritage Assets within 5-10 km of the proposed Mochrum Fell wind farm with predicted visibility of the proposed turbines;
  - Technical Appendix 7.5: Cultural Heritage Assets outwith 10 km from the proposed Mochrum Fell wind farm but requested by DGC; and
  - Figures 7.1 - 7.13 which are referenced in the text where relevant.

<sup>1</sup> IfA (2012) 'By-Laws: Code of Conduct', Institute for Archaeologists.

<sup>2</sup> IfA (2012) 'Standard and guidance for archaeological desk-based assessment', Institute for Archaeologists.

<sup>3</sup> Historic Scotland (2010) Scottish Historic Environment Policy, Edinburgh.

<sup>4</sup> The Scottish Government (2010) Scottish Planning Policy, Edinburgh.

## Legislation and Policy Context

- 7.5 Primary planning guidance on cultural heritage comprises the SPP, SHEP and Planning Advice Note 2 / 2011 (PAN 2 / 2011)<sup>5</sup> at national level, and the Dumfries and Galloway Structure Plan (December 1999); the Dumfries and Galloway Interim Planning Policy: Wind Energy Development (February 2012); and the Dumfries and Galloway Proposed Local Development Plan (January 2013) at the regional and local level.

### National Legislation and Policy

- 7.6 SHEP sets out Scottish Minister's policies for the historic environment, and provides policy direction for Historic Scotland and a framework that informs the day-to-day work of a range of organisations that have a role and interest in managing Scotland's historic environment. Through the implementation of SHEP, Scottish Ministers wish to achieve three outcomes for Scotland's historic environment:
- That the historic environment is cared for, protected and enhanced for the benefit of our own and future generations.
  - To secure greater economic benefits from the historic environment.
  - That the people of Scotland and visitors to our country value, understand and enjoy the historic environment.
- 7.7 Historic environment resources include statutory and non-statutory designations, as defined in SPP.
- 7.8 Heritage assets with statutory designations and relevant in the context of the Site are:
- Scheduled Monuments;
  - Listed Buildings;
  - Conservation Areas; and
  - Inventory Garden and Designed Landscapes.
- 7.9 Heritage assets with non-statutory designations and relevant in the context of the Site are:
- Other Historic Environment Interests.
- 7.10 SPP requires that planning authorities ensure that development plans provide a framework for the protection, conservation and enhancement of the historic environment and its setting (paragraph 112). PAN2 / 2011 advises that, in determining planning applications, planning authorities should take into account the relative importance of archaeological assets (paragraph 5). It also notes that in determining planning applications that may impact on archaeological features or their setting, planning authorities may on occasion have to balance the benefits of development against the importance of archaeological features (paragraph 6). The desirability

<sup>5</sup> Scottish Government (2011) Planning Advice Note 2/2011 Planning and Archaeology.

of preserving a monument (whether scheduled or not) is a material consideration and the objective should be to assure the protection and enhancement of monuments by preservation in situ, in an appropriate setting. When preservation in situ is not possible, recording and / or excavation followed by analysis and publication of the results may be an acceptable alternative (paragraph 14).

### Heritage Assets with Statutory Designations

#### SCHEDULED MONUMENTS

7.11 Under the Ancient Monuments and Archaeological Areas Act 1979<sup>6</sup> (1979 Act), the Scottish Ministers are required to compile and maintain a schedule of monuments considered to be of national importance. The consent of the Scottish Ministers is required before any works are carried out which would have the effect of demolishing, destroying, damaging, removing, repairing, altering, adding to, flooding or covering up a Scheduled Monument. In addition, impacts of proposed development works upon the setting of a Scheduled Monument form an important consideration in the granting or refusal of planning consent to conduct development works.

#### LISTED BUILDINGS

7.12 Under the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997<sup>7</sup> (1997 Act) (Scottish Government 1997), the Scottish Ministers are required to compile a list of buildings of special architectural or historic interest. Such buildings are classified into Categories A, B and C, in decreasing order of importance. Planning authorities and the Scottish Ministers are required to have special regard for the desirability of preserving Listed Buildings and their settings, and any features of special architectural or historic importance they possess.

#### CONSERVATION AREAS

7.13 Under the 1997 Act areas of special architectural or historic interest can be designated by local authorities as Conservation Areas, the character or appearance of which it is desirable to preserve or enhance. Planning authorities are required to consider planning applications affecting the appearance, character or setting of Conservation Areas.

#### INVENTORY GARDEN AND DESIGNED LANDSCAPES

7.14 The impact of a development on a designated Garden or Designed Landscape listed in 'An Inventory of Gardens and Designed Landscapes in Scotland or its Supplements' (Inventory published by Historic Scotland<sup>8</sup>) is a material consideration in the determination of a planning application. Under the provisions of the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2008<sup>9</sup> planning authorities must consult Historic Scotland on any development that may affect an asset contained in the Inventory.

<sup>6</sup> HM Government (1979) Ancient Monuments and Archaeological Areas Act 1979, HMSO, London.

<sup>7</sup> HM Government (1997) Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997, HMSO, London.

<sup>8</sup> Historic Scotland (2013) Inventory of Gardens and Designed Landscapes, available from: <http://www.historic-scotland.gov.uk/index/heritage/gardens.htm>.

<sup>9</sup> Scottish Government (2008) The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2008.

### Heritage Assets with Non-Statutory Designations

#### OTHER HISTORIC ENVIRONMENT INTERESTS

7.15 There is a range of other non-designated archaeological assets and areas of historic interest, including other (non-designated) battlefields, historic landscapes, other (non-Inventory) gardens and designed landscapes, woodlands and historic routes, such as drove roads, that do not have statutory protection. Assets with statutory protection are curated by the local planning authority, and SPP and PAN 2 / 2011 provide national planning policy guidance and advice on the treatment of such resources.

### Regional Policy

#### Dumfries and Galloway Structure Plan (December 1999)

7.16 The Plan contains policies that provide a framework for the conservation and enhancement of the urban and rural environment and protection of the diversity of the natural and cultural heritage.

7.17 Policy E9 - Listed Buildings, states that development proposals which would destroy or adversely affect the character, appearance, or setting of a Listed Building, will be resisted.

7.18 Policy E11 - Historic Gardens and Designed Landscapes, states that development in or affecting the setting of a site listed in the Inventory of Gardens and Designed Landscapes or mentioned in the list of Non-Inventory Sites will require an evaluation of the proposal's impact on the site and its setting. There will be a presumption against development which would adversely affect the landscape features, character and setting of these sites and the approaches and environs of Inventory Sites.

7.19 Policy E12 - Development Affecting Archaeological Sites, states that there will be a presumption against development which would destroy or adversely affect the appearance, fabric or setting of Scheduled Monuments, sites of national importance and other areas of significant archaeological interest. In exceptional circumstances, where it is not possible to secure the preservation of archaeological remains, the DGC will require an appraisal of the impact of the development on the Site. The developer will be responsible for securing an agreed programme of archaeological work to the satisfaction of the DGC. The policy places archaeological remains into three categories: Sites of National Importance, Regional and Local Importance, and other sites. Where there is no overriding case for preservation, development proposals which affect a site must be programmed to ensure that recording of the site can be undertaken prior to development.

- Sites of National Importance: development which would have an adverse effect on Nationally Important Sites should not normally be permitted and proposals should seek alternative locations or adopt construction techniques which do not cause an adverse impact. Where development is proposed it is particularly important that the site is preserved in an appropriate setting.
- Sites of Regional and Local Importance: where development is proposed, priority should be given to the preservation of the site within an appropriate setting. Where on balance it is



considered appropriate to approve a planning application which would result in damage or alteration to a site, provision must be made for the recording of any part of the site affected.

- Other sites: sites of lesser archaeological importance will be considered on a case by case basis.

7.20 Policy E13 (Archaeologically Sensitive Areas) states that the DGC will safeguard the character and archaeological interest of 'archaeologically sensitive areas', the boundaries of which will be defined in Local Plans.

*Dumfries and Galloway Interim Planning Policy (IPP): Wind Energy Development (Feb 2012).*

7.21 The Dumfries and Galloway IPP for Wind Energy Development sets out the issues to be considered when assessing proposals for wind energy developments. In the 'Historic Environment and Cultural Heritage' the IPP states that:

- 'All proposals will be assessed for their impact on the historic environment and cultural heritage. Site-specific assessments will be required to identify potential issues and effects and proposals should identify mitigation for identified effects. These will be assessed against the Dumfries and Galloway Wind Farm Landscape Capacity (2011) which identifies landscape and visual sensitivities relative to the consideration and determination of proposals for wind farm developments in the region'.

*Dumfries and Galloway Proposed Local Development Plan (January 2013)*

7.22 The proposed local development plan covers all of Dumfries and Galloway and guides the future use and development of the region. The plan is currently at the consultation stage and it is expected to be adopted in 2014. Once adopted the plan will replace the current Structure Plan and Local Plans. Until the plan is adopted it is a material consideration when assessing planning proposals.

7.23 Policy OP1 - Development Considerations, states that all development proposals should address, to satisfaction of the DGC, the following where relevant:

- Historic Environment - development proposals should protect and/or enhance the character, appearance and setting of the region's rich historic environment principally by ensuring they are sympathetic to nearby buildings, sites and features, integrate well and complement the surrounding area. The information contained within the DGC's Historic Environment Record and SHEP will be a material consideration in the assessment of proposals.

7.24 Policy HE1 - Listed Buildings, states that in considering development that impacts on the character or appearance of a Listed Building or its setting the DGC will need to be satisfied that: the layout, design, materials, scale, siting and the future use shown in any development proposals are appropriate to the character and appearance of the listed buildings and its setting.

7.25 Policy HE2 - Conservation Areas, states that the DGC will support development within or adjacent to a Conservation Area that preserves or enhances the character of the area and is

consistent with any relevant Conservation Area Appraisal. In considering such development the DGC will need to be satisfied that:

- the new development preserves or enhances the character, appearance or setting of the Conservation Area through appropriate design, use of materials, detailing, scale and general massing and arrangement of such development,
- the quality of views within, from and into the Conservation Area will be maintained or enhanced.

7.26 Policy HE3 – Archaeology, states that:

- a) The DGC will support development that protects significant archaeological and historic assets, and the wider historic environment from adverse affects. In considering development proposals the DGC will need to be satisfied that:
  - the development preserves or enhances the appearance, fabric or setting of the site or asset in situ; and/or,
  - where there is uncertainty about the location, extent or significance of these assets an agreed scheme of assessment and evaluation to inform the application is included with the proposal; and/or,
  - due consideration has been given to the significance and value of the site or asset in relation to the long-term benefit and specific need for the development in the location proposed.
- b) Where, due to exceptional circumstance, development is to proceed and the preservation of historic assets in situ including buildings is not possible, a scheme of mitigation involving excavation, recording, analysis, publication and archiving and any other measures appropriate to the case has been agreed with the DGC.

7.27 Policy HE4 - Archaeologically Sensitive Areas, states that the DGC will support development that safeguards the character, archaeological interest and setting of Archaeologically Sensitive Areas (ASA) as designated by the DGC.

7.28 Policy HE6 - Historic Gardens and Designed Landscapes, states:

- a) that the DGC will support development that protects or enhances the significant elements, specific qualities, character, integrity and setting, including key views to and from, gardens and designed landscapes included in the Inventory of Gardens and Designed landscapes of the Non-Inventory List. In considering development proposals the DGC will need to be satisfied that:
  - the development protects or enhances the significant elements of the garden or landscape in-situ; and,
  - due consideration has been given to the significance and value of the asset in relation to the long-term benefit and specific need for the development in the location proposed.
- b) Developers will be required to submit the results of an assessment of the impact of their proposals on the sites and their settings plus details of any potential mitigation measures.

## Local Policy

### Stewartry Local Plan (July 2006)

- 7.29 The Local Plan sets out the detailed guidance for new development in the Stewartry area and conforms to the Dumfries and Galloway Structure Plan.
- 7.30 General Policy 50 - Conservation Areas, states that DGC will ensure that new development preserves or enhances the character, appearance and setting of the Conservation Area through appropriate design, use of materials, detailing and general massing and arrangement of any new proposals.
- 7.31 General Policy 51 - Listed Buildings, states that in considering proposals affecting Listed Buildings DGC will ensure that proposals for development will not be permitted if they would harm the setting of a Listed Building.
- 7.32 General Policy 54 - Known Archaeological Sites – including Scheduled Ancient Monuments, reiterates the policies set out in E12 of the Structure Plan, and General Policy 55: (Archaeological Sensitive Areas) reiterates the policies set out in E13 of the Structure Plan.

## Issues Identified during Consultation

- 7.33 Scoping opinions, addressing cultural heritage issues, were received from Historic Scotland and from DGC Archaeology Service. Summaries of the consultation responses are set out below in Table 7.1.
- 7.34 Post scoping consultation (09.04.2013) by letter was also undertaken with Historic Scotland, and with DGC Archaeology Service, to agree viewpoints for assessment of impacts on setting of cultural heritage features. Summaries of the consultation responses are set out below in Table 7.1.

Table 7.1 Issues Identified during Consultation		
Consultee	Issue	Where / How this is addressed
Historic Scotland (Formal Scoping 10.01.13)	The effect of the proposed Mochrum Fell wind farm on the setting of Scheduled Monument Little Merkland, fort (1082) should be assessed in the EIA. The assessment of the effects on this Scheduled Monument should include the cumulative impacts, supported by visualisations, of Benshinnie wind farm in combination with the Mochrum Fell turbines.	The potential indirect impact of the proposed Mochrum Fell wind farm on the setting of Little Merkland, Fort is assessed in paragraphs 7.121-7.124. A cumulative wireline for Little Merkland, Fort is provided as Figure 7.5b.
DGC Archaeology Service (Formal Scoping 22.01.13)	The applicant should be aware of the Interim Planning Policy: Wind Energy Development (IPP) (2012) and its supporting technical study, the Dumfries and Galloway Wind Farm Landscape Capacity Study (DGWFLCS). Advised that the landscape capacity study considered 'Settlement and Archaeology' as one of the landscape sensitivities informing landscape capacity and the resulting	The potential indirect impact of the proposed Mochrum Fell wind farm on the historic character of the surrounding landscape is assessed in Chapter 8: Landscape and Visual

Table 7.1 Issues Identified during Consultation		
Consultee	Issue	Where / How this is addressed
	spatial framework. The study provides a regional wide overview of the historic character and sensitivity of the historic built and managed element of the landscape. Information and guidance contained in the Interim Planning Policy: Wind Energy Development (2012) and the Dumfries and Galloway Wind Farm Landscape Capacity Study must be considered and that the potential wide effect of the proposed Mochrum Fell wind farm on the historic character (sense of place and identity, recreation and tourism) of the surrounding landscape should be assessed in the EIA. .	Amenity.
DGC Archaeology Service (Formal Scoping 22.01.13)	An assessment of the direct impacts of the proposed Mochrum Fell wind farm should be assessed in the EIA, informed by a through desk-based study and where appropriate field survey.	The results of a desk-based assessment and field survey carried out for the proposed Mochrum Fell wind farm is set out in Sections 7.63-7.92. The potential direct impacts of the proposed Mochrum Fell wind farm on cultural heritage assets has been assessed in paragraphs 7.107-7.113.
DGC Archaeology Service (Formal Scoping 22.01.13)	The effects of the Mochrum Fell wind farm on the setting of designated and non-designated cultural heritage assets within the surrounding area should be included in the EIA. The assessment should include: Scheduled Monuments <ul style="list-style-type: none"> <li>Little Merkland, fort (1082)</li> <li>Boreland Mote, motte (1114)</li> <li>Kirkland Mote, motte (1124)</li> <li>Balmacillellan Motte (1109)</li> <li>Glenroan (Glengappock) Mote, fort (1072)</li> <li>Kenmure Castle (7743 –also a Category B Listed Building)</li> <li>Threave Castle (90301 – also a Category A Listed Building)</li> </ul> Category A Listed Buildings and their non-inventory designed landscapes <ul style="list-style-type: none"> <li>Hensol House (3415)</li> </ul> Category B Listed Buildings <ul style="list-style-type: none"> <li>Threave House (9829)</li> </ul> Category B Listed Buildings and their non-inventory designed landscapes <ul style="list-style-type: none"> <li>Corsock House (17080)</li> <li>Barscobe Castle (3310)</li> <li>Holm House (3311)</li> <li>Barwhillanty (17091)</li> <li>Airds of Parton (17089)</li> </ul>	The potential indirect impacts of the proposed Mochrum Fell wind farm on the setting of cultural heritage assets is assessed in Section 7.114-7.161.

Table 7.1 Issues Identified during Consultation		
Consultee	Issue	Where / How this is addressed
	Inventory Gardens and Designed Landscapes Threave House Undesignated assets <ul style="list-style-type: none"> <li>Mochrum Fell, fort (HER ref no: MDG 4316)</li> <li>Parton village</li> </ul>	
DGC Archaeology Service (Formal Scoping 22.01.13)	Requested that the cumulative impacts of the Mochrum Fell wind farm in combination with other wind energy developments on the setting of cultural heritage assets be assessed.	The potential cumulative impacts of the proposed Mochrum Fell wind farm on the setting of cultural heritage assets is assessed in paragraphs 7.162-7.168.
Historic Scotland (Other Consultation) (26.04.13)	Confirmed that it is content with the proposed cultural heritage visualisations (photomontages and wirelines) and welcome that the Scheduled Monument, Little Merklund, Fort (1082) will include a cumulative visualisation with Benshinnie Wind Farm.	A list of cultural heritage viewpoints is provided in Table 10.9.
DGC Archaeology Service (Other Consultation) (08.07.13)	Confirmed that DGC is content with the list of viewpoints proposed for the cultural heritage assessment.	A list of cultural heritage viewpoints is provided in Table 10.9.

## Assessment Methodology

### Baseline Characterisation

#### Study Area Description

- 7.35 The cultural heritage study area consists of two parts:
- The Site: this covers the area within the red line boundary, as shown on Figure 1.2.
  - A wider study area: this extends to 10 km from the Site boundary and provides the study area for the identification of cultural heritage assets with statutory protection (and those with national and regional non-statutory designations) whose settings may be affected (operational and cumulative impacts) by the proposed Mochrum Fell wind farm.

#### Data Sources

##### DESK-BASED INFORMATION

- 7.36 Up-to-date information was obtained from appropriate sources on the locations of cultural heritage assets with statutory protection and non-statutory designations within the study area.

- 7.37 Details of the locations and extents of Scheduled Monuments, Listed Buildings, Inventory Garden and Designed Landscapes, and Conservation Areas within the study area were downloaded, in GIS, from the Historic Scotland Data Warehouse<sup>10</sup>.
- 7.38 Information on known cultural heritage assets within the Site was obtained from DGC Archaeology Service Historic Environment Record (HER).
- 7.39 Additional information on the character and condition of known archaeological assets within the Site was obtained from the Royal Commission on the Ancient and Historic Monuments of Scotland database<sup>11</sup>.
- 7.40 Ordnance Survey maps (including 1<sup>st</sup> and 2<sup>nd</sup> Edition maps and subsequent maps until 1951<sup>12</sup>) and other historic maps held by the Map Library of the National Library of Scotland were examined to provide information on assets of potential cultural heritage interest and on historic land-use development within the Site.
- 7.41 An assessment was also made of vertical aerial photograph collections covering the Site held by the Royal Commission on the Ancient and Historic Monuments of Scotland (RCAHMS). Sorties dating from 1946 were examined. In addition modern aerial photography imagery (GoogleEarth<sup>TM</sup>; Bing<sup>TM</sup>) was examined.
- 7.42 Historic Land-Use Assessment Data for Scotland (HLAMap)<sup>13</sup> was consulted for information on the historic land use character of the Site.
- 7.43 The Scottish Palaeoecological Database<sup>14</sup> (SPAD) which records the distribution of known palaeoenvironmental sites across Scotland was consulted for information on such sites within or adjacent to the Site.

##### FIELD SURVEY

- 7.44 A reconnaissance walk-over field survey of the Site was undertaken in January 2013, with the following aims:
- to assess the baseline condition of the known heritage assets identified through the desk-based assessment;
  - to identify any further features of cultural heritage interest not detected through the desk-based assessment; and,
  - to identify areas with the potential to contain currently unrecorded buried archaeological remains.
- 7.45 Open moorland and farmland (rough / improved pasture) areas were surveyed in full and previously recorded cultural heritage assets that now lie within commercial forestry were

<sup>10</sup> Historic Scotland (2013) GIS downloaded, available at <http://hsewsf.sedsh.gov.uk/gisdl.html> (accessed in July 2013).

<sup>11</sup> RCAHMS (2012) Royal Commission of Ancient and Historic Monuments Database (PASTMAP) available from: <http://jura.rcahms.gov.uk/PASTMAP/start.jsp> (accessed December 2012).

<sup>12</sup> Ordnance Survey maps (1895, 1910 & 1951) Sheet XXVII, six inches to one mile.

<sup>13</sup> RCAHMS (2013) Historic Land-use Assessment for Scotland (HLAMap) available from: <http://rcahms.gov.uk> (accessed July 2013).

<sup>14</sup> Coles, G.M., Gittintgs, B.M., Milburn, P. and Newton, A.J. (1998) Scottish Palaeoecological Archive Database available from: <http://www.geos.ed.ac.uk/~ajn/spad/> (accessed December 2012).



targeted. Other areas of dense commercial forestry were not surveyed in detail due to access difficulties.

- 7.46 The position of identified assets (and where appropriate their extents) were logged using a FLITN s852 Handheld GNSS running Penmap and using channel GPS+Galileo with SBAS and NTRIP (Trimble VRS service) data corrections via SIM card. The device has typical accuracy with NTRIP correction of approximately 0.6 m – 1.2 m. The baseline condition of identified assets was recorded on pro-forma monument recording sheets and by digital photography.

#### KEY EXTERNAL CULTURAL HERITAGE ASSETS

- 7.47 The turbine blade tip and hub height Zone of Theoretical Visibility (ZTV) maps, generated for the proposed Mochrum Fell wind farm, were used to identify those assets within 10 km of the outermost turbines from which there would be theoretical visibility of one or more of the turbines.
- 7.48 Site visits to heritage assets within a 10 km radius of the outermost proposed turbines were also carried out in January 2013, in order to assess the character and sensitivity of their settings. The site visits focused on those heritage assets most likely to receive significant effects on their settings (i.e. those closest to the proposed Mochrum Fell wind farm and those considered, on preliminary analysis, to potentially be the most sensitive to change within their settings). Factors considered in the assessment of setting undertaken during the field visit were those set out in the guidance issued by Historic Scotland<sup>15</sup>, namely:
- the location and orientation of the asset;
  - important views of, or from, heritage assets (including the principal façades of Listed Buildings);
  - the importance, if applicable, of designed settings; and
  - any obvious views or vistas.

### Method of Assessment

#### Assessing Significance

- 7.49 The importance of cultural heritage assets reflects the relative weight given to them in SPP and SHEP. Table 7.2 summarises the relative importance of heritage assets (which are relevant in the context of this assessment).

Table 7.2: Importance of Cultural Heritage Assets	
Heritage Importance	Definition
National / International	Assets of national or international importance, including: <ul style="list-style-type: none"> <li>Scheduled Monuments and assets proposed for scheduling;</li> <li>Category A Listed Buildings;</li> <li>Inventory Gardens and Designed Landscapes;</li> <li>Outstanding Conservation Areas (where designation persist);</li> </ul>

<sup>15</sup> Historic Scotland (2010) Managing Change in the Historic Environment: Setting, Historic Scotland.

	<ul style="list-style-type: none"> <li>Inventory Historic Battlefields.</li> </ul>
Regional	Assets of regional importance, including: <ul style="list-style-type: none"> <li>Archaeological assets and areas of distinctive regional importance;</li> <li>Undesignated archaeological assets and features identified in DGC Historic Environment Records (HER) as non-statutory register (NSR<sup>16</sup>) sites ;</li> <li>Archaeologically Sensitive Areas (ASA<sup>17</sup>);</li> <li>Category B Listed Buildings;</li> <li>Conservation Areas;</li> <li>Non-Inventory Designed Landscapes (NIDL<sup>18</sup>).</li> </ul>
Local	Assets of local importance, including: <ul style="list-style-type: none"> <li>Archaeological assets of local importance;</li> <li>Category C Listed Buildings;</li> <li>Unlisted buildings and townscapes with local (vernacular) characteristics.</li> </ul>
Lesser	Assets of little or no importance, including: <ul style="list-style-type: none"> <li>Artefact find-spots;</li> <li>Unlisted buildings of minor historic or architectural interest;</li> <li>Poorly preserved examples of particular types of feature.</li> </ul>

#### Assessment of Direct (Construction Phase) Impacts

- 7.50 Criteria for assessing the magnitude of direct (construction phase) impact, which measures the degree of change to the baseline condition of the heritage asset that could result from the construction of the proposed Mochrum Fell wind farm, are presented in Table 7.3.

Table 7.3: Magnitude of Construction (Direct) Impacts	
Magnitude of Impact	Definition
High	A fundamental change to the baseline condition of the asset, leading to total loss or major alteration of character.
Medium	A material, partial loss or alteration of character.
Low	A slight, detectable, alteration of the baseline condition of the asset.
Imperceptible	A barely distinguishable change from baseline conditions.

#### Criteria for Assessing Significance of Construction (Direct) Impacts

- 7.51 The importance of the asset (Table 7.2) and the magnitude of the predicted impact (Table 7.3) are used to inform the professional judgement of the likely significance of the direct impacts. Table 7.4 summarises the criteria for assigning significance of direct impact.

<sup>16</sup> NSR sites were identified in some Local Authority areas through a Historic Scotland funded project in the 1980s. In most cases the designations have not been verified by further field inspections and Historic Scotland does not rely solely, or mainly, on such designations when selecting sites for scheduling. Nevertheless, it is recognised that such designations denote potentially important archaeological sites and features and that they should be considered to be important assets. In recognition of this, assets with such designations (whilst they have no statutory protection equivalent to Scheduled Monuments) are considered in the assessment as being of regional importance and medium heritage value.

<sup>17</sup> Archaeologically Sensitive Areas (ASA) are a designation within Dumfries and Galloway that came about during preparation of an Indicative Forestry Strategy in the 1990's. ASAs were designated in the DGC Structure Plan under Policy E13. The designation of ASAs is at the regional/local level and is non-statutory in effect.

<sup>18</sup> DGC holds lists of Non-Inventory Gardens and Designed Landscapes (NIDL). These are parks, gardens and designed landscapes which do not qualify for inclusion in the Inventory of Gardens and Designed Landscapes in Scotland but which are of regional/local interest. Their designation is non-statutory in effect but they are provided for under Dumfries and Galloway Council Structure Plan Policy E11.

Table 7.4: Significance of Construction (Direct) Impacts				
Magnitude of Impact ▼	Heritage Importance ►			
	National / International	Regional	Local	Lesser
High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Negligible	Negligible
Imperceptible	Minor	Negligible	Negligible	Negligible

7.52 Major and moderate impacts are considered to be ‘significant’ in the context of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011<sup>19</sup> (EIA Regulations). Minor and negligible impacts are not significant.

#### Assessment of Indirect (Operational Phase) Impacts on Setting

7.53 Historic Scotland’s guidance document Managing Change in the Historic Environment: Setting (Historic Scotland 2010<sup>20</sup>) notes that “*setting should be thought of as the way in which the surroundings of a historic asset or place contribute to how it is experienced, understood and appreciated. Setting often extends beyond the immediate property boundary of a historic structure into the broader landscape*”. The guidance also suggests that if a proposed development is likely to affect the setting of a cultural heritage asset, an objective, written assessment should be prepared by the applicant to inform the decision-making process. The conclusions drawn should take into account the significance of the historic asset and its setting and attempt to quantify the extent of any detrimental impact. The methodology and level of information should be tailored to the circumstances of each case.

7.54 The guidance recommends that, for each asset where a potential impact on setting has been identified, the assessment of possible impacts should adopt a four-stage approach:

- identification of the characteristics of the setting of the asset;
- assessment of the sensitivity of that setting;
- identification of how the presence of the proposed Mochrum Fell wind farm would affect that setting (magnitude of impact); and
- assessment of significance of impact.

#### Criteria for Assessing Sensitivity of Setting

7.55 Sensitivity of setting has been assessed by considering two factors:

- the relative weight which statute and policy attached to the asset and its setting (Table 7.2); and

- the degree to which the baseline setting contributes to the understanding and / or appreciation, and hence value, of the asset (Table 7.5).

Table 7.5: Contribution of Setting to Understanding and Appreciation of a Cultural Heritage Asset	
Contribution of Setting	Definition
High	A setting which makes a strong positive contribution to the understanding and / or appreciation of the siting and / or historical / archaeological / architectural context of an asset. E.g. a prominent topographic location; surroundings that include related monuments in close association; surroundings that are believed to be little changed from those when the asset was created.
Moderate	A setting which makes some positive contribution to the understanding and / or appreciation of the siting and / or historical / archaeological / architectural context of an asset. E.g. surroundings that complement the siting and appearance of an asset such as the presence of a feature of the rural past within a more recent farming landscape containing little or no urban or industrial development.
Low	A setting which makes little positive contribution to the understanding and / or appreciation of the siting and / or historical / archaeological / architectural context of an asset. E.g. where surroundings only partially complement the siting and appearance of an asset, such as the presence of a feature of the rural past within a partly urbanised or industrialised landscape.
Negligible	A setting which does not contribute positively to the understanding and / or appreciation of the siting and / or historical / archaeological / architectural context of an asset. E.g. immediate surroundings, such as of a commercial coniferous single species woodland or an industrial development, that are not relevant to understanding the context of the asset.

7.56 These two criteria (Tables 7.2 and 7.5) are combined to assess the overall sensitivity, as set out in Table 7.6.

Table 7.6: Sensitivity of Setting of an Asset				
Heritage Importance ▼	Contribution of Setting ►			
	High	Moderate	Low	Negligible
National / International	High	High	Medium	Low
Regional	High	Medium	Low	Low
Local	Medium	Low	Low	Low

#### Criteria for Assessing Magnitude of Impacts on Setting

7.57 Where it has been determined that the setting of an asset is such that there is no potential for it to be affected by the presence of the proposed Mochrum Fell wind farm the asset is not

<sup>19</sup> Scottish Government (2011) Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011, Edinburgh.

<sup>20</sup> Historic Scotland (2010) ‘Managing Change in the Historic Environment: Setting’, Edinburgh.



considered further in the assessment. For the remaining assets, the magnitude of impact on setting has been assessed according to the thresholds set out in Table 7.7.

Table 7.7: Magnitude of Impacts on Setting	
Magnitude of Impact	Definition
High	A fundamental material impact obviously changing the surroundings of an asset, such that its baseline is substantially or totally altered.
Medium	An impact discernibly changing the surroundings of an asset, such that its baseline setting is partly and materially altered.
Low	A slight, but detectable impact that does not materially alter the baseline setting of the asset.
Imperceptible	A very slight and barely distinguishable change from baseline conditions.

#### Criteria for Assessing Significance of Impacts on Setting

7.58 The significance of an impact depends on both the magnitude of impact and the sensitivity of the setting of the asset. Table 7.8 presents the matrix that was used to inform the determination of the significance of impacts on setting.

Table 7.8: Significance of Impact on Setting			
Magnitude of Impact ▼	Sensitivity of Setting ►		
	High	Medium	Low
High	Major	Major	Minor
Medium	Major	Moderate	Minor
Low	Minor <sup>21</sup>	Minor	Negligible
Imperceptible	Negligible	Negligible	Negligible

7.59 Major and moderate impacts are deemed to have potential to result in a significant effect in the context of the EIA Regulations<sup>22</sup>. Minor and negligible impacts are not considered significant in EIA terms.

#### Cumulative Assessment

7.60 The assessment of cumulative effects on cultural heritage is based upon consideration of the effects of the proposed Mochrum Fell wind farm on the settings of assets with statutory designations within 10 km of the proposed outer turbines in addition to the likely effects of other operational, consented and proposed wind farm schemes (at the application stage). The assessment takes into account the relative scale (i.e. size and number of turbines) of the identified developments, their distance from the affected asset, and the potential degree of visibility of the various developments from the assets.

<sup>21</sup> A non-material change to baseline conditions cannot by its nature lead to a significant effect. A significant effect arises from a material change to baseline conditions. This distinction explains why this particular assessment finding is 'minor' significance and not 'moderate'.

<sup>22</sup> Scottish Government (2011) Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011, Edinburgh.

## Baseline Conditions

### Current Baseline within the Site

- 7.61 Twenty cultural heritage assets have been identified within the Site. The locations and extents of these are shown on Figure 7.1, and Technical Appendix 7.1 provides detailed gazetteer information on the character and baseline condition of the assets and features identified by the study. Numbers in brackets, in the following sections, refer to site numbers shown on Figure 7.1 and listed in Technical Appendix 7.1.
- 7.62 There are no Scheduled Monuments and no Listed Buildings within the Site. No part of the Site lies within a Conservation Area or Inventory Garden and Designed Landscape.
- 7.63 The DGC Archaeology Service HER and the RCAHMS database hold records for five heritage assets within the Site, a relict field system (1), a former enclosure (2), a fort (3), field boundaries and former sheep ree (alt. sheep fold) (12), and the alleged route of a Roman Road (20). In addition the HER holds a record for a sheep ree (7), and the RCAHMS database records a former quarry (4) and head dyke (14).
- 7.64 Examination of historic maps identified ten additional heritage assets, three quarries (5, 18 and 19), a foot bridge (6), two sheep rees (8 and 10), a hay ree (9), two field boundaries (13 and 17), and a building and associated enclosure (15).
- 7.65 A relict field system (1) is present in rough pasture to the southwest of Mochrum Fell and visible on vertical aerial photographs from 1946 and on modern aerial photographic imagery (GoogleEarth<sup>TM</sup>; Bing<sup>TM</sup>).
- 7.66 The field survey provided further information on the baseline condition of the heritage assets identified through desk-based assessment and identified two additional assets of cultural heritage interest, a quarry (11) and a clearance cairn (16).
- 7.67 The SPAD provided no relevant information specific to the Site.
- 7.68 The HLAMap indicates that the majority of the Site lies under 20<sup>th</sup> century commercial forestry plantation (at Mochrum Fell, Poundland Hill, Planting Hill and Glengunnoch Hill). Moorland and rough pasture land is found along the western edge of the site, at Pattiesthorn Plantation, while small pockets of improved 19<sup>th</sup> / 20<sup>th</sup> century fields are present to the south, around Nether Laggan and Parton Village A summary is provided below of the character of the cultural heritage assets within the Site (Figure 7.1). Using the criteria detailed in Table 7.2, the heritage importance of each identified asset is stated.

### Prehistoric Features

- 7.69 The poorly preserved and much denuded remains of a probable prehistoric fort (3) survive on a rocky knoll at the northern end of the tongue of high land projecting south from Mochrum Fell. The condition of the fort was first recorded by Feacham<sup>23</sup> in 1956 who noted that the principal defence of the fort, at the time, consisted of a stone wall around the well-defined shoulder of the

<sup>23</sup> Feacham, R.W. (1956) Iron Age and early medieval monuments in Galloway and Dumfriesshire, Trans Dumfriesshire Galloway Natur Hist Antiq Soc, 3<sup>rd</sup>, vol 33, p59.

knoll and that although the wall was much robbed of its outer stone, the wall core, which had become vitrified in places, was traceable. To the south side of the fort a ditch with a rampart on the counterscarp was also visible. No traces of any structures were identified within the interior of the fort. Later field survey in 1977, carried out by the Ordnance Survey, recorded that by this time the fort stood in an area of commercial forestry plantation and only slight traces of the main wall, as recorded by Feacham, were still visible. Today the fort is surrounded by dense commercial conifer forestry and self seeded trees are growing over a large proportion of the interior; no obvious traces of the main wall survive and only what may be the denuded rampart at the southern edge of the fort was visible amongst trees. The fort is one of a group of similar monuments spread throughout the Loch Ken / River Dee valley and although the fort remains are covered in commercial forestry it is still visible from the surrounding landscape, standing in a prominent topographical position (**Technical** Appendix 7.5: Photo Log: Photo 7.1). Even though little in the way of upstanding earthworks of the fort survive today there is still potential for buried remains holding information on the construction, date and use of the fort, to survive within the commercial forestry. Taking its intrinsic archaeological potential and its prominent topographical position into account, it is assessed that the fort is of **regional** heritage importance.

#### *Alleged Roman Road*

- 7.70 The HER and RCAHMS database note that Crawford (1954)<sup>24</sup> suggested that the route of the modern A713 public road may follow the line of a previous Roman road (20) running between Glenlochar and Water of Ken. Field survey carried out by the Ordnance Survey in 1975 recorded that there was no evidence on the ground or on aerial photographs to support Crawford's assertions. Current field survey for the assessment did not identify any remains potentially associated with a Roman road. The record is considered to be of lesser heritage importance.

#### *Medieval or Later Farming Features*

##### FORMER SETTLEMENT

- 7.71 The Ordnance Survey 1<sup>st</sup> Edition map<sup>25</sup> (1852) depicts a single, unnamed, roofed building and an associated enclosure (15) in an area of farmland, approximately 250 m north-northwest of Nether Laggan Farm. The building and enclosure are not, however, depicted on the 2<sup>nd</sup> Edition<sup>26</sup> (1895) map suggesting that they had been abandoned and demolished by this later date. No upstanding remains of the building or enclosure survive; the location is within a flat, improved pasture field. The building does not appear to correspond with any farm shown on historic maps prior to those of the Ordnance Survey (i.e. Roy<sup>27</sup>, Ainslie<sup>28</sup> and Thomson<sup>29</sup>) and

was most probably a functional farm building, such as a barn, connected with Nether Laggan Farm. They are considered to be of lesser heritage importance.

##### FIELD SYSTEMS AND RELICT CULTIVATION REMAINS

- 7.72 The HER and RCAHMS database record the presence of a large relict field-system (1) in an area of rough moorland, approximately 1 km to the north east of Glenswinton Farm. The field system is depicted on the Ordnance Survey 1<sup>st</sup> Edition map<sup>30</sup> (1853, annotated as 'Old Fences', suggesting that the field system is probably of 18<sup>th</sup> century date, or earlier, and may be associated with the farmstead at 'Glenhead' (now named Glenswinton) shown on Roy's map. The field survey recorded discontinuous field banks concentrated on the higher, dry knolls (highlighted in solid dark brown line on Figure 7.1); the field banks are generally poorly preserved surviving no higher than 0.3 m, although one or two sections do survive up to a 1 m high in places (Technical Appendix 7.5: Photo Log: Photo 7.2 and 7.3).
- 7.73 The Ordnance Survey 1<sup>st</sup> Edition map<sup>31</sup> (1853) and assessment of aerial photographs shows that the field system was once more extensive than that recorded in the field (field banks recorded from desk-based sources are depicted as light brown dotted line on Figure 7.1) and the limited visibility of the field system today is probably due to a combination of erosion over time and the inundation of features in wet marshy areas and thick vegetation growth (including bracken cover). It is therefore possible that remains of the field banks, shown on the Ordnance Survey 1<sup>st</sup> Edition map but not recorded in the field, could still be present as buried remains or very low relief features. The field banks were found to define areas of relict reverse 'S' shaped rig and furrow cultivation, which are thought to date to the medieval period surviving on higher and drier knolls (shown in light green on Figure 7.1).
- 7.74 The remains of the field system on high moorland perhaps indicate the cultivation of these areas at a time of better climatic conditions (perhaps in the early medieval period). The field system and associated cultivation remains are considered to be of local heritage importance.
- 7.75 The Ordnance Survey 1<sup>st</sup> and 2<sup>nd</sup> Edition (1853<sup>32</sup> & 1895<sup>33</sup>) maps depict a roughly square enclosure (or field) (2) present to the west of Mochrum Fell. The enclosure is likely to have once formed part of the larger field system (1), present just to the west and described above. No upstanding remains of the enclosure survive today, it having been removed by commercial forestry, and it is of lesser heritage importance.
- 7.76 Further field banks and an associated sheep ree (12-14) are depicted on the Ordnance Survey 1<sup>st</sup> Edition map<sup>34</sup> (1852 & 1853) to the south around Mid Laggan Hill, and an additional field bank (17) is shown at Glengunnoch Mill. Only one of these field banks (12b) continues to be depicted on the later Ordnance Survey 2<sup>nd</sup> Edition<sup>35</sup> (1895) map, the others are no longer

<sup>24</sup> Crawford, O.G.S. (1954) Roman Roads in SW Scotland, 1, at Glenochar', Trans Dumfriesshire Galloway Natur Hist Antiq Soc, 3<sup>rd</sup>, vol 31, p22-23.

<sup>25</sup> Ordnance Survey 1<sup>st</sup> Edition (1852), Kirkcudbrightshire, Sheet XXIV, six inches to one mile.

<sup>26</sup> Ordnance Survey 2<sup>nd</sup> Edition (1895) Kirkcudbrightshire, Sheet XXVII.NW, six inches to one mile.

<sup>27</sup> Roy, W. (1747-55) Military Survey Map of Scotland.

<sup>28</sup> Ainslie, J (1797) The Stewartry of Kirkcudbright.

<sup>29</sup> Thomson, J (1821) Kirkcudbright-shire.

<sup>30</sup> Ordnance Survey 1<sup>st</sup> Edition (1853) Kirkcudbrightshire, Sheet XXIV, six inches to one mile.

<sup>31</sup> Ordnance Survey 1<sup>st</sup> Edition (1853) Kirkcudbrightshire, Sheet XXIV, six inches to one mile.

<sup>32</sup> Ordnance Survey 1<sup>st</sup> Edition (1853) Kirkcudbrightshire, Sheet XXIV, six inches to one mile

<sup>33</sup> Ordnance Survey 2<sup>nd</sup> Edition (1895) Kirkcudbrightshire, Sheet XXVII.NW, six inches to one mile.

<sup>34</sup> Ordnance Survey 1<sup>st</sup> Edition (1852 & 1853) Kirkcudbrightshire, Sheets XXXI & XXIV, six inches to one mile.

<sup>35</sup> Ordnance Survey 2<sup>nd</sup> Edition (1895) Kirkcudbrightshire, Sheet XXVII.SW, six inches to one mile.

shown. A small denuded fragment of field bank (12b) was identified by the field survey, surviving between the edge of a commercial forestry and a modern forestry track; the remainder of the field bank, as shown on the Ordnance Survey maps, has been removed by commercial forestry plantation and construction of the forest track. None of the other field boundaries, or the sheep ree, survive as upstanding remains. All of these features are of lesser heritage importance.

- 7.77 The field survey recorded the presence of a large clearance cairn (16) in an area of improved pasture just west of Nether Laggan Farm. The cairn was most likely formed when the ground was cleared of stone to help improve the pasture ground. It is of lesser heritage importance.

#### OTHER AGRARIAN FEATURES

- 7.78 Two sheep rees (7 and 8) are depicted on the Ordnance Survey 1<sup>st</sup> Edition maps<sup>36</sup> (1854), to the west of Mochrum Farm; a further sheep ree (10) is shown on the Ordnance Survey 2<sup>nd</sup> Edition map<sup>37</sup> (1895), in rough pasture to the north of Little Mochrum. Two of the structures (8 and 10) no longer survive as upstanding remains, having been removed by later commercial forestry plantation; while the tumbled remains of the third sheep ree (7) do still exist, immediately south of a modern forestry access track and at the edge of commercial forestry. All of these structures are considered to be of lesser heritage importance.
- 7.79 A hay ree (9) is depicted on Ordnance Survey 1<sup>st</sup> Edition<sup>38</sup> (1854) map, and on subsequent maps until 1951<sup>39</sup>, north of Mochrum Farm. The hay ree no longer survives as upstanding remains and is of lesser heritage importance.

#### Miscellaneous Features

- 7.80 Three quarries (5, 18 and 19) are depicted on the Ordnance Survey 1<sup>st</sup> Edition maps<sup>40&41</sup> (1852 & 1854) but not on subsequent maps. One of the quarries (5) no longer survives having been lost during the construction of a modern forestry access track. The other quarries (18 and 19) were recorded during the field survey, both cut into a west facing slope on the edge of modern forestry ride.
- 7.81 A fourth quarry (4), recorded in the RCHAMS Database, was identified during the field survey, cut into a south-facing slope just north of a modern forestry access track. Whilst a fifth (11) was identified by field survey; located at the edge of a commercial forestry plantation.
- 7.82 All of the quarries are likely to be 19<sup>th</sup> - 20<sup>th</sup> century quarries utilised as a source of stone for construction of farm buildings / field walls in the surrounding area or as a source of gravel for trackways. They are all of lesser heritage importance.

<sup>36</sup> Ordnance Survey 1<sup>st</sup> Edition (1854) Kirkcudbrightshire, Sheet XXV, six inches to one mile.

<sup>37</sup> Ordnance Survey 2<sup>nd</sup> Edition (1895) Kirkcudbrightshire, Sheet XXV11.NE, six inches to one mile.

<sup>38</sup> Ordnance Survey 1<sup>st</sup> Edition (1854) Kirkcudbrightshire, Sheet XXV, six inches to one mile.

<sup>39</sup> Ordnance Survey maps (1895, 1910 & 1951) Sheet XXVII.NE, 6 inches to one mile.

<sup>40</sup> Ordnance Survey 1<sup>st</sup> Edition (1854) Kirkcudbright, Sheet XXV, six inches to one mile.

<sup>41</sup> Ordnance Survey 1<sup>st</sup> Edition (1852) Kirkcudbright, Sheet XXXI, six inches to one mile.

- 7.83 A footbridge (6) is depicted crossing an unnamed burn to the southwest of Mochrum Farm on the Ordnance Survey 1<sup>st</sup> Edition map<sup>42</sup> (1854) but not on subsequent maps. No visible remains of the footbridge were identified during the field survey. The area has been planted with commercial forestry plantation which has removed any trace of the foot bridge. The structure is of lesser heritage importance.

#### Future Baseline within the Site

- 7.84 If the proposed Mochrum Fell wind farm was not to proceed there would be no immediate change to the baseline condition of the heritage assets identified. The current commercial forestry activity, moorland habitat and improved pasture land-use would continue, limiting the potential for disturbance to historic environment assets, and only natural erosion and decay would affect the surviving remains. There would be no change to the setting of key external cultural heritage assets within the 10 km wider study area related to the future baseline condition of the Site.

#### Archaeological Potential of the Site

- 7.85 Settlement within the Site itself dates to at least the Iron Age period, with the remains of a prehistoric fort (3) surviving on a rocky knoll just southwest of Mochrum Fell. Other prehistoric forts are also recorded in the wider landscape around the Site, including examples such as: Little Merkland Fort (RCAHMS Database Ref: NX67SE 2), approximately 2 km to the west of the Site; and Auld Kirk of Lochroan, Fort (RCAHMS Database Ref: NX76NW 7), Glengappock Mote, Fort (RCAHMS Database Ref: NX77SE 9) and Moat Hill, Fort (RCAHMS Database Ref: NX77SE 1), all approximately 4 km – 5 km to the southeast. These forts are all spread out along the higher slopes of the Loch Ken Valley.
- 7.86 Early medieval settlement is recorded at Parton village, 4.5 km southwest of the Site, where the remains of a 12<sup>th</sup>-13<sup>th</sup> century motte and bailey, Kirkland Motte (RCAHMS database Ref: NX66NE 3), are present; whilst within the Site itself are the remains of a possible early medieval field system (1). The presence of such remains on high ground (around 200 m AOD), in what is now moorland and rough pasture, perhaps points to cultivation of these upland areas during times of better climatic conditions (perhaps prior to the onset of the Little Ice Age; with abandonment perhaps in the 17<sup>th</sup> century).
- 7.87 Examination of historic maps indicates that the area surrounding the Site has been permanently settled from at least the 18<sup>th</sup> century; for instance, 'Nether Laggan' and 'Overlaggan' are shown on early historic maps (Roy's Military map of Scotland 1747-55<sup>43</sup>), although these may have had their origins in the medieval period. During the 19<sup>th</sup> century much of the land around these farms was improved and enclosed forming the rectangular fields visible today.
- 7.88 Large swathes of commercial forestry plantation were planted across the Site in the 20<sup>th</sup> century and the potential for as yet undetected buried remains of prehistoric and / or later features to survive within areas that have been disturbed by commercial plantation is low to negligible.

<sup>42</sup> Ordnance Survey 1<sup>st</sup> Edition (1854) Kirkcudbrightshire, Sheet XXV, six inches to one mile.

<sup>43</sup> Roy, W (1747-55) Military Survey of Scotland.



- 7.89 In other areas which have undergone little or no modification the potential for buried archaeological remains to survive is considered to be moderate, particularly in the moorland / rough pasture areas; this potential is considered to be greatest within an area of moorland just north of Pattiesthorn Plantation (west of Glenswinton Farm).

### External Receptors

- 7.90 The Dumfries and Galloway Wind Farm Landscape Capacity Study<sup>44</sup> records that the Site is located in the Stroan Area: Foothills with Forest (Landscape Type 18a). The Foothills with Forest forms an undulating upland plateau punctuated by occasional, more pronounced, often craggy, ridges and hills. This landscape is predominantly forested, although areas of moorland pasture and moss occur in places and it is considered to be of Medium sensitivity to large wind energy developments (p132). No Historic Landscape Assessment has yet been carried out for the Stroan Area. Examination of Ordnance Survey maps indicates that the majority of the heritage assets within this area are concentrated within the river valleys along the main watercourse, including the Ken Loch, River Dee and Urr Water. Within the more upland foothills settlement is sparse with small pockets of farmland and much dispersed isolated farms and cottages within extensive forest.
- 7.91 Within 5 km of the outer turbines of the proposed Mochrum Fell wind farm there are three Scheduled Monuments, Little Merkland, fort (1082), Moat Hill, fort (1086) and, Auchenhay settlement (5179) with predicted visibility of the turbines. There are also two Category A listed buildings, Corsock House (17094), 3.4 km to the east of the proposed Mochrum Fell wind farm, and Ironmacannie Mill (3315), 4.5 km to the west. Other groups of listed buildings of Category B are located in and around, Corsock, around 4 km to the east of the proposed Mochrum Fell wind farm. Three non-designated designed landscapes (NIDLs) surround Category A Listed Corsock House, around 3 km to the west of the proposed Mochrum Fell wind farm, Category B Listed Barwhillanty House (17091) 3.9 km to the south of the proposed Mochrum Fell wind farm, and undesignated Parton House, approximately 4.5 km to the south. The DGC HER records the presence of four NSR sites within 5 km of the Site, Knocklearn Settlement (MDG4281), 4.5 km to the northeast of the proposed Mochrum Fell wind farm, Auchendavy Cairn (MDG4288), 1.9 km to the northeast, Dullach Burn, burnt mound (MDG13187), 2 km to the west, and Arkland Enclosure (MDG4300), 4.4 km to the east.
- 7.92 Between 5 km and 10 km from the outer turbines of the proposed Mochrum Fell wind farm there are ten Scheduled Monuments, Glenroan Mote, fort (1072), Auld Kirk of Lochroan, fort (1051), Little Duchrae, fort (1077), Kenmure Castle (7743 / 9745), Doon Hill, Mote (1128), Meikle Cairn, cairn (1036), Craig Hill, fort (2891), Crofts Mote, fort (1065), Rough Island, crannog (659) and Glenlochar, Roman fort, annex, road, camps & barrows (12792). One of the Scheduled Monuments, Kenmure Castle, situated just north of Galloway and 7.8 km to the west of the proposed Mochrum wind farm is also a Category B Listed Building. Other groups of listed buildings (Category A and B Listed) are present in and around New Galloway, to the west of the proposed Mochrum Fell wind farm, Little Duchrae, to the southwest of the proposed

Mochrum Fell wind farm, Laurieston, Crossmicheal and Glenlochar to the south of the proposed Mochrum Fell wind farm, Kirkpatrick Durham, to the southwest of the proposed Mochrum Fell wind farm and around Category B Listed Walton Park house (10192) around 5.7 km to the southeast of the proposed Mochrum Fell wind farm. One Inventory Garden and Designed Landscape is recorded surrounding Category B Listed Brooklands house and associated buildings (Category B Listed Brocklands Lodge (9665) and Brooklands Ornamental Walling (9666). In addition, an area of archaeological sensitivity (ASA), designated by DGC is present around 12.9 km to the southwest of the proposed Mochrum Fell wind farm: Grobdale ASA includes an extensive scatter of monuments of well-preserved archaeological and historic remains spanning the prehistoric and medieval periods spread along the upper slopes of Crack Hill, Ewe Hill and Bennan Hill.

## Potential Impacts

### Potential Construction and Decommissioning Impacts

- 7.93 Any ground-breaking activities associated with the construction of the proposed Mochrum Fell wind farm (such as those required for turbine bases and crane hardstandings, access tracks, cable routes, compounds, etc) have the potential to disturb or destroy features of historic environment interest. Other construction activities, such as vehicle movements, soil and overburden storage and landscaping also have the potential to cause direct, permanent and irreversible impacts on the cultural heritage.
- 7.94 It is assumed that the same road infrastructure would be used for dismantling and removal of the built features of the proposed Mochrum Fell wind farm during decommissioning. Therefore no additional impacts on the historic environment are predicted during the decommissioning stage.

### Potential Operational Impacts

- 7.95 The presence of the proposed Mochrum Fell wind farm features could have indirect impacts on the setting of cultural heritage assets on the Site and in the wider landscape. In particular, there is potential for the turbines to be present in views of and from Scheduled Monuments, Listed Buildings and other heritage assets, including NSR sites and ASA areas, in the vicinity of the Site.

## Mitigation

### Mitigation by Design

- 7.96 The results of the desk-based study and reconnaissance field survey were provided to the design team as GIS data, with the locations of cultural heritage assets highlighted, in order to inform the constraints analysis. Cultural heritage assets were recorded using GPS and the grid references provided are accurate to around + / - 1-3 m. These were recorded as either point / area locations – given for individual features, such as quarry pits, sheep rees (sheep folds),

<sup>44</sup> Dumfries and Galloway Wind Farm Landscape Capacity Study (2011), Carol Anderson in association with Alison Grant, Landscape Architects.

clearance cairns and farmsteads, or linear representations for individual roads and field boundaries.

- 7.97 The layout of the proposed Mochrum Fell wind farm, including the positioning of the turbines, access tracks and other infrastructure elements has evolved at through a series of iterative stages to develop the best layout within the context of all environmental and technical constraints (as discussed in Chapter 3: Design Evolution and Alternatives). The layout of the proposed Mochrum Fell wind farm embeds mitigation for the cultural heritage into the siting of the turbines and ancillary elements to avoid direct impacts on sensitive features, where possible.

### Mitigation during Construction

- 7.98 Except where otherwise stated, all mitigation works presented in the following paragraphs would take place prior to or during the construction of the proposed Mochrum Fell wind farm. All works would be conducted by a professional archaeological organisation, and the scope of works would be set out in a Written Scheme of Investigation (WSI) for the approval of the DGC Archaeology Service. The WSI would make provision for appropriate post-excavation analyses and dissemination of the results of the mitigation works, as well as for archiving of the project materials and records following completion of the project.

#### *Preservation in-situ*

- 7.99 There are no surviving upstanding heritage assets in proximity to any element of the proposed Mochrum Fell wind farm whose heritage importance is sufficient to warrant fencing off to ensure preservation in situ.

#### *Archaeological Investigations / Watching Briefs*

- 7.100 A small number of heritage features would be directly affected by construction works and, in order to ensure their proper recording, the following works would be carried out prior to construction of the proposed Mochrum Fell wind farm:
- The access track between Turbines 8 and 9 would cross a former field system (1) of local importance, cutting through a number of relict field banks. In order to off-set the potential direct impact on these banks it is proposed that prior to construction of that section of access track, evaluation trenches would be excavated in order to record the make-up of the field banks, record any sequence of land enclosure, and, if possible, to recover some dating evidence for the establishment and abandonment of the field system;
  - The proposed access route would involve the upgrading and widening of an existing forestry track that would entail the removal of a 2m stretch of a former field boundary (12). In order to off-set the potential direct impact it is proposed that a trench is excavated across the affected portion of the field boundary in order to record its make-up, and, if possible, to recover some dating evidence; and
  - The proposed access route would cross the site of a former building and enclosure (15) of early 19th century date but of unknown function. There are no upstanding remains but it is possible that buried remains may survive. A watching brief would be carried out at this

location during track construction, in order to identify and record any remains that may be encountered.

- 7.101 The scope of any archaeological investigations and watching brief(s) would be set out in a WSI for the agreement of the DGC Archaeology Service.

#### *Post-Excavation*

- 7.102 If significant discoveries are made during archaeological monitoring and preservation in situ of any asset is not possible, provision would be made for the excavation, where necessary, of any archaeological remains encountered. This provision would include the consequent production of written reports on the findings, with post-excavation analyses and publication of the results of the works, where appropriate.

#### *Construction Guidelines*

- 7.103 Written guidelines would be issued and delivered in the form of toolbox talks on behalf of the Applicant for use by all construction contractors, outlining the need to avoid causing unnecessary damage to known heritage assets. That document would contain arrangements for calling upon retained professional support in the event that buried remains of potential archaeological interest (such as building remains, human remains, artefacts, etc) should be discovered in areas not subject to archaeological monitoring. The guidance would make clear the legal responsibilities placed upon those who disturb artefacts or human remains.

### Mitigation during Operation

- 7.104 A programme of mitigation is proposed to off-set potential impacts on the setting of regionally important Mochrum Fell fort (3). The aims of the programme of works would be to enhance current knowledge and understanding of the asset, and to facilitate wider public access.
- 7.105 An invitation would be offered to local community heritage groups to participate in the development and implementation of community based projects, including archaeological research and educational activities. It is envisaged that, in line with aims of SHEP, PAN2 / 2011 and Dumfries and Galloway Structure Plan Policies (E12 and EP5), the offset / compensatory mitigation would include:
- topographical survey of the surviving upstanding earthworks of the fort (in line with SHEP paragraph 1.12d, 1.14d and 1.15a)
  - improved access and interpretation of the monument (in line with SHEP paragraph 1.10, 1.12e, 1.14d, 1.46-1.60, Structure Plan Policy D37 );and,
  - a programme of archaeological investigation of the asset, such as geophysical survey and trial trenching (in line with SHEP paragraph 1.12d, 1.15a, 1.46-1.60, and PAN 2 / 2011 paragraph 27).
- 7.106 The programme of works would not only provide academic information improving our understanding of such forts in Dumfries and Galloway, but would also provide a greater awareness to local communities of their surrounding historic environment and bring opportunities for local heritage societies to be involved in historic / archaeological research.



## Assessment of Residual Impacts

### Residual Construction Impacts

- 7.107 The assessment of potential direct effects has been carried out with reference to the proposed Mochrum Fell wind farm layout and cultural heritage constraints shown on Figure 7.1. Using the criteria detailed in Tables 7.3 and 7.4, Appendix 7.1 summarises the predicted impacts on the identified cultural heritage assets within the proposed Mochrum Fell wind farm. Direct effects are predicted on four cultural heritage assets (1, 4, 12 and 15). These impacts are discussed in more detail below. No direct effects are predicted on the other cultural heritage assets present within the Site.
- 7.108 The proposed access track between T8 and T9 would directly affect the remains of a relict field system (1). The field system is assessed to be of local heritage importance. The access track would run across the middle of the field system crossing the remains of at least three upstanding field banks. The proposed access track route would avoid the majority of the surviving field banks and relict rig and furrow remains (shown as green hatched areas on Figure 7.1), and hence a direct impact of Medium magnitude is predicted. The overall level of effect would be Minor; this is considered not significant in terms of the EIA Regulations.
- 7.109 A former quarry (4) probably used to provide gravel for construction of modern forestry access tracks, is located in an area allocated as a proposed borrow pit location. The former quarry is of lesser heritage importance. Ground-breaking works within the borrow pit location would remove the former quarry resulting in a direct impact of High magnitude. The overall level of effect would be Minor; this is considered not significant in terms of the EIA Regulations. No mitigation is required for this impact.
- 7.110 Any proposed upgrading and widening of an existing forestry track could potentially affect the remains of a short (2m long) portion of a former field boundary (12) which survives as upstanding remains immediately east of the existing track. The field bank is of lesser heritage importance. Widening works along the existing forestry access track would remove a 2m portion of the field bank section resulting in a direct impact of Medium magnitude. The overall level of effect would be Negligible; this is considered not significant in terms of the EIA Regulations.
- 7.111 The proposed Site access track would cross the location of a former building and enclosure (15) previously recorded on the Ordnance Survey 1<sup>st</sup> Edition map to the north-northwest of 'Nether Laggan'. The building and enclosure are not shown on the 2<sup>nd</sup> Edition map suggesting that they were short lived agrarian structures, such as a barn, and the asset is assessed to be of lesser heritage importance. There is, however, potential for any ground breaking works associated with the construction of the proposed access track (new section) to directly affect any surviving buried remains of the building or enclosure. If buried remains do survive then a direct impact of High magnitude. The overall level of effect would be Minor; this is considered not significant in terms of the EIA Regulations.

- 7.112 Ground-disturbance works associated with the construction of the proposed Mochrum Fell wind farm could have an impact on hitherto unrecorded, buried archaeological remains present in affected areas. Given the limited extent of the proposed ground disturbance generated by the construction of the proposed Mochrum Fell wind farm elements the likelihood of encountering remains of archaeological significance within the Site is assessed to be Low-Negligible. The most likely area where buried remains may be encountered by construction works is in the moorland / rough pasture just north of Pattiethorn (west of Glenswinton Farm).

- 7.113 The completion of the programme of archaeological mitigation works set out above would offset any loss of the archaeological resource that could potentially occur as a result of the construction of the proposed Mochrum Fell wind farm.

### Residual Operational Impacts

- 7.114 Analysis of the ZTVs indicates that there would be theoretical visibility of the turbines from 13 Scheduled Monuments; nine Category A Listed Buildings; 54 Category B Listed Buildings, two Conservation Areas (CA); one Inventory Garden and Designed Landscape (GDL), and one Archaeological Sensitive Area (ASA) within 10 km of the proposed Mochrum Fell wind farm, and four Non-Statutory Register sites (NSR site) and three Non-Inventory Designed Landscapes (NIDL) within 5 km of the proposed outer turbines. There are no Category C Listed Buildings within 5 km that are predicted to have visibility of the proposed turbines.
- 7.115 The assessment of the magnitude of residual impacts has been based on the analysis of the blade tip ZTV, taking into account:
- the distance of the archaeological asset from the Site;
  - the number of blade tips visible; and,
  - the present baseline setting of each asset.
- 7.116 A list of cultural heritage assets within 10 km of the nearest proposed Mochrum Fell turbines and predicted by the ZTV to have theoretical views to one or more turbines is provided in Technical Appendices 7.3 and 7.4. Additional assets specifically identified by DGC, but which are located at greater distance, are detailed in Technical Appendix 7.5. The locations of all assets assessed are shown on Figure 7.2.
- Technical Appendix 7.3 is a list of those designated and non-designated heritage assets that have predicted Intervisibility with the proposed turbines and which lie within 5 km of the nearest proposed turbines (including Scheduled Monuments, Category A, B and C Listed Buildings, CAs, GDLs, ASAs, NSR sites and NIDLs).
  - Technical Appendix 7.4 is a list of assets between 5 km and 10 km from the nearest of the proposed turbines (including Scheduled Monuments, Category A and B Listed Buildings, CAs, GDLs and ASAs).
  - Technical Appendix 7.5 is a list of assets specifically identified by the DGC Archaeology Service to be assessed within the EIA but lie outwith the 10 km study area.
- 7.117 The ZTV model is, however, a coarse predictive tool based on bare-earth surface topography and maximum blade-tip heights. It takes no account of obstructions to Intervisibility caused by

existing forestry and other vegetation or buildings and other man-made features. Therefore, professional judgement has been used to assess the significance of impacts informed by analysis of the ZTV, desk-based resources and photomontage wireline visualisations.

7.118 Heritage assets identified by HS and DGC to be specifically assessed in the EIA (Table 7.1) are assessed in detail below. In addition, one cultural heritage asset, Auchenhay Settlement (5179), (the remains of a prehistoric enclosed settlement located immediately northeast of Corsock Village and considered to have a sensitive setting) is also assessed. To aid the assessment of these assets photomontages and wirelines (listed in Table 7.9) have been produced which provide a range of visualisations of the proposed turbines, from different locations and at varying distances from the Site.

Table 7.9: Cultural Heritage Photomontages and Wireline Viewpoints				
Heritage Asset name and no	Status	Distance to nearest turbine	Visualisation	Figure no
Little Merkland, fort (1082)	Scheduled Monument	2.3 km	Photograph and wireline <sup>45</sup>	7.4
Glenroan (or Glengappock) Mote, fort (1072)	Scheduled Monument	5.1 km	Photograph, wireline and cumulative wireline	7.5A-B
Auchenhay settlement (5179)	Scheduled Monument	5.0 km	Wireline and 360 cumulative wireline	7.6A-B
Threave Castle (90301 / 3408)	Scheduled Monument and Category A Listed	12.3 km	Photograph, wireline and 360 cumulative wireline	7.7A-B
Kenmure Castle (7743 / 9745)	Scheduled Monument and Category B Listed	7.8 km	Photograph, wireline and 360 cumulative wireline	7.8A-B
Hensol House (3415) and NIDL	Category A Listed	5.7 km	Wireline	7.9
Threave House (9829) and GDL	Category B Listed and GDL	14.4 km	Photograph, wireline and 360 cumulative wireline	7.10A-B
Corsock House (17080) and NIDL	Category B Listed and NDL	3.2 km	Wireline	7.11
Barwhillantry House (17091) and NIDL	Category B Listed and NIDL	3.9 km	Wireline	7.12
Mochrum Fell, fort (3)	Undesignated	Within the Site approx. 0.3 km from nearest turbine	Photomontage and 360° Wireline	7.13A-B

7.119 The ZTV demonstrates that no wind turbines would be visible from four assets (listed below) (see Figure 7.2 for locations) identified as requiring consideration by DGC Archaeology Service, or in views to these assets from the surrounding landscape. Therefore the proposed Mochrum

Fell wind farm would have no impact on the setting of these assets and they are not discussed further.

- Kirkland Mote, motte (1114);
- Boreland Mote, motte (1124);
- Balmaclellan Motte (1109);and
- Parton Village.

7.120 The ZTV demonstrates that no wind turbines would be visible from two additional assets, Barscobe Castle (3310) and Holm House (3311), however, some limited views of the turbines would be visible from the NIDLs that surround each house (Figure 7.2). In both cases views of the proposed turbines would be restricted to the most northerly wooded edges of the NIDLs and would have minimal effect on the setting of the designed landscapes. They are not discussed further.

#### Scheduled Monuments

##### LITTLE MERKLAND, FORT (1082)

7.121 The low-lying earthwork remains of a prehistoric enclosed settlement located on a small shoulder of a south facing slope of Merkland Hill within an area of unmodified moorland and approximately 0.4 km to the north of Nether Dullarg Farm. Panoramic views to the surrounding farmland can be gained from the asset, particularly to the south along an unnamed burn, taking in distant views to Loch Ken. Views to the north, northwest and northeast are generally restricted by rising topography. The setting of the fort is the unmodified moorland in which it sits and the farmland out over which views extend. The fort has a current setting that makes a high contribution to its understanding and appreciation and this gives it a setting of High sensitivity.

7.122 There are potentially other contemporary settlements / hill forts in the vicinity, including Little Duchrae, fort (1077); Auld Kirk of Lochroan, fort (1051); Glenroan Mote, fort (1072); Moat Hill, fort (1086) and Craig Hill, fort (2891). The proposed turbines would not, however, be visible in views orientated on these assets and would, therefore, not affect any potential intervisibility between them (Figure 7.2). Views to the east-northeast from the asset take in Mochrum Fell and the surrounding commercial forestry; included in these views is Mochrum Fell, fort (3), which may be potentially contemporary with Little Merkland, fort and have intentional intervisibility with it. The turbines would be visible in views from the Little Merkland, fort to Mochrum Fell, fort; although slightly offset to the north and they would not directly interrupt the line of sight.

7.123 The proposed Mochrum Fell wind farm would be present to the north and east of the fort and the closest proposed turbine would be approximately 2 km away. The ZTV predicts that 6-8 turbine hubs and 9-11 blade tips would be theoretically visible from the asset in one arc of view (29 degrees) to the east-northeast. A wireline produced from a viewpoint just southwest of the fort, on the opposite side of the burn (Figure 7.4), shows that six blade tips and three hubs would be theoretically visible in the same view as the asset, the turbines being partially screened and visible beyond the skyline.

<sup>45</sup> A cumulative wireline with Benshinnie WF is not provided as this project is at scoping stage (see paragraph 7.165)

7.124 Although a new discernible element in the surrounding landscape the proposed turbines would only be visible in views to the northeast and would not affect views in other directions out to the surrounding landscape, and the character of the landscape in which the asset lies, and out over which it looks, would not be altered. The presence of the proposed Mochrum Fell wind farm would, therefore, not detract from an ability to understand or appreciate the asset or its wider landscape setting. The residual impact of the proposed turbines on the setting of Little Merkland fort is assessed to be of Low magnitude and the overall effect is assessed as Minor. This effect is not considered significant in EIA terms.

#### GLENROAN (OR GLENGAPOCK) MOTE, FORT (1072)

- 7.125 The earthwork remains of a hill fort of probable Iron Age date situated on a low hillock in an improved pasture field approximately 0.5 km south-southwest of Glenroan Farm and surrounded by undulating improved pasture farmland. Wide open views are afforded from the monument in all directions taking in the surrounding farming landscape. The fort stands in a more recent modified farming landscape and has a current setting that makes a moderate contribution to its understanding and appreciation, and this gives it a setting of High sensitivity.
- 7.126 The proposed Mochrum Fell wind farm would be present to the northwest of the asset; the closest proposed turbine being approximately 5.1 km away. A wireline view from the fort (Figure 7.5A) indicates that 11 turbine blades and eight hubs would be visible in views to the northwest from the fort; the proposed turbines being seen spread along the skyline together with the operational Wether Hill wind farm, although as visibly separate developments.
- 7.127 The fort is one of several, possible, contemporary forts that survive within the upper slopes of the Loch Ken / River Den valley including Little Duchrae, fort (1077); Auld Kirk of Lochroan, fort (1051); Moat Hill, fort (1086); Little Merkland, fort (1082), Craig Hill, fort (2891) and Mochrum Fell, fort (3). The proposed turbines would not, however, be visible in views orientated on the majority of these assets and would, therefore, not affect any potential intervisibility between them. Views to the northwest take in Mochrum Fell and the surrounding farmland landscape, included in these views is Mochrum Fell, fort (3) which may potentially be contemporary with Little Merkland, fort and have theoretical intervisibility. The turbines would be visible in views from Glenroan fort to Mochrum Fell, fort with three turbines seen behind Mochrum Fell, fort; however, the relationship between the two forts would still be legible.
- 7.128 Although a new discernible element in the surrounding landscape, the proposed turbines would only be visible in views to the northwest and would not affect views in other directions out to the surrounding landscape, and the character of the landscape in which the asset lies and out over which it looks would not be altered. The presence of the proposed Mochrum Fell wind farm would, therefore, not detract from an ability to understand or appreciate the asset or its wider landscape setting. The residual impact of the proposed turbines on the setting of Glenroan fort is of Low magnitude and the overall effect is assessed as Minor. This effect is not considered significant in EIA terms.

#### AUCHENHAY SETTLEMENT (5179)

- 7.129 This asset comprises the earthwork remains of an enclosure, possibly surrounding settlement remains thought to be potentially of late prehistoric date. The settlement remains stand in an area of rough pasture on the floor of a narrow stream valley approximately 100 m east of the public road to Auchenhay Farm. Views are afforded from the asset to the north, northwest, northeast and southwest, taking in the surrounding pasture farmland, with views particularly overlooking the Urr River Valley to the southwest. Views to the south and southeast are limited by rising topography. There are several other remains of field systems in the immediately surrounding area that have not been scheduled, but which may all be contemporary. The current setting of the asset is the rough pasture in which it lies and the upland farmland out over which it looks, and these make a high contribution to its understanding and appreciation giving it a setting of High sensitivity.
- 7.130 The proposed Mochrum Fell wind farm would be present to the southwest of the settlement remains, the closest proposed turbine being approximately 5 km away. A wireline of the predicted view from the asset (Figure 7.6A) indicates that ten blade tips and eight hubs would be visible beyond the skyline on the opposite side of the Urr River Valley. Although a new detectable element in the wider landscape of the asset, the proposed Mochrum Fell wind farm would not greatly diminish the ability to understand the settlement in its immediate stream-side setting, or its association with other potentially former agricultural remains in the immediate area. Views of the turbines would be restricted to a small arc of view (approximately 15°) and visible in only one direction from the asset, around 5 km away; views out from the settlement in other directions would be unaffected. The presence of the proposed Mochrum Fell wind farm would have no more than a slight, discernible impact on the setting of the settlement and the residual impact would be of Low magnitude and the overall effect is assessed as Minor. This effect is not considered significant in EIA terms.

#### THREAVE CASTLE (90301 / 3408)

- 7.131 Threave Castle survives as a ruined tower surrounded by the remains of a curtain wall on Threave Island, in the midst of the River Dee, from which location it commands extensive views in all directions and dominates the river setting. The castle is a Scheduled Monument, a Category A Listed Building, and a Historic Scotland Property in Care and promoted visitor site. It has a current setting that makes a high contribution to its understanding and appreciation and has a setting of High sensitivity.
- 7.132 The proposed Mochrum Fell wind farm would be visible from the castle approximately 12.3 km upstream visible along the river valley. A wireline view (Figure 7.7A), from a position just south of the castle, indicates that there would be theoretical views of 11 turbine blades and nine hubs in distant views to the north of the asset; the proposed turbines being visible beyond the skyline. The turbines theoretically visible in the same view as the operational Windy Standard wind farm, although seen as two separate developments.
- 7.133 A photograph (Figure 7.7A) from the same view shows that intervening woodland that surrounds the island on which Threave Castle stands would primarily limit views to the



proposed turbines. The presence of the proposed turbines would not discernibly change the immediate setting of the castle on its island site; neither would it affect views outwards from the castle in other directions. Views of the asset, best appreciated at relatively close quarters, would be unaffected.

- 7.134 The presence of the proposed Mochrum Fell wind farm would not be a visually dominant structure in the surrounding landscape of the castle; being more than 12 km away, nor would it affect an appreciation of the character of the monument, an understanding of its original purpose, or its island setting. The residual impact is assessed to be of Imperceptible magnitude and the overall effect is assessed as Negligible. This effect is not considered significant in EIA terms.

#### KENMURE CASTLE (7743 / 9745)

- 7.135 The ruins of Kenmure Castle (7743 / 9745) are situated on the flat summit of an artificial knoll immediately west of the Lane River and at the head of Loch Ken. The remains of a 1st floor balcony survive on the southern side of the castle, from which there would have been open views out southwards over Loch Ken. Today, the remains of the castle and the knoll on which it stands are currently surrounded by dense woodland that limits views out to the surrounding landscape creating an enclosed and localised setting for the castle.
- 7.136 The castle is accessed from the A712 along an avenue of trees. Views out from this avenue are limited by dense woodland. To the south and southwest of the castle are the remains of a small designed landscape, including a walled garden, defined garden areas and several pathways.
- 7.137 The current setting of the castle is the knoll that it sits on and the relict gardens that surround it and these make a high contribution to its understanding and appreciation giving it a setting of High sensitivity.
- 7.138 The proposed Mochrum Fell wind farm would be approximately 7.8 km to the east-southeast of the castle. A wireline (Figure 7.8A) of the predicted view from the just east of the castle indicates that nine blade tips and eight turbine hubs would theoretically be visible from the asset; the proposed turbines spread along the skyline and partially back-dropped by hill slopes. However, the castle stands in an open space surrounded by woodland and the proposed turbines would be largely screened from view by the woodland as shown in the photograph (Figure 7.8A). The current close setting of the castle would not, therefore, be affected by the proposed Mochrum Fell wind farm. The residual impact is of Imperceptible magnitude and the overall effect is assessed as Negligible. This effect is not considered significant in EIA terms.

#### Listed Buildings

##### HENSOL HOUSE (3415)

- 7.139 This Category A Listed 18<sup>th</sup> century country house stands in a small designed landscape immediately south of the River Dee (or Black Water of Dee). The house forms part of a small designed landscape along with Category A Listed Lainshaw sundial (3416) and Category B Listed Hensol Lodge (3417). The designed landscape (NIDL), in which the house stands,

comprises enclosed woodland policies (Lodge Wood), along the northern edge of the NIDL, and commercial forestry plantation (Hensol Wood), within the eastern half of the NIDL. Views out from the house itself are generally restricted by surrounding woodland, particularly to the north, east and west. A small area of relict parkland survives immediately south of the house. The setting of the house, within a small designed landscape, makes a high contribution to its understanding and appreciation, giving it a setting of High sensitivity.

- 7.140 The main elevations of the house are orientated towards the northeast and southwest. A designed vista from the southeast elevation of the house overlooks formal gardens and parkland in this direction. In addition, a second vista, from the southwest elevation of the house, looks out onto open farmland to the south. The house is largely screened from view from the surrounding landscape, although it can be viewed, bounded by woodland, from farmland to the southwest and from the access road to Home Farm.
- 7.141 The proposed Mochrum Fell wind farm would be present 5.7 km to the northeast of the house. A wireline (Figure 7.9) of the predicted view from the house indicates that views to the proposed turbines would be partially screened by intervening topography; with only three turbine hubs and five blade tips visible beyond the skyline. Views to the proposed turbines from the house itself would be largely screened by intervening woodland that surrounds the house, although glimpses of the proposed turbines may be afforded from the upper floors of the house.
- 7.142 In wider landscape views of the house, from parkland to the southwest, the proposed turbines would be seen beyond the house and at a higher elevation. The proposed Mochrum Fell wind farm would constitute a new element in views taking in the house in this north-easterly direction and would represent a change in the backdrop to the setting of the house. However, at over 5.5 km away the turbines, although a new element in the surrounding landscape, would not be visually dominant and would only be visible when viewing the house from a south-westerly direction. The turbines would not be visible in any of the main views or vistas from the house.
- 7.143 The ZTV (Figure 7.2) indicates that 9-11 turbines, (would theoretically be visible from the NIDL surrounding the house. However, many of the views out from the designed landscape would be restricted by woodland and commercial forestry (Hensol Wood) that make up a great proportion of the NIDL.
- 7.144 The proposed Mochrum wind farm would not detract from an appreciation and understanding of the layout of the house and gardens, its designed landscape or its connection with other associated structures within its designed landscape. The residual impact is of Low magnitude and the overall effect is assessed as Minor. This effect is not considered significant in EIA terms.

##### THREAVE HOUSE (9829) AND GDL

- 7.145 Threave Inventory GDL is situated approximately 3 km to the southwest of Castle Douglas and surrounds Category B Listed Threave House. The Inventory describes the gardens as having a high artistic value due to the design of the gardens that flow along Kelton Hill. The GDL also has a high value for the architectural qualities of the buildings for which it forms the setting. The asset is open to the public. .

- 7.146 Threave House (9829) and its associated Category B Listed stables (9830) stand within the south western half of the GDL. The main elevations of the house are aligned west-southwest and east-northeast, and a tree-lined vista, taking in the surrounding countryside, is obtained from the house to the west-southwest across formal gardens.
- 7.147 The gardens lie 14.4 km to the southeast of the proposed Mochrum Fell wind farm. A wireline of the predicted view, from a position just east of the entrance to Threave House (Figure 7.10A), indicates that 11 turbine tips and nine hubs would be visible in distance views. The turbines would be visible spread along the skyline and viewed alongside the operational Windy Standard and Wether Hill wind farms. A photograph from the same location shows that the views out to the surrounding landscape would be screened by vegetation and trees.
- 7.148 Glimpses of the proposed turbines would be gained from pathways along the higher slopes within the eastern half of the GDL (Kelton Wood), although, here woodland would generally limit visibility out to the wider landscape. The ZTV also indicates that theoretically 9-11 turbine tips would be visible from the lower lying areas of the GDL. This area is comprised of several 'themed rooms' that make up the formal gardens, including the Patio Gardens, Rockery, Azalea Walk, Sculpture Gardens and Secret Garden. In most instances the different landscaped areas are surrounded by woodland that forms an enclosed and sheltered setting for the individual garden areas and only glimpses to the surrounding farmland can be afforded, principally from the south-western edge of the GDL.
- 7.149 At over 14 km away the proposed Mochrum Fell wind farm would not affect the relationship between the various listed buildings within the GDL, or between the buildings and other designed landscape elements, nor would it affect the main vista from the house which is orientated towards the west-southwest. It would not detract from an appreciation of the gardens themselves and would not adversely affect the integrity and character of the gardens and designed landscape as a whole. They would be visible in distant views out from the garden to the northwest, but the proposed turbines would not be a dominant feature in the wider landscape views. The residual impact is of Imperceptible magnitude and the overall effect is assessed as Negligible. This effect is not considered significant in EIA terms.

#### CORSOCK HOUSE (17080) AND NIDL

- 7.150 This Category B Listed 19<sup>th</sup> century house stands in a small designed landscape immediately south of Corsock Village. The main elevations of the house are orientated north-northwest and south-southeast and a vista runs from the south-southeast elevation to overlook surrounding upland farmland. The house itself stands in a substantial NIDL which stretches out north and west of the house, and includes woodland glades, water gardens, a walled garden, and several 20<sup>th</sup> century architectural features such as a classical temple, follies and a trompe l'oeil bridge. Views out from the house and from the designed landscape, surrounding the house, are generally restricted by woodland that forms a large proportion of the designed landscape and provides a secluded and sheltered setting for the house, its formal gardens and other landscape buildings / structures. The designed landscape is part of the 'Scotland's Gardens' Scheme and is open to the public. The NIDL provides a fine setting for the house and makes a

high contribution to both its understanding and appreciation, and both the house and its surrounding gardens are of High sensitivity.

- 7.151 The house and its NIDL lie 3.2 km to the east-northeast of the proposed Mochrum Fell wind farm. A wireline (Figure 7.11) of the predicted view from the house indicates that there would be limited visibility of the proposed turbines from this location, with only the tips of four blades being visible beyond the skyline; the proposed Mochrum Fell wind farm being largely screened by intervening topography. The house itself is set in an area of woodland at the centre of its designed landscape and surrounding woodland would screen any views from the house to the proposed Mochrum Fell wind farm. Furthermore, the proposed turbines would not be visible within the open vista orientated to the south from the house, nor visible in views of the house from the public Corsock to Merkland road, which passes the house on the south. The effect of the proposed Mochrum Fell wind farm on the setting of Corsock House would be minimal and of Imperceptible magnitude and the overall effect is assessed as Negligible. This effect is not considered significant in EIA terms.
- 7.152 The ZTV (Figure 7.2) predicts that 6-8 hubs and 9-11 blade tips would theoretically be visible from the northern edge of the NIDL, particularly around the northern edge of Corsock Loch, and Loch Plantation. However, woodland in this part of the NIDL would provide screening to the surrounding landscape and limit visibility of the turbines. The presence of the proposed Mochrum Fell wind farm in the wider landscape would not adversely affect appreciation of the NIDL, or affect an understanding of the layout / relationship of the house with other associated structures / buildings and designed landscape features. It is therefore assessed that overall, the residual impact on the setting of Corsock NIDL would be of no more than Low magnitude and the overall effect is assessed as Minor. This effect is not considered significant in EIA terms.

#### BARWHILLANTY HOUSE (17091) AND NIDL

- 7.153 This late 18<sup>th</sup> century villa is situated approximately 3 km to the east-northeast of Parton Village and stands in a small picturesque designed landscape (NIDL) comprising woodland policies, open parkland, ponds and a walled garden. The main elevations of the house are orientated southwest and northwest. A long vista extends from the southwest elevation of the house taking in the surrounding farmland. Formal gardens and ponds are present immediately to the southeast of the house, and the walled garden is located north, in an area of woodland. Views in other directions from the house are generally limited by surrounding woodland. The house itself is visible, bounded by woodland, in views from the southwest, from the public road running between Babershall and Nether Laggan. The NIDL provides a sheltered setting for the house and makes a high contribution to both its understanding and appreciation, and both the house and its surrounding designed landscape are of High sensitivity.
- 7.154 The house and its NIDL lie 3.9 km to the south of the proposed Mochrum Fell wind farm. A wireline of the predicted view from the house (Figure 7.12) shows that nine turbine tips and two turbine hubs would theoretically be visible from the house in views to the north; the turbines being visible beyond the skyline, although largely screened from view by intervening



topography. Woodland to the north of the house would generally screen any views of the turbines, although some glimpses may be gained from the upper floors of the house.

- 7.155 The ZTV (Figure 7.2) indicates that 6-8 turbine hubs and 9-11 blade tips would theoretically be visible from the NIDL surrounding the house. However, many of the views out from the designed landscape are limited by woodland that make up a great proportion of the NIDL and the turbines would generally only be seen from the most northern most edges of the designed landscape.
- 7.156 The immediate setting of the house, the main vistas and views from the house, and the views of the house from the surrounding public road would not be affected by the proposed turbines, nor would the relationship between the house and other associated landscape structures be affected. Taking this into consideration it is judged that the presence of the proposed turbines, within the wider landscape, would not adversely affect the ability to appreciate the house or its surrounding designed landscape. The overall effect of the proposed Mochrum Fell wind farm on the setting of Barwhillantry House and its NIDL is, therefore, assessed to be of Low magnitude and the overall effect is assessed as Minor. This effect is not considered significant in EIA terms.

#### *Undesignated Assets*

##### MOCHRUM FELL, FORT (3)

- 7.157 The poorly preserved remains of this probable prehistoric fort stand on a knoll at the northern end of the tongue of high land projecting south from Mochrum Fell in an area of dense commercial forestry. Commercial forestry has been planted up to the ramparts of the fort and self-seeded forestry trees are growing over a great proportion of the fort, and only a small fragment of what may be the denuded remains of a rampart are visible today. The current setting of the fort is dominated by the commercial forestry that it stands within and out over which it looks. Views out from the fort are generally restricted by the forestry, although views of the surrounding landscape, in all directions, can still be glimpsed through the trees and it is possible to gain an appreciation of the wide and distant views that would have been afforded from the fort and which were probably an important consideration in the siting of the fort. The fort, on its tree shrouded hilltop, is a prominent topographical feature in the surrounding landscape emphasising its once prominent position. Although only fragments of upstanding earthworks are detectable today, there is, potential for buried archaeological remains to be preserved within and around the fort providing information relating to the nature and occupation of these hill fort sites. As such the asset has a moderate value as an archaeological and educational resource.
- 7.158 A photomontage of the predicted view from the fort (Figure 7.13A) shows that ten turbines would be visible from the fort in an arc around Mochrum Fell from the north-northeast to the west-southwest, with the turbines visible at a slightly lower elevation than the fort. The closest turbine (T11) would be 0.3 km to the west-southwest of the fort. The majority of the proposed turbines would be situated within the current commercial forestry, although three (T9, T10 and T11) would stand in open moorland to the west of the fort. Initially key-hole felling of the

woodland would be carried out to accommodate the proposed Mochrum Fell wind farm and the surrounding forestry would provide some (albeit limited) screening of the proposed turbines. Under the current Forestry Management Plan the forestry block immediately surrounding the fort would be retained until 2031 (Phase 4 of the Felling Plan, as shown on Appendix 1C to Technical Appendix 16.1: Forest Design Plan). This forestry, on the slopes around Mochrum Fell fort would screen views of the proposed turbines until the felling date; after which views would be opened up to the surrounding landscape and taking in the proposed Mochrum Fell wind farm.

- 7.159 There are potentially other contemporary settlements and hill forts in the vicinity which may have intentional intervisibility with the fort, including: Little Duchrae, fort (1077); Auld Kirk of Lochroan, fort (1051); Glenroan Mote, fort (1072); Moat Hill, fort (1086) and Craig Hill, fort (2891). The proposed turbines would not be visible in views orientated on these other assets and would, therefore, not affect any potential intervisibility between them (Figure 7.2). Views out to the west from the fort take in an area of open moorland (Pattiesthorn Plantation) and surrounding farmland. These views include Little Merkland fort (1082), which is set down in the valley at a lower elevation and which may be potentially contemporary with Mochrum Fell fort. The turbines would be visible in views from the fort to Little Merkland fort, although slightly offset to the north and not directly interrupting line of sight.
- 7.160 Mochrum Fell fort is not scheduled but this assessment considers it to be of regional importance on the basis of its prominent topographical location and its intrinsic value as an archaeological and educational resource. The current setting (including the long distant views out to the surrounding landscape) makes a moderate contribution to its understanding and appreciation, and this gives it a setting of Medium sensitivity.
- 7.161 The character of the landscape within which the fort lies and out over which it looks would be discernibly altered by the presence of the proposed turbines. However, the surrounding landscape, and the relationship between the fort and that landscape, would still be legible; it will remain possible to appreciate the setting of the fort from the surrounding landscape and to recognise its prominent topographic location. The residual impact on the setting of the fort is assessed to be of Medium magnitude, (causing a discernible change in the surroundings of an asset such that its baseline setting is partly altered), resulting in an overall effect of Moderate. This effect is considered significant in EIA terms and, in recognition of this, off-set / compensatory mitigation measures are provided above paragraphs 7.104-7.106; however these would not alter the effect predicted.

## Cumulative Impacts

- 7.162 The location of the proposed Mochrum Fell wind farm, the key cultural heritage assets from which there would be predicted views of the proposed Mochrum Fell wind farm, and other wind farm schemes included in the cumulative assessment are shown in Figure 7.3. The baseline condition and setting of each key cultural heritage asset is discussed above in Residual Operational Impacts, paragraphs 7.121-7.161, and summarised in Technical Appendices 7.2-7.4. To aid the assessment cumulative wirelines from key cultural heritage assets were

produced (listed in Table 7.9) to provide a range of visualisations from different locations and at varying distance from the Site.

7.163 Within 10 km of the proposed Mochrum Fell wind farm there are:

- One consented wind farm, Blackcraig wind farm (23 turbines, present 6 km to the north of the proposed Mochrum Fell wind farm; and,
- Three wind farms at the planning application stage, Margree (25 turbines), Loch Hill (11 turbines) and Knockman Hill (five turbines), all three being present around 10 km to the northwest.

7.164 Other wind farms are present or proposed in the wider landscape (Chapter 8: Landscape and Visual Amenity: Figure 8.14). Where predicted to be visible they are included on the cumulative wirelines and included in the assessment below.

7.165 Historic Scotland specifically noted in their scoping opinion (Table 10.1) a potential cumulative impact in the case of Little Merkland fort (1082) from the proposed Mochrum Fell wind farm in combination with Bennshinnie wind farm and asked that this be considered in the assessment. Bennshinnie wind farm remains at the scoping stage and there is a lack of detailed information concerning the proposed development available at this time. In accordance with the requirements of planning policy and guidance and LVIA guidance, this scheme, and others at the scoping stage, have been excluded from the assessment (see Chapter 8: Landscape and Visual, for further details on the rationale for inclusion of other developments within the cumulative impact assessment).

7.166 A moderate significant residual impact (paragraphs 7.157-7.161) is predicted on the setting of the undesignated Mochrum Fell fort (3), and this asset is discussed below.

### **Mochrum Fell, fort (3)**

7.167 A cumulative wireline (Figure 7.13A) indicates that, in views to the northwest from the fort, the proposed Mochrum Fell wind farm would be seen in conjunction with several other operational and proposed wind farm developments, including: the operational developments of Wether Hill, Windy Standard and its extension, and Torrs Hill; consented developments at Whiteside Hill and Blackcraig; and proposed developments at Knockman Hill and Loch Hill. The majority of these other wind farms would be visible in the far distance, spread out along the skyline and visible beyond the proposed Mochrum Fell turbines. In views to the south from the fort, two proposed wind farm developments - Plascow and Barcloy Hill - would be visible in the far distance. Should all the proposed wind farms be built there would be numerous wind farms visible in distant views from the fort, particularly in an arc of view from the northwest to the north, and there would be a cumulative impact on the setting of the fort. The majority of these wind farms would, however, be over 20 km from the fort and would have a minimal cumulative impact. It is therefore assessed that the cumulative impact from the proposed Mochrum Fell wind farm in combination with other wind energy developments on the setting of Mochrum Fell fort would be of no greater magnitude than the impact resulting from the proposed Mochrum Fell wind farm in isolation and of no more than Moderate significance.

### **Other Cultural Heritage Assets**

7.168 From the other cultural heritage assets considered in the assessment, the other cumulative developments would either be too distant to significantly add to the cumulative visual impact on the setting of the individual or collective assets, or not be visible in combination with the proposed Mochrum Fell wind farm. In addition, variable topography and screening from woodland and forestry would further restrict the visual impact on the settings of the assets; therefore, no other significant cumulative impacts are predicted.

### **Summary**

7.169 A desk-based assessment and reconnaissance field survey have been carried out for the proposed Mochrum Fell wind farm. The assessment has been informed by comments and information supplied by Historic Scotland and the DGC Archaeology Service.

7.170 Twenty cultural heritage assets have been identified within the Site. The majority of these assets are associated with medieval or later settlement and agrarian activity, although the remains of a prehistoric (Iron Age) fort (3) were also recorded just south of Mochrum Fell, and the route of an alleged Roman road (20) was noted potentially following the route of the modern A713 public road.

7.171 Large swathes of commercial forestry plantation were planted across the Site in the 20<sup>th</sup> century and the potential for as yet undetected buried remains of archaeological significance to survive within areas that have been disturbed by commercial plantation is assessed to be low to negligible.

7.172 In other areas which have undergone little or no modification, particularly in moorland / rough pasture areas, the potential for buried archaeological remains to survive is assessed to be moderate, particularly within an area of moorland just north of Pattiesthorn Plantation (west of Glenswinton Farm).

7.173 Potential direct impacts are predicted on the following four assets; relict field system (1), a former quarry (4), a short section of relict field bank (12) and the recorded location of a former building and enclosure (15). These direct impacts can be offset by mitigation, including watching briefs carried out during any ground breaking / topsoil removal where they cross or run close to the assets.

7.174 One residual significant impact of moderate significance is predicted on the relict field system (1).

7.175 One significant residual indirect impact, of moderate significance, is predicted on the setting of undesignated Mochrum Fell, Fort (3). In recognition of this adverse impact off-set / compensatory mitigation measures including topographical survey, improved access and interpretation of the monument and a programme of archaeological investigation, such as geophysical survey and trial trenching, have been proposed.

7.176 A summary of likely impacts of the proposed Mochrum Fell wind farm is presented in Table 7.12.

<b>Table 7.12: Summary of Potential Impacts of the proposed Mochrum Fell wind farm, Mitigation and Residual Impacts</b>			
<b>Likely Significant Impact</b>	<b>Mitigation Proposed</b>	<b>Means of Implementation</b>	<b>Outcome / Residual Impact</b>
<b>Construction</b>			
Potential direct impact on a relict field system (1).	Watching brief / Trial trenching to be carried out to the specification required by DGC Archaeology Service prior to any ground breaking / topsoil removal for the construction of the proposed access track running between T8 and T9.	The scope of works would be detailed in a Written Scheme of Investigation (WSI) and approved by DGC Archaeology Service.	Record of the make-up of the field banks and any sequence of land enclosure, recover of any dating evidence for the construction and abandonment of the field system, and record of any buried remains that survive. The residual impact is predicted to be of minor significance.
Potential direct impact on a former quarry (4)	The extent and baseline condition of the quarry has been recorded as part of the EIA assessment. No mitigation is required for this impact.	N / a	N / a
Potential direct impact on short section of former field boundary (12)	The extent and baseline condition of this short (2m long) section of field bank has been recorded as part of the EIA assessment. No mitigation is required for this impact.	N / a	N / a
Potential direct impact the location of a former building and enclosure (15)	Watching brief to be carried out during any ground breaking / topsoil removal for the construction of the proposed Site access track where it crosses the recorded location of the former building and enclosure	The scope of works would be detailed in a Written Scheme of Investigation (WSI) and approved by DGC Archaeology Service.	Identify and record any buried remains that survive.
<b>Operational</b>			
A potential indirect impact of moderate significance is predicted on the setting of Mochrum Fell, fort (3)	Off-set / compensatory mitigation including: topographical survey, improved access and interpretation of the monument, and a programme of archaeological investigation, such as geophysical survey and trial trenching.	An invitation would be offered to local community heritage groups to participate in the development and implementation of community based projects.	Further enhancement of the understanding of the asset, a broader knowledge of hill forts in Dumfries and Galloway, and facilitate wider access.

**Technical Appendix 7.1: Cultural Heritage Assets within the Site**

Heritage Asset no	Heritage Asset name and type	Easting	Northing	HER no / RCAHMS no	Sources	Description of Asset	Heritage importance	Type of Impact	Magnitude of Impact	Significance of Impact
1	Glenhead Hill, Relict field system	271300	575100	MDG 16238 / NX77NW 14	HER; RCAHMS; Historic maps; Aerial photographs; Field survey	<p>The HER and RCAHMS database record that a large field-system annotated 'Old Fences' is depicted on the Ordnance Survey 1st Edition map (1853, Sheet XXIV, 6 inch) but is not shown on the 1990 Ordnance Survey 1:10,000 map.</p> <p>Some limited parts of the field system are also depicted on the 2<sup>nd</sup> Edition map and subsequent maps (1895, 1910 and 1951, Sheet XXVII.NW).</p> <p>The outline of several field banks and areas of relict rig and furrow cultivation are visible on modern aerial photographs (GoogleEarth™). Some of the rig and furrow remains appear to be reverse S-shaped rig suggesting an early, medieval date for the cultivation.</p> <p>Field survey identified the fragmentary remains of several relict stone and turf field banks that define areas of former rig and furrow cultivation. The field banks survive in varying condition; most are rather denuded surviving no more than 0.2 m - 0.3 m high, although occasional fragments of well-preserved bank are extant up to a max height of 1 m, and ranging in width from 0.5 m-1 m wide. In places, remnants of the former reverse S-shaped rig are still visible on the ground, amidst rough vegetation and bracken cover. Where it could be recorded, the rig has a wave length of 4 m – 5 m; the rigs surviving to 0.3 m high with 0.2 m - 0.3 m deep furrows.</p>	Local	<b>Direct:</b> crossed by proposed access track from T8 to T9.	<b>Medium</b>	<b>Minor</b>
2	Mochrum, Former enclosure (or field)	271850	575080	MDG 16239 / NX77NW 15	HER; RCAHMS; Historic Maps	<p>The HER and RCAHMS database record that an enclosure (or field) annotated 'Old Fence' is depicted on the Ordnance Survey 1st Edition map (1853, Sheet XXIV, 6 inch), but it is not shown on the 1990 Ordnance Survey 1:10,000 map.</p> <p>The enclosure is also depicted on the Ordnance Survey 2<sup>nd</sup> Edition map and subsequent maps (1895, 1910 and 1951, Sheet XXVII.NW, 6 inch), although its south-western portion is no longer shown on these later editions.</p> <p>No visible, upstanding remains of the enclosure survive; the location is now within dense commercial forestry plantation and ploughing and subsequent tree planting has removed all remains of the enclosure.</p>	Lesser	None	None	None
3	Mochrum Fell / Nick of Mochrum, Fort, vitrified stone	272080	574490	MDG 4316 / NX77SW 3	HER; RCAHMS; Feacham (1956); Historic maps; Field survey	<p>The HER and RCAHMS database record the presence of a prehistoric hill fort.</p> <p>Feacham (1956) described the fort as being built around a rocky knoll at the northern end of the tongue of high land projecting south from Mochrum Fell. The principal defence of the fort consisted of a stone wall around the well-defined shoulder of the knoll. The wall had been much robbed and its thickness was uncertain; all that remained of the facings were two adjacent stones of the external face on the east side although the wall core, composed of small stones packed together with earth, was traceable around much of its circumference and exhibits vitrification on its south side. Another line of defence of a similar character, but with no sign of vitrification, was indicated by a band of core which could be traced intermittently along the foot of the knoll on the south side. The south side of the fort had additional protection from a ditch with a rampart on the counterscarp that ran roughly parallel to the stone defences. The interior of the fort, which consisted partly of bare rock and partly of turf, showed no trace of structures.</p> <p>Field survey carried out in 1973 by the Ordnance Survey recorded that although the fort generally conformed to the description provided by Feacham (above) the fort had been covered by commercial forestry plantation which had practically obliterated the outer ditch and counter-scarp bank. There was no trace of the alleged second stone wall (Feacham above) on the south side, other than a scatter of rubble.</p> <p>A further field survey carried out by the Ordnance Survey in 1977 noted that the fort stood in an area of commercial forestry plantation and all that could be seen was a slight traces of the main wall.</p> <p>The fort is depicted on the Ordnance Survey 1<sup>st</sup> Edition map (1853, Sheet XXIV, 6 inch) and on subsequent maps.</p> <p>Field survey established that the very poorly preserved remains of the fort now stand in an</p>	Regional	<b>Indirect</b> (see Appendix 7.2 for details).	<b>Medium</b>	<b>Moderate</b>

Heritage Asset no	Heritage Asset name and type	Easting	Northing	HER no / RCAHMS no	Sources	Description of Asset	Heritage importance	Type of Impact	Magnitude of Impact	Significance of Impact
						area of dense commercial forestry plantation. No obvious trace of the main wall survives, and only a small fragment of what may be the denuded rampart is visible in trees at the southern edge of the fort. Dense commercial forestry surrounds the fort and trees are now growing over a great proportion of the interior area and nothing but bedrock knolls are visible in any clearings. A modern marker cairn, measuring 1 m in diameter and 1m high, stands within the fort's interior.				
4	Mochrum Fell / Nick of Mochrum, Former quarry	272178	574220	NX77SW 32	RCAHMS; Field survey	RCAHMS record the location of a disused quarry.  The quarry is not shown on the Ordnance Survey 1 <sup>st</sup> or 2 <sup>nd</sup> Edition maps (1853, Sheet XXIV, 6 inch and 1895, Sheet XXIV.SW, 6 inch) or on subsequent maps (1910 and 1951) suggesting that It is of relatively recent date.  Field survey identified a large quarry (35 m long, 15 m wide and 5 m deep) cut into a south-facing hill slope and just north of a modern forest track.	Lesser	<b>Direct:</b> the former quarry is located within the extent of a proposed borrow pit location	<b>High</b>	<b>Minor</b>
5	Former quarry	272070	574162		Historic Maps	A quarry is depicted on the Ordnance Survey 1 <sup>st</sup> Edition map (1854, Sheet XXV, 6 inch) but not shown on the 2 <sup>nd</sup> Edition (1893, Sheet XXVII.SW, 6 inch).  Field survey established that the quarry has been removed during the construction of a modern forestry track.	Lesser	None	None	None
6	Former footbridge	272449	574105		Historic Maps	A foot bridge is depicted on the Ordnance Survey 1 <sup>st</sup> Edition map (1854, Sheet XXV, 6 inch) but is not shown on the 2 <sup>nd</sup> Edition map (1894, Sheet XXVII.SE, 6 inch).  Field survey established that no visible remains of the footbridge survive; the area has been planted with commercial forestry plantation and forestry activity has removed all remains of the foot bridge.	Lesser	None	None	None
7	Sheep ree (sheep fold)	272546	574647	MDG 25834	HER; Historic Maps	A sheep ree is depicted on the Ordnance Survey 1 <sup>st</sup> Edition map (1854, Sheet XXV, 6 inch) and on subsequent maps (1895, 1910 and 1951, Sheet XXVII.NE, 6 inch).  Field survey identified the sheep ree which still survives within commercial forestry, just south of a modern forestry track. The sheep ree is no longer in use but survives in relatively good condition. It is rectangular in plan, 42 m long by 13 m wide with drystone built walls 1.2 m high and 0.4 m thick. The structure is split into two compartments, with an entrance on the western side. Trees are now growing in the interior of the sheepfold and the northern end of the structure is much tumbled and appears to have been robbed of stone.	Lesser	None	None	None
8	Former sheep ree (sheep fold)	272295	574712		Historic Maps	A sheep ree, annotated 'Old Sheep Ree', is depicted on the Ordnance Survey 1 <sup>st</sup> Edition map (1854, Sheet XXV, 6 inch) but is not shown on the 2 <sup>nd</sup> Edition map (1895, Sheet XXVII.NE, 6 inch).  Field survey established that no visible remains of the sheep ree survive; the area has been planted with commercial forestry plantation and ploughing for the forestry and subsequent tree planting has removed any remains of the structure.	Lesser	None	None	None
9	Former hay ree	272354	575698		Historic Maps	A hay ree is depicted on the Ordnance Survey 1 <sup>st</sup> Edition map (1854, Sheet XXV, 6 inch) but not shown on the 2 <sup>nd</sup> Edition map (1895, Sheet XXVII.NE, 6 inch).  Field survey established that no upstanding remains of the hay ree survive; the position in which it is shown on the Ordnance Survey 1 <sup>st</sup> Edition map now forms part of a modern forestry track.	Lesser	None	None	None
10	Former sheep ree (sheep fold)	273418	575450		Historic Maps	A sheep ree or enclosure is depicted on the Ordnance Survey 2 <sup>nd</sup> Edition map (1895, Sheet XXVII.NE) and on the 1910 Edition map (Sheet XXVII.NE, 6 inch).  Field survey established that the sheep ree has been removed during the construction of a modern forestry track.	Lesser	None	None	None
11	Former quarry	272328	574046		Field survey	Field survey identified a quarry measuring 15 m long, 10 m wide and 1 m deep, cut into a slight east-facing slope within an area of forestry.	Lesser	None	None	None
12	Poundland Hill, Field	271850	573350	MDG 16421 /	HER; RCAHMS;	The HER and RCAHMS database record that two lengths of a field boundary, annotated	Lesser	<b>Direct:</b>	<b>High</b>	<b>Minor</b>



Heritage Asset no	Heritage Asset name and type	Easting	Northing	HER no / RCAHMS no	Sources	Description of Asset	Heritage importance	Type of Impact	Magnitude of Impact	Significance of Impact
	boundaries, former sheep ree (sheep fold)			NX77SW 10	Historic maps; Field survey	<p>'Old Fence', and an enclosure, annotated 'Old Sheep Ree', are depicted on the Ordnance Survey 1st Edition map (1853, Sheet XXIV, 6 inch).</p> <p>The southern length of field boundary is also depicted on the Ordnance Survey 2<sup>nd</sup> Edition map (1895, Sheet XXVII.SW, 6 inch); however, the northern length of field boundary and the sheep ree are not depicted.</p> <p>Field survey identified a small, denuded fragment of the southern field boundary (2 m long, 0.3 m - 0.4 m high and 1 m wide) survives on the edge of a commercial forestry plantation. There are no upstanding remains of the northern length of field boundary or of the sheep ree previously recorded by the Ordnance Survey; this area has been planted with commercial forestry.</p>		upgrading and widening of the existing forest access track could potentially disturb the section of filed bank that survives on the edge of commercial forestry and immediately east of the existing forest track		
13	Poundland Hill, field boundary	271947	572872		Historic maps	<p>A length of field boundary, annotated as 'Old Fence', is depicted on the Ordnance Survey 1<sup>st</sup> Edition map (1853, Sheet XXIV, 6 inch) but not shown on the Ordnance Survey 2<sup>nd</sup> Edition map (1895, Sheet XXVII.SE, 6 inch).</p> <p>Field survey established that no remains of the field boundary survive within the study corridor for the proposed access road; the area has been planted with commercial forestry.</p>	Lesser	None	None	None
14	Mid Laggan Hill, head dyke / field boundary	271470	572340	NX77SW 28	RCAHMS; Historic maps	<p>The RCAHMS database records that a length of field boundary, possible a former head-dyke, annotated as 'Old Fence' is depicted on the Ordnance Survey 1<sup>st</sup> Edition map (1852, Sheet XXXI, 6 inch) with a pecked line.</p> <p>The field boundary is also shown on the Ordnance Survey 2<sup>nd</sup> Edition map (1853, Sheet XXVII.SW, 6 inch), although it is shown as a solid line, suggesting that the old field boundary had been replaced by a wall that follows a similar alignment.</p> <p>Field survey established that no upstanding remains of the head-dyke (field bank) survive within the study corridor; any remains of the head-dyke have been removed by the construction of a modern farm / forestry access track. The area in which the former head-dyke is recorded now forms part of a commercial forestry plantation.</p>	Lesser	None	None	None
15	Mid Laggan, building and enclosure	271259	571570		Historic maps	<p>The Ordnance Survey 1<sup>st</sup> Edition map (1852, Sheet XXXI, 6 inch) depicts a single rectangular roofed building and a small enclosure, with a pen to the south-east. Neither the building nor the enclosure is shown on the Ordnance Survey 2<sup>nd</sup> Edition map (1895, Sheet XXVII.SW, 6 inch).</p> <p>Field survey established that no upstanding remains of the building or the enclosure survive within the study corridor. The location now lies within a flat, ploughed field.</p>	Lesser	<b>Direct:</b> location of former building and enclosure crossed by proposed new Site access track	<b>High</b>	<b>Minor</b>
16	Clearance cairn	271040	571212		Field survey	Field survey recorded a large field clearance cairn standing in an improved pasture field to the west of Nether Laggan. The cairn is 14.5 m long, 6 m wide and 0.8 m high (max).	Lesser	None	None	None
17	Glengunnoch Hill, field boundary	270549	570702		Historic maps	<p>A length of field boundary, annotated as 'Old Fence', is depicted on the Ordnance Survey 1<sup>st</sup> Edition map (1852, Sheet XXXI, 6 inch) but is not shown on the 2<sup>nd</sup> Edition map (1895, Sheet XXXV.NW, 6 inch).</p> <p>Field survey established that no upstanding remains of the field boundary survive within the study corridor; the area has now been planted with dense commercial forestry plantation.</p>	Lesser	None	None	None
18	Glengunnoch Hill, former quarry	270555	570430		Historic maps; Field survey	<p>A quarry is depicted on the Ordnance Survey 1<sup>st</sup> Edition map (1852, Sheet XXXI, 6 inch) but not on the 2<sup>nd</sup> Edition map (1895, Sheet XXXV.NW, 6 inch).</p> <p>The quarry was identified during the field survey, cut into a west-facing slope on the edge of a commercial forestry plantation. It was overgrown with gorse bushes and its full extent could not be identified; however, it measures approximately 10 m long, 8 m wide and 3 m deep.</p>	Lesser	None	None	None
19	Glengunnoch Hill, former	270517	570381		Historic maps; Field	A quarry is depicted on the Ordnance Survey 1 <sup>st</sup> Edition map (1852, Sheet XXXI, 6 inch)	Lesser	None	None	None

Heritage Asset no	Heritage Asset name and type	Easting	Northing	HER no / RCAHMS no	Sources	Description of Asset	Heritage importance	Type of Impact	Magnitude of Impact	Significance of Impact
	quarry				survey	<p>but not on the 2<sup>nd</sup> Edition map (1895, Sheet XXXV.NW, 6 inch).</p> <p>The quarry was identified during the field survey cut, into a west-facing slope on the edge of a commercial forestry plantation. It measured 10 m long, 8 m wide and 3 m deep. An entrance to the quarry is visible on its west side.</p>				
20	Glenlochar - Water of Ken, Roman Road (alleged line of)			MDG 9249 / NX66NE 12	HER; RCAHMS	<p>The HER and RCAHMS database note that Crawford (1954) suggested that the modern A713 public road may be on the line of a Roman Road.</p> <p>Field survey by the Ordnance Survey in 1975 recorded that there was no evidence on the ground or on aerial photographs to support Crawford's assertions.</p>	Lesser	None	None	None

# Technical Appendix 7.2: Cultural Heritage Assets within 5 km of the proposed Mochrum Fell wind farm with predicted visibility of the proposed turbines

Heritage Asset no	Heritage Asset name	Status	Easting	Northing	Heritage Importance	Asset Description and Setting	Contribution of Setting	Significance of Setting	No of blade tips visible	No of hubs visible	Distance to nearest turbine (km)	Magnitude of Impact	Significance of Predicted Impact
1082	Little Merkland, fort	Scheduled Monument	268909	573789	National	<p>The upstanding remains of a hill fort of probable early Iron Age date, comprising two low ramparts with a broad 'horseshoe-shaped' ditch which enclose an oval area.</p> <p>The fort remains are situated on a small shoulder of the south-facing slope of Merkland Hill, approximately 0.4 km to the north of Nether Dullarg Farm. Surrounded by open moorland. Panoramic views are gained to the south taking in Loch Ken and the undulating farmland that surrounds the Loch. Views to the north, northwest and northeast are restricted by rising topography.</p>	<b>High:</b> earthwork remains situated within an unmodified moorland setting.	<b>High</b>	9-11	6-8	2.3	<b>Low:</b> Although, a new discernible element in the surrounding landscape the proposed turbines would only be visible in views to the northeast and would not affect the other arc of views out to the surrounding landscape. The character of the landscape in which the asset lies and out over which it looks would not be significantly altered. The presence of the proposed turbines would not detract from an ability to understand or appreciate the asset or its wider landscape setting.	<b>Minor:</b>
1086	Moat Hill, fort, Margley	Scheduled Monument	277013	573267	National	<p>The upstanding earthwork remains of a small circular hill fort of probable prehistoric date, defined by two earthen mounds.</p> <p>The fort remains are situated on a west facing slope of Moat Hill overlooking Margley Farm, which stands just 0.2 km to the west. The fort remains stand in an area of improved pasture and surrounded by open farmland. Views from the fort are particularly concentrated down the Urr Water valley, orientated to the north and south. Wide open views are also afforded to the west taking in surrounding hill tops. Views to the east are generally restricted by rising topography.</p>	<b>Moderate:</b> earthwork remains situated in more recent modified farming landscape.	<b>High</b>	9-11	6-8	4.9	<b>Low:</b> Although a new detectable element in the wider landscape, the proposed turbines would not greatly diminish the ability to understand the settlement in its immediate farmland setting. Views of the turbines are restricted to a small arc of view (24°) visible in only one direction from the asset and other arcs of views out from the settlement would not be affected.	<b>Minor</b>
5179	Auchenhay, settlement 1000 m S of	Scheduled Monument	277672	577050	National	The monument comprises an upstanding earthwork enclosure, probably of late prehistoric date and interpreted as a possible enclosed settlement. It consists of a triple series of banks formed by up-cast of two intervening ditches.	<b>High:</b> earthwork remains situated within open rough pasture that has undergone little modification and	<b>High</b>	9-11	6-8	5.0	<b>Low:</b> Although a new detectable element in the wider landscape, the proposed Mochrum Fell wind	<b>Minor</b>



Heritage Asset no	Heritage Asset name	Status	Easting	Northing	Heritage Importance	Asset Description and Setting	Contribution of Setting	Significance of Setting	No of blade tips visible	No of hubs visible	Distance to nearest turbine (km)	Magnitude of Impact	Significance of Predicted Impact
						The settlement remains stand in an area of rough pasture on the floor of a narrow stream valley which was formerly a marsh, approximately 100m east of the public road to Auchenhay Farm. Surrounded by pasture farmland. The remains of several field banks and some areas of rig and furrow cultivation remains are visible in the surrounding area and these may be associated with the settlement. Panoramic views taking in the surrounding farmland are gained to the north, northwest, northeast and southwest. Views out to the south and southeast are restricted by rising topography.	surrounded by other potential relict farming features.					farm would not greatly diminish the ability to understand the settlement in its immediate setting, or its association with other potentially former agricultural remains in the immediate area. Views of the turbines are restricted to a small arc of view (15°) visible in only one direction from the asset and other arcs of views out from the settlement would not be affected.	
17094	Corsock House, Gates and Gatepiers	Cat A Listed	276178	575780	National	Mid 19 <sup>th</sup> century exceptionally large and fine pair of ornamental Gothic cast-iron gates and gatepiers. Standing at the entrance to the access road to Corsock House. Immediately west of the Corsock to Merkland public road. Surrounded by woodland. Localised roadside setting.	<b>High</b> (localised): roadside setting.	<b>High</b> (localised)	1-2	0	3.4	<b>Imperceptible:</b> views of proposed turbines restricted by intervening topography.	<b>Negligible</b>
3315	Ironmacannie Mill	Cat A Listed	266721	575330	National	Well-preserved mill buildings including grain mill and kiln; the mill originated in the 18 <sup>th</sup> century although the existing buildings date mainly to the 19 <sup>th</sup> century. Historic Scotland note that the mill is of particular interest due to the good survival of internal gearing and machinery.  The mill buildings stand immediately next to the Ironmacannie to Barnshalloch public road and just north of Shirmers Burn. Localised river setting.	<b>High</b> (localised): river setting.	<b>High</b> (localised)	6-8	1-2	4.5	<b>Low:</b> the proposed turbines will be visible in one arc of view to the east of the mill and 4.5 km away; the localised river/farmland setting of the mill will be retained.	<b>Minor</b>
17095	Corsock House Stables	Cat B Listed	275968	575468	Regional	Two 2-storey ranges, enclosing stable yard, of probable 19 <sup>th</sup> century date. Standing immediately south-south-east of Corsock House. Forming part of designed landscape that surrounds the house (see NIDL below). Surrounded by woodland that restricts views to, and from, the surrounding landscape.	<b>High:</b> stables standing in a designed landscape, good appreciation of the layout of the stables along with the main house and its gardens.	<b>High</b>	3-5	0	3.2	<b>Imperceptible:</b> views to the proposed turbines restricted by intervening topography and woodland.	<b>Negligible</b>
17080	Corsock House	Cat B Listed	276015	575481	Regional	An 18th century David Bryce turreted 2-storey and basement house, with later additions added in 1853 and 1910 by Charles Stuart Still Johnson.  The house is situated approximately 0.8 km to the south of Corsock village. The main elevations of the house are orientated north-north-west and south-south-east. A vista runs from the south-south-east elevation to	<b>High:</b> house standing in a designed landscape, good appreciation of the layout of the house and its gardens.	<b>High</b>	3-5	1-2	3.2	<b>Imperceptible:</b> the house is set in an area of woodland at the centre of its designed landscape and surrounding woodland would screen any	<b>Negligible</b>

Heritage Asset no	Heritage Asset name	Status	Easting	Northing	Heritage Importance	Asset Description and Setting	Contribution of Setting	Significance of Setting	No of blade tips visible	No of hubs visible	Distance to nearest turbine (km)	Magnitude of Impact	Significance of Predicted Impact
						overlook the surrounding farmland and hill tops. The house stands within a substantial designed landscape (see NIDL below) including woodland glades, water gardens and a walled garden. Views in other directions, from the house, are restricted by surrounded woodland.						views from the house to the proposed turbine.	
17091	Barwhillanty Lodge	Cat B Listed	272246	570587	Regional	<p>A late 18th century asymmetrical picturesque country villa of particularly interest due to its lavish and high quality interior.</p> <p>The house is situated approximately 3 km to the east-north-east of Parton village (see NIDL below). Stands in a small designed landscape comprising woodland policies and parkland. The main elevations of the villa are orientated southwest and northeast. Views are afforded from the southwest elevation of the villa down a long vista taking in the surrounding arable farmland. Views in other directions from the villa are restricted by surrounding woodland, although there is likely to be views to the surrounding landscape from the upper floors of the villa. The villa itself can be viewed from the public road running from 'Babershall' to 'Nether Laggan' (from the southwest).</p>	<b>High:</b> house standing in a designed landscape, good appreciation of the layout of the house and its gardens.	<b>High</b>	6-8	1-2	3.9	<b>Low:</b> views to the proposed turbines restricted by intervening woodland; principal views from the main elevations of the house (to the northeast and southwest) and along the vista to the southwest of the house would not be affected; the presence of the turbines would not detract from an appreciation of the house and its surrounding designed landscape.	<b>Minor</b>
9655	Holmhead House	Cat B Listed	276714	576039	Regional	Earlier 19 <sup>th</sup> century 2-storey house standing in small landscape gardens immediately west of the Corsock to Glaisters public road. The main elevations of the house are orientated north and south looking out over surrounding arable farmland. Views to the northwest, west and southwest are restricted by intervening woodland.	<b>High:</b> house standing in landscape garden, good appreciation of the layout of the house and gardens.	<b>High</b>	3-5	0	3.9	<b>Imperceptible:</b> views to the proposed turbines restricted by intervening topography.	<b>Negligible</b>
50001	Corsock, Signpost at Junction of A712 and B794	Cat B Listed	276751	575633	Regional	<p>Painted cast-iron signpost dated late 1920s.</p> <p>Situated southeast of Corsock village, near Kirkebride Bridge, at the junction of the A712 and B794 public roads. Erected during the inter-war period as a response to the increased use of the motor car. This example is well-preserved and has been listed in recognition of its attractive design, historic importance and present scarcity in Scotland. Localised road side setting.</p>	<b>High</b> (localised): road side setting.	<b>High</b>	1-2	0	3.9	<b>Imperceptible:</b> views to the proposed turbines restricted by intervening topography.	<b>Negligible</b>
17096	Glenlair House	Cat B Listed	275884	572186	Regional	<p>Substantial 2-storey country house of 19<sup>th</sup> century date. The house is now largely ruinous. Historic Scotland note that it is of particular interest as being the former home of the pioneering 19<sup>th</sup> century physicist and leading mathematician James Clerk Maxwell, and combines the work of local architects Watler Newall and James Barbour with renowned Edinburgh architects Peddie and Kinnear.</p> <p>Stands in a former small designed landscape to the</p>	<b>High:</b> house standing in landscape garden, good appreciation of the layout of the house and gardens.	<b>High</b>	9-11	3-5	4.7	<b>Low:</b> the proposed turbines will be visible in one arc of view to the northwest of the house and 4.7 km away; intervening woodland will restrict views from the house to the proposed	<b>Minor</b>

Heritage Asset no	Heritage Asset name	Status	Easting	Northing	Heritage Importance	Asset Description and Setting	Contribution of Setting	Significance of Setting	No of blade tips visible	No of hubs visible	Distance to nearest turbine (km)	Magnitude of Impact	Significance of Predicted Impact
						west of B794 public road. The main elevations of the house are orientated northwest to southeast; entrance to the house is on the southeast side. Views out from the house are restricted by intervening topography on the north, northwest and west sides. Views from the southeast elevation overlook open farmland.						development and the designed landscape in which the house stands will not be affected.	
3317	Troquhain Sundial	Cat B Listed	268114	579411	Regional	Sundial dated 1616; noted as the earliest known dated dial in Scotland. Now rests upon a later (late 19 <sup>th</sup> century) sandstone baluster-pedestal.  Stands in the garden of Troquhain House Cottage. Localised garden setting. Surrounded by woodland shelterbelts.	<b>High</b> (localised): garden setting.	<b>High</b>	9-11	6-8	4.9	<b>Imperceptible:</b> the presence of the proposed turbines, nearly 5 km from the sundial, would not affect the immediate garden setting of the structure.	<b>Negligible</b>
	Corsock House	NIDL	275920	575394	Regional	An extensive woodland garden that forms the setting for category B Listed Corsock House (17080) planted originally in 1850 and substantially modified in the 20th century by the current owners. The gardens forms part of 'Scotland's Gardens' and is open to the public.  The designed gardens stretch out north and west from the house; at the west end lies Corsock Loch. The gardens which include water gardens, woodland glades and walled gardens, along with several 20th century architectural features, including: a classical temple, follies, a trompe l'oeil bridge and a selection of modern/antique statutory. Views from, and to, the designed gardens, from the surrounding landscape, are generally restricted by woodland.	<b>High:</b> designed landscape that forms the setting for Corsock House, good appreciation of the layout of the gardens.	<b>High</b>	9-11	6-8	3.1	<b>Low:</b> views to the proposed turbines principally restricted by intervening woodland; the presence of the proposed turbines would not affect an appreciation of the layout of the designed landscape and the its associated structures.	<b>Minor</b>
	Barwhillanty	NIDL	272238	570675	Regional	Setting for late 18th century Category B Listed Barwhillanty House (17091).  Designed landscape surrounding Barwhillanty House comprising a mix of woodland policies and open parkland. A vista runs from the southwest elevation of the house taking in surrounding arable farmland. Views from, and to, the house and designed landscape are generally restricted due to the surrounding woodland.	<b>High:</b> designed landscape that forms the setting for Barwhillanty House, good appreciation of the layout of the woodland/parkland policies.	<b>High</b>	9-11	6-8	3.8	<b>Low:</b> Much of the views out from the designed landscape would be limited by woodland policies that make up a great proportion of the NIDL and the turbines would generally only be seen from the most northern edges of the designed landscape. The relationship between Barwhillantr House and other associated landscape structures would not be affected.	<b>Minor</b>
	Parton House	NIDL	271107	569589	Regional	Fragmentary designed landscape that once surrounding Parton House. Parton House was demolished in 1964, however, several associated features still survive including the stables/kennels, lodge, ice house, walled	<b>Moderate:</b> fragmentary designed landscape that once surrounded former Parton House.	<b>Medium</b>	9-11	6-8	4.7	<b>Low:</b> views to the proposed turbines generally restricted by surrounding woodland;	<b>Minor</b>



Heritage Asset no	Heritage Asset name	Status	Easting	Northing	Heritage Importance	Asset Description and Setting	Contribution of Setting	Significance of Setting	No of blade tips visible	No of hubs visible	Distance to nearest turbine (km)	Magnitude of Impact	Significance of Predicted Impact
						garden and priest house. All of these structures once formed part of the designed landscape, principally comprising woodland, which surrounded the original house. Views out from the surviving structures are limited by the surrounding woodland, which forms a secluded setting for the buildings.						secluded woodland setting of buildings will be retained.	
MDG4281	Knocklearn, Settlement	NSR	275758	579291	Regional	<p>The remains of a settlement comprising the possible sites of house platforms enclosed by the remains of a dry-stone wall.</p> <p>The settlement remains are situated just below the crest of a ridge on gently southwest sloping ground. Situated in an area of improved pasture land approximately 0.4 km to the east-north-east of Knocklearn Farm. Wide open views, in all directions are gained from the settlement out to the surrounding farmland.</p>	<b>Moderate:</b> earthwork remains situated in more recent modified farming landscape.	<b>Medium</b>	9-11	9-11	4.5	<b>Low:</b> immediate farmland setting would be retained .	<b>Minor</b>
MDG4288	Auchenvey, Cairn	NSR	273779	577549	Regional	<p>The remains of a probable prehistoric burial cairn situated on a low-spur of improved pasture east of Crogo Burn and approximately 0.3 km to the northeast of Auchenvey Farm. Large swathes of commercial forestry lie to the north and southwest of the cairn. Views from the cairn are concentrated particularly along the Crogo Burn valley, to the northwest and southeast; although wider views taking in the immediate hilltops are afforded to the north and west.</p>	<b>Moderate:</b> remains of prehistoric burial cairn standing in more recent modified farming landscape.	<b>Medium</b>	6-8	3-5	1.9	<b>Low:</b> immediate farmland setting would be retained.	<b>Minor</b>
MDG4300	Arkland, Enclosure	NSR	276847	574021	Regional	<p>The much denuded earthwork remains of a possible homestead, comprising a circular enclosure defined by a stone and turf bank.</p> <p>Situated in an area of rough grazing in the corner of an enclosed improved pasture field, approximately 0.4 km to the northwest of Arkland Farm. Located on a gentle southwest slope overlooking the B794 public road. Views from the enclosure are concentrated along the Urr Water valley, to the north and south; although wider views are afforded to the north, northwest and southwest taking in surrounding hilltops.</p>	<b>Moderate:</b> much denuded remains of possible homestead standing in more recent modified farming landscape.	<b>Medium</b>	9-11	1-2	4.4	<b>Low:</b> immediate farmland setting would be retained.	<b>Minor</b>
MDG13187	Dullach Burn, Burnt Mound	NSR	269360	575600	Regional	<p>The earthwork remains of a burnt mound located on the edge of an improved pasture field on the banks of Dullarg Burn. The monument is surrounded by a large swathe of commercial forestry that restricts views out to the surrounding landscape. Localised burn setting.</p>	<b>Moderate</b> (Localised): burn setting.	Medium	9-11	9-11	2.0	<b>Imperceptible:</b> remains of burnt mound surrounded by commercial forestry which will restrict views of the proposed turbines.	<b>Negligible</b>
CH Asset 3	Mochrum Fell, Fort	Undesignated	272094	574495	Regional	<p>The poorly preserved remains of a probable prehistoric hill fort standing in an area of dense commercial forestry plantation. There is no obvious trace of the main fort walls, and only a small fragment of what may be the denuded remains of a rampart are visible in trees. Dense commercial forestry surrounds the fort and trees</p>	<b>Moderate:</b> poorly preserved earthwork remains surviving in a commercial forestry plantation.	<b>Medium</b>	9-11	9-11	0.3	<b>Medium:</b> Ten turbines would be visible from the fort in an arc from the north-northeast to the west-southwest with the turbines	<b>Moderate</b>

Heritage Asset no	Heritage Asset name	Status	Easting	Northing	Heritage Importance	Asset Description and Setting	Contribution of Setting	Significance of Setting	No of blade tips visible	No of hubs visible	Distance to nearest turbine (km)	Magnitude of Impact	Significance of Predicted Impact
						are now growing over a great proportion of the interior area and nothing but bedrock is visible in any clearings. Views out from the hill fort are generally restricted by commercial forestry, although panoramic views of the surrounding landscape, in all directions, can be glimpsed through the trees and it is still possible to gain an appreciation of the wide and long distant views that would have been afforded from the fort. The fort itself, albeit covered in trees, is also a prominent feature in the surrounding landscape, providing some appreciation of the wider setting of the fort.						visible at a slightly lower elevation than the fort. The closest turbine being present 0.3 km to the west-southwest of the fort. The character of the landscape within which the fort lies and out over which its views extent would be discernibly altered by the presence of the proposed turbines. Nevertheless, the surrounding landscape, and the relationship between the fort and that landscape, would still be legible.	

### Technical Appendix 7.3 Cultural Heritage Assets within 5-10 km of the proposed Mochrum Fell wind farm with predicted visibility of the proposed turbines

Heritage Asset no	Heritage Asset name	Status	Easting	Northing	Heritage Importance	Asset Description and Setting	Contribution of Setting	Significance of Setting	No of blade tips visible	No of hubs visible	Distance to nearest turbine (km)	Magnitude of Impact	Significance of Predicted Impact
1072	Glenroan (or Glengappock) Mote, fort	Scheduled Monument	274982	570441	National	<p>The upstanding remains of a hill fort of Iron Age date comprising at least two phases of fortification. The earliest feature consists of an oval enclosure with a much reduced rampart, overlain by a stone wall and ditches/banks defining an oval area.</p> <p>The well-preserved earthwork remains of a fort set on a low hillock situated in an improved pasture field, approximately 0.5m south-south-west of Glenroan Farm. Surrounded by improved pasture farmland. Wide open views, in all directions, are gained from the fort out to the surrounding farmland.</p>	<b>Moderate:</b> earthwork remains situated in more recent modified farming landscape.	<b>High</b>	9-11	6-8	5.1	<b>Low:</b> Although a new discernible element in the surrounding landscape the proposed turbines would only be visible in views to the northwest and will not affect the other arc of views out to the surrounding landscape, and the character of the landscape in which the asset lies and out over which it looks would not be significantly altered.	<b>Minor</b>
1051	Auld Kirk of Lochroan, fort	Scheduled Monument	273885	569142	National	<p>The earthwork remains of a stone-built fort utilizing a naturally defended eminence. Three parallel ridges of rock outcrop run from east to west across the top of the eminence, and a wall of angular stones has been erected along the top of the two outer ridges and across the ends of all three, thus forming an almost oval enclosure.</p> <p>The remains of the fort are located in Blairinnie Plantation, covered by trees. Views out from the monument restricted by forestry. Localised setting.</p>	<b>Negligible</b> (localised): remains situated in woodland plantation.	<b>Low</b> (localised)	9-11	9-11	5.7	<b>Imperceptible:</b> views to surrounding area from fort remains restricted by surrounding woodland.	<b>Negligible</b>
1077	Little Duchrae, fort	Scheduled Monument	266299	569563	National	<p>The earthwork remains of a well-preserved fort situated on the edge of the floodplain near the junction of the Crae Lane River and the River Dee.</p> <p>The remains stand at the foot of a gentle northwest facing hill slope, bounded on the east side by the public road that runs between Laurieston and Mossdale. The fort stands in an area of woodland and visibility out to the surrounding area is restricted. Localised setting.</p>	<b>Negligible</b> (localised): remains situated in woodland.	<b>Low</b> (localised)	9-11	6-8	6.8	<b>Imperceptible:</b> views to surrounding area from fort remains restricted by surrounding woodland.	<b>Negligible</b>
7743 / 9745	Kenmure Castle	Scheduled Monument / Cat B Listed	263538	576412	National	<p>Upstanding ruins of a castle, probable of early 17th century origin. The castle was occupied until the 1950s, but today is unoccupied and roofless. The castle is accessed from the west along an avenue of trees and is surrounded by a small designed landscape probably of 19th century date.</p> <p>The ruins of the castle are situated on the flat summit of an artificial knoll immediately west of the Lane River and at the head of Loch Ken. The remains of the castle and the knoll on which it stands are surrounded by dense woodland that limits views out to the surrounding landscape. The remains of a 1st floor balcony survive</p>	<b>High:</b> ruins are situated within an unmodified designed landscape, good appreciation of the historical layout of the castle and the later 19th century gardens.	<b>High</b>	9-11	6-8	7.8	<b>Imperceptible:</b> The castle stands in an open space surrounded by woodland and the proposed turbines would be primarily screened from view by the woodland. The current close setting of the castle would not, be affected by the	<b>Negligible</b>



Heritage Asset no	Heritage Asset name	Status	Easting	Northing	Heritage Importance	Asset Description and Setting	Contribution of Setting	Significance of Setting	No of blade tips visible	No of hubs visible	Distance to nearest turbine (km)	Magnitude of Impact	Significance of Predicted Impact
						on the southern side of the castle, from which there would have been open views out southwards over Loch Ken. The castle is accessed from the A712 along an avenue of trees. Views out from this avenue are limited by dense woodland. To the south and southwest of the castle are the remains of a small designed landscape, including a walled garden, defined garden areas and several pathways. The current setting of the castle is the knoll that it sits on and the relict gardens that surround it.						proposed turbines	
1128	Doon Hill, Mote of Doon, Doon of Urr	Scheduled Monument	277425	568890	National	<p>The earthwork remains of an elliptical enclosure situated on a small hillock approximately 0.2 km to the southeast of Doon of Urr Farm. The enclosure is defined by a single bank of earth and stone.</p> <p>The enclosure is situated in an area of improved pasture just east of the B794 public road. Surrounded by undulating farmland. The enclosure is currently covered in trees, however, views can be afforded from the monument to the surrounding landscape in all directions.</p>	<b>Moderate:</b> earthwork remains situated in more recent modified farming landscape.	<b>High</b>	9-11	9-11	7.9	<b>Low:</b> proposed turbines visible in one arc of view to the northwest, 7.9 km away.	<b>Minor</b>
1036	Meikle Cairn, cairn, Upper Minnydow	Scheduled Monument	279690	571249	National	<p>The remains of a probable prehistoric burial cairn.</p> <p>Remains of monument situated in an improved pasture field 0.4 m to the east-north-east of Upper Minnydow Farm, and just southeast of the public road between Kilpatrick Durham and the A712. The monument is surrounded by a dry-stone wall and covered in woodland; nevertheless views can be afforded from the monument to the surrounding landscape in all directions.</p>	<b>Moderate:</b> earthwork remains situated in more recent modified farming landscape.	<b>High</b>	1-2	0	8.3	<b>Imperceptible:</b> views to the proposed turbines restricted by intervening topography.	<b>Negligible</b>
2891	Craig Hill, fort, Laurieston	Scheduled Monument	269143	566080	National	<p>The denuded earthwork remains of a sub-rectangular dun situated on a bedrock outcrop on the southwest side of Meikle Dornell. The wall of the monument has been robbed and is now a mass of small stones.</p> <p>Situated in an area of open moorland just west of Lochengower Loch. Wide open views out to the surrounding area in all directions.</p>	<b>High:</b> earthwork remains situated within an unmodified moorland setting.	<b>High</b>	9-11	9-11	8.5	<b>Low:</b> proposed turbines visible in one arc of view to the north-north-east 8.5 km away.	<b>Minor</b>
1065	Crofts Mote, fort	Scheduled Monument	274312	565918	National	<p>The earthwork remains of a small hill fort probably of Iron Age date defined by three stone and earth ramparts.</p> <p>The fort remains area situated on a flat hillock in an improved pasture field, approximately 0.2 km from Crofts Farm. Surrounded by enclosed pasture/arable fields. Views from the fort are particularly concentrated along the River Dee valley, orientated to the northwest and southeast; although wide open views can be afforded out to the surrounding landscape in all directions.</p>	<b>Moderate:</b> earthwork remains situated in more recent modified farming landscape.	<b>High</b>	9-11	6-8	8.9	<b>Low:</b> proposed turbines visible in one arc of view to the north-north-east nearly 9 km away.	<b>Minor</b>
659	Rough Island, crannog	Scheduled	276284	584500	National	The remains of an artificial island (Rough Island),	<b>High</b> (localised): remains	<b>High</b>	6-8	0	9.3	<b>Imperceptible:</b> views	<b>Negligible</b>

Heritage Asset no	Heritage Asset name	Status	Easting	Northing	Heritage Importance	Asset Description and Setting	Contribution of Setting	Significance of Setting	No of blade tips visible	No of hubs visible	Distance to nearest turbine (km)	Magnitude of Impact	Significance of Predicted Impact
		Monument				located in Loch Urr. The island is encircled by the tumbled remains of a dry-stone wall and connected to the shore by a submerged causeway.  Localised loch setting, views out to surrounding area taking in surrounding hills.	of lake dwelling (artificial island/crannog) in loch setting	(localised)				to the proposed turbines restricted by intervening topography and forestry plantation.	
12792	Glenlochar, Roman fort, annex, road, camps & barrows 50m E of Montford	Scheduled Monument	273746	564659	National	The monument comprises the buried remains of a complex of Roman military remains and a pair of later prehistoric round barrows, all visible as cropmarks on aerial photography.  The asset is located in an area of flat arable farmland just west of Townhead of Greenlaw. No upstanding remains of the monuments survive and their settings add little to their value or significance as an archaeological resource.	<b>Negligible:</b> cropmark site.	<b>Low</b>	9-11	9-11	10.0	<b>Imperceptible:</b> monuments are located 10 km from the proposed turbines and would retain their farmland setting.	<b>Negligible</b>
3415	Hensol House	Cat A Listed	267560	569835	National	A 2-storey and attic house built by Robert Lugar (architect) in 1822 for John Cunningham of Lainshaw. The house survives largely intact, although the south front porch was removed in the 1960s and replaced by a modern conservatory. The house forms part of a small designed landscape along with Category A Listed Lainshaw sundial (3416) and Hensol lodge and bridge.  The house stands in a small designed landscape immediately south side of the River Dee (or Black Water of Dee). Orientated northwest to southeast. The main elevation (main vista from the house) overlooks landscape gardens present to the southeast of the house. The house and gardens are surrounded by woodland policies that restrict both the views out from the house to the surrounding farmland and views to the house from surrounding public roads. Nevertheless, views of the house bounded by woodland are visible from parkland to the southwest of the house. In these views the proposed turbines would be seen beyond the house and at a higher elevation to the house, but contained by the surrounding hill tops.	<b>High:</b> house standing in a designed landscape, good appreciation of the layout of the house and its gardens.	<b>High</b>	3-5	3-5	5.7	<b>Low:</b> the proposed turbines would not detract from an appreciation and understanding of the layout of the house, its designed landscape or its connection with other associated structures within its designed landscape	<b>Minor</b>
3416	Hensol House, The Lainshaw Sundial	Cat A Listed	267584	569806	National	Later 17 <sup>th</sup> century large and complex sundial. Originally stood in grounds at Lainshaw Estate in Ayrshire but brought to Hensol House in the 19 <sup>th</sup> century and re-erected in the gardens.  Today stands at the head of the landscaped gardens to the southeast of Hensol House. Localised garden setting.	<b>High</b> (localised): garden setting.	<b>High</b> (localised)	3-5	3-5	5.8	<b>Imperceptible:</b> the presence of the proposed turbines, 5.8 km from the sundial, would not affect the immediate garden setting of the structure.	<b>Negligible</b>
3698	Crossmichael Parish Church and Churchyard (Church of Scotland)	Cat A Listed	272977	566985	National	A T-plan church built in 1751 with a tall round tower of probable late16 <sup>th</sup> /17 <sup>th</sup> century origin. The tower is of particular note as buildings of this type are very rare in Scotland. Historic Scotland record that it may have originally served as both a navigational beacon and	<b>High</b> (localised): church yard setting.	<b>High</b> (localised)	3-5	1-2	7.5	<b>Imperceptible:</b> views of proposed turbines restricted by intervening topography.	<b>Negligible</b>

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						<p>belfry.</p> <p>Located on the northern edge of Crossmicheal town, standing at centre of a large graveyard.</p>							
3699	Crossmichael Church Gordon Memorial	Cat A Listed	272994	566978	National	<p>Mid 18<sup>th</sup> century classical memorial and burial enclosure for the Gordon Family standing to the south of Crossmicheal Parish Church (3698).</p> <p>Standing in a large graveyard that surrounds the parish church. Localised churchyard setting.</p>	<b>High</b> (localised): church yard setting.	<b>High</b> (localised)	6-8	3-5	7.5	<b>Imperceptible:</b> The memorial stands on the southeast side of the church and views out to the proposed turbines (visible to the north) would be restricted the intervening building – localised churchyard setting of the memorial would not be affected.	<b>Negligible</b>
10191	Old Bridge of Urr Mill	Cat A Listed	277651	567700	National	Group of mill buildings standing on the northeast banks of the Water of Urr on the edge of Old Bridge of Urr village. The mill buildings consist of two ranges of rubble built outbuildings, a mill and a kiln range with cottage. Historic Scotland note that the mill buildings are of particular note due to the mill machinery that survives, including a timber-framed water wheel which is thought to be unique in Scotland. Localised river setting.	<b>High</b> (localised): river setting.	<b>High</b> (localised)	3-5	0	8.9	<b>Imperceptible:</b> views of the proposed turbines restricted by intervening topography.	<b>Negligible</b>
3706	Glenlochar Bridge	Cat A Listed	273206	564512	National	5-arch stone built bridge circa 1797. The bridge spans the Water of Ken and carries the now B795 public road over the river. Views from the bridge are concentrated along the Water of Ken to the north and southeast; wide open views are afforded from the bridge taking in the surrounding flat arable land and hilltops. Views along the river to the north are partially constrained by the presence of Glenlochar Barrage. Localised river setting.	<b>High</b> (localised): river setting.	<b>High</b> (localised)	9-11	9-11	10.0	<b>Low:</b> proposed turbines would be visible in only one arc of view to the north, 10 km away from the bridge and its river setting will be retained.	<b>Minor</b>
9721	Airds of Kells House	Cat B Listed	267619	570480	Regional	Unusually complete and unaltered later 18 <sup>th</sup> century farmhouse which stands at the centre of farm steading complex, and surrounded by farm barns and outbuildings. Looking out to surrounding arable farmland. Localised farm setting.	<b>High</b> (localised): farm setting, good appreciation of layout of farmhouse and surrounding steading and other farm buildings.	<b>High</b> (localised)	1-2	0	5.2	<b>Imperceptible:</b> views to the proposed turbines restricted by intervening topography.	<b>Negligible</b>
17097	Knockvennie Bridge	Cat B Listed	276036	571160	Regional	Earlier 19 <sup>th</sup> century 2-arched stone built bridge spanning Urr of Water. Carries the now Barbershall to Walton Park public road over the river. Views from the bridge are concentrated along the Urr of Water to the north-north-west and southwest. Localised river setting.	<b>High</b> (localised): river setting.	<b>High</b> (localised)	6-8	1-2	5.4	<b>Low:</b> proposed turbines will be visible in one arc of view, slightly off-set to the northwest from the bridge, nearly 5.5 km from the bridge; the presence of the turbines would not affect the localised	<b>Minor</b>



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												river setting of the bridge.	
10193	Walton Park Stables, Dovecot, Horsemill and Walled Garden	Cat B Listed	276153	570921	Regional	Group of buildings forming part of the small designed landscape surrounding Walton Park House (10192). Comprising a 4-range stable block, dated 1817, present to the east of the house, a horsemill associated with the stable block, and a large walled garden present to the west of the house. All are surrounded by woodland that restricts views from, and to, the buildings from the surrounding landscape.	<b>High:</b> stables and other buildings forming part of designed landscape surrounding Walton Park House; good appreciation of the layout of the stables, walled garden, etc in relation to house and its gardens.		6-8	1-2	5.6	<b>Imperceptible:</b> views of the proposed turbines restricted by intervening woodland.	<b>Negligible</b>
10192	Walton Park House	Cat B Listed	276225	570930	Regional	2-storey and basement country house dated 1816 with late 19 <sup>th</sup> century additions to the east side.  The house stands at the centre of a small designed landscape that includes other associated structures, including: Walton Park Stables (10193) and Walton Park Lodge (10194). The main elevations of the house are orientated north-north-west and south-south-east, with the entrance on the north-north-west side. The house is surrounded by woodland which generally restricts views from, and to, the house; although some views out to the surrounding farmland may be gained from the upper floors.	<b>High:</b> house standing in a designed landscape, good appreciation of the layout of the house and its gardens.	<b>High</b>	6-8	1-2	5.7	<b>Imperceptible:</b> views of the proposed turbines restricted by intervening woodland.	<b>Negligible</b>
10194	Walton Park Lodge	Cat B Listed	276403	571009	Regional	Late 19 <sup>th</sup> century single storey and attic lodge standing at the east entrance gate for Walton Park House (10192). Forming part of the small designed landscape surrounding the house, along with other associated structures including: Walton Park Stables and Walled Garden (10193). Main elevations orientated northeast and southwest. Surrounded by trees on the north, west and south sides. Views from the house are concentrated to the east looking out across open farmland. Localised road setting; immediate west of the B794 public road.	<b>High:</b> lodge house situated at entrance to designed landscape for Walton Park House.		9-11	1-2	5.8	<b>Imperceptible:</b> views of the proposed turbines restricted by intervening woodland; turbines will not be visible from the main elevation of the lodge (orientated east).	<b>Negligible</b>
9656	Kilquhanity House School	Cat B Listed	276569	570546	Regional	2-storey, attic and basement classical house, circa 1810-20. A good example of a villa built/designed by Walter Newal. The house was latterly used as an independent school and then bought in 2002 by the Kinokuni Children's Village for education purposes.  Situating immediately southwest of the B794 public road and northwest of a large complex of modern barns. The main elevations of the house are orientated northeast and southwest. The building is surrounded by woodland shelterbelts.	<b>Moderate:</b> classical house now standing next to a complex of modern farm buildings – modified farm setting.	<b>Medium</b>	9-11	6-8	6.2	<b>Low:</b> proposed turbines would be visible in only one arc of view to the northwest, over 6 km away from the house and would not affect its immediate setting.	<b>Minor</b>
3417	Hensol Lodge and Gates	Cat B Listed	266420	570069	Regional	Lodge and gateway with granite wall continuing from Hensol Bridge (9742) parapet to form entrance to Hensol House (3415). Single storey gothic lodge circa 1822.	<b>High</b> (localised): road side setting.	<b>High</b> (localised)	9-11	3-5	6.4	<b>Imperceptible:</b> views of the proposed turbines would be restricted by intervening woodland.	Negligible

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						Standing immediately east of A762 public road and on the edge of woodland. Forms part of the designed landscape for Hensol House. Localised road side setting.							
9742	Hensol Bridge	Cat B Listed	266366	570081	Regional	Earlier 19 <sup>th</sup> century granite built bridge spanning the Black Water of Dee. Now carries the A762 public road over the river. Views from the bridge orientated along river to the northeast and southwest. Localised river setting.	<b>High</b> (localised): river setting.	<b>High</b> (localised)	9-11	9-11	6.4	<b>Low:</b> proposed turbines would be visible in only one arc of view to the northeast, 6.4 km away from the house and would not affect its immediate river setting.	<b>Minor</b>
3407	Livingstone House	Cat B Listed	271472	567669	Regional	Earlier 18 <sup>th</sup> century 2-storey and attic house situated to the west of Loch Ken (and River Dee). The main elevations of the house are orientated northwest and southeast; vistas running from both elevations overlook Loch Ken (to the northwest) and the River Dee (to the southeast). Views from the southwest and northeast elevations are restricted by woodland shelterbelts, whilst views off the house, from the surrounding landscape (particularly from the public road), are limited by woodland.	<b>High:</b> country house standing in own designed landscape (principally woodland), good appreciation of the house and its immediate setting.	<b>High</b>	9-11	3-5	6.6	<b>Low:</b> proposed turbines would be visible in only one arc of view to the north, 6.6 km away from the bridge and would not affect its immediate setting.	<b>Minor</b>
4250	Craigenputtock House	Cat B Listed	277128	582363	Regional	Early 19 <sup>th</sup> century farmhouse with small courtyard steading to the rear. Localised farmland setting; buildings surrounded by woodland shelterbelts that restrict views out, and from, the surrounding area.	<b>High</b> (localised): arable building in farmland setting.	<b>High</b> (localised)	9-11	9-11	7.8	<b>Low:</b> proposed turbines would be visible in only one arc of view to the southwest and 7.8 km away; will retain its farmland setting.	<b>Minor</b>
3703	Culgruff House Hotel	Cat B Listed	273807	566741	Regional	A Baronial/Free-style mansion built in 1889, comprising 2-storey with attics and a tall tower on the west side. It was turned into a hotel in 1947.  It stands approximately 0.4 km to the east of Crossmicheal village. The main elevations of the house are orientated east-north-east and west-south-west and views are afforded to the west taking in the Ken valley and Loch Ken. Other views out from the building are generally restricted by surrounding woodland, although there may be some views afforded from upper floors or the tower.	<b>High:</b> former mansion house standing in own estate (principally woodland), good appreciation of the house and its immediate setting.	<b>High</b>	9-11	6-8	8.0	<b>Low:</b> proposed turbines would be visible in one arc to the north-north-west of the house, 8 km away and views to the turbines would generally be restricted by intervening woodland, immediate woodland setting of hotel would be retained and views to Loch Ken (to the west) would not be affected.	<b>Minor</b>
3422	Balmaghie Parish Church and Churchyard, Church of Scotland	Cat B Listed	272277	566318	Regional	Late 18 <sup>th</sup> century church standing at northwest corner of large graveyard.  Situated just east of Loch Ken (River Dee) and 0.1 km to the east of Kenholm House. The main elevations of the church are orientated northwest to southeast, with	<b>High:</b> church standing in associated graveyard.	<b>High</b>	9-11	9-11	8.1	<b>Low:</b> the proposed turbines would be visible in one arc of view to the north of the church over 8 km	<b>Minor</b>

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						the entrance on the northwest side. Surrounded by open farm land.						away; the immediate graveyard setting of the church would be retained.	
3695	Auchendolly House and Steadings	Cat B Listed	276868	568173	Regional	Early 19 <sup>th</sup> century 2-storey house with some late 19 <sup>th</sup> and modern additions and alterations.  The house stands at the centre of a small designed landscape, comprising principally of woodland. The stables are located north of the house. The main elevations of the house are orientated northwest to southeast. Views out from the house are generally restricted by intervening woodland, although some views of the surrounding farmland may be afforded from the upper floor.	<b>High</b> : house and associated steading standing in small designed landscape, good appreciation of the layout of the house, stables and gardens.	<b>High</b>	3-5	1-2	8.1	<b>Imperceptible</b> : views of the proposed turbines would be restricted by intervening topography and surrounding woodland.	<b>Negligible</b>
38466	East Port, Hillboro Cottage, New Galloway	Cat B Listed	263435	577527	Regional	Early 19 <sup>th</sup> century cottage standing within core of New Galloway Town, close to the High Street. Forms part of New Galloway Conservation Area. The setting of this building is the built environment of the town and its relationship to the group of related buildings and other town features that surrounds it. Localised town setting.	<b>High</b> (localised): town setting.	<b>High</b> (localised)	9-11	3-5	8.1	<b>Low</b> : proposed turbines would be present over 8 km to the east of building and its town setting would be retained.	<b>Minor</b>
9660	Durham House (Former Manse)	Cat B Listed	278628	570094	Regional	Mid 19 <sup>th</sup> century 2-storey house standing on southeast side of Kilpatrick Durham village. Forms part of Kilpatrick Durham Conservation Area. The setting of this building is the built environment of the village and its relationship to the group of related buildings and other village features that surrounds it. Localised village setting.	<b>High</b> (localised): village setting.	<b>High</b> (localised)	1-2	0	8.1	<b>Imperceptible</b> : views of the proposed turbines would be restricted by intervening topography.	Negligible
38475	High Street, Town Hall, New Galloway	Cat B Listed	263412	577506	Regional	Late 19 <sup>th</sup> century town hall standing within core of New Galloway Town, on the High Street. Forms part of New Galloway Conservation Area. The setting of this building is the built environment of the town and its relationship to the group of related buildings and other town features that surrounds it. Localised town setting.	<b>High</b> (localised): town setting.	<b>High</b> (localised)	9-11	6-8	8.1	<b>Low</b> : proposed turbines would be present over 8 km to the east of building and its town setting would be retained.	<b>Minor</b>
38464	Brae Cottage, Off Wylies Brae, High Street, New Galllowsay	Cat B Listed	263423	577575	Regional	Late 18 <sup>th</sup> /early 19 <sup>th</sup> century cottage standing within core of New Galloway Town, on the High Street. Forms part of New Galloway Conservation Area. The setting of this building is the built environment of the town and its relationship to the group of related buildings and other town features that surrounds it. Localised town setting.	<b>High</b> (localised): town setting.	<b>High</b> (localised)	9-11	3-5	8.1	<b>Low</b> : proposed turbines would be present over 8 km to the east of building and its town setting would be retained.	<b>Minor</b>
38468	High Street, Corner House, New Galloway	Cat B Listed	263396	577511	Regional	Late 18 <sup>th</sup> /early 19 <sup>th</sup> century house standing within core of New Galloway Town, on the High Street. Forms part of New Galloway Conservation Area. The setting of this building is the built environment of the town and its relationship to the group of related buildings and other town features that surrounds it. Localised town setting.	<b>High</b> (localised): town setting.	<b>High</b> (localised)	9-11	9-11	8.1	<b>Low</b> : proposed turbines would be present over 8 km to the east of building and its town setting would be retained.	<b>Minor</b>
38478	West Port, The Thorn, New Galloway	Cat B Listed	263387	577514	Regional	Early 19 <sup>th</sup> century cottage standing within core of New Galloway Town, on the High Street. Forms part of New Galloway Conservation Area. The setting of this	<b>High</b> (localised): town setting.	<b>High</b> (localised)	9-11	9-11	8.1	<b>Low</b> : proposed turbines would be present over 8 km to	<b>Minor</b>

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						building is the built environment of the town and its relationship to the group of related buildings and other town features that surrounds it. Localised town setting.						the east of building and its town setting would be retained	
38465	Clydesdale Bank, New Galloway	Cat B Listed	263464	577819	Regional	Mid 19 <sup>th</sup> century bank house standing within core of New Galloway Town, close to the High Street. Forms part of New Galloway Conservation Area. The setting of this building is the built environment of the town and its relationship to the group of related buildings and other town features that surrounds it. Localised town setting.	<b>High</b> (localised): town setting	<b>High</b> (localised)	9-11	3-5	8.1	<b>Low:</b> proposed turbines would be present over 8 km to the east of building and its town setting would be retained.	<b>Minor</b>
38472	High Street, Kenburn And Burnbank, New Galloway	Cat B Listed	263417	577662	Regional	Pair of early 19 <sup>th</sup> century cottages standing within core of New Galloway Town, on the High Street. Forms part of New Galloway Conservation Area. The setting of this building is the built environment of the town and its relationship to the group of related buildings and other town features that surrounds it. Localised town setting.	<b>High</b> (localised): town setting.	<b>High</b> (localised)	9-11	3-5	8.2	<b>Low:</b> proposed turbines would be present over 8 km to the east of building and its town setting would be retained	<b>Minor</b>
38474	High Street, Mill House, New Galloway	Cat B Listed	263387	577660	Regional	Earlier 19 <sup>th</sup> century house standing within core of New Galloway Town, close to the High Street. Forms part of New Galloway Conservation Area. The setting of this building is the built environment of the town and its relationship to the group of related buildings and other town features that surrounds it. Localised town setting.	<b>High</b> (localised): town setting.	<b>High</b> (localised)	9-11	6-8	8.2	<b>Low:</b> proposed turbines would be present over 8 km to the east of building and its town setting would be retained.	<b>Minor</b>
9749	Overton House, Garden Building	Cat B Listed	263407	578184	Regional	Garden building possible dovecot. Situated in the gardens of Overton House. Enclosed garden setting.	<b>High</b> (localised): enclosed garden setting forming part of designed landscape for Overton House.	<b>High</b> (localised)	9-11	9-11	8.3	<b>Imperceptible:</b> localised garden setting would be retained, proposed turbines present over 8 km away.	<b>Negligible</b>
9670	Durhamhill House and Flanking Steadings	Cat B Listed	279121	570434	Regional	3-storey house and associated steading, circa 1820. Standing in open farmland just 0.3 km to the east of Kilpatrick Durham village. Localised farm setting.	<b>High</b> (localised): farm setting, surrounded by arable farmland.	<b>High</b> (localised)	9-11	6-8	8.3	<b>Low:</b> proposed turbines would be present over 8 km to the northeast of the farm and it's steading and their arable/farmland setting would be retained.	<b>Minor</b>
10185	Kirkpatrick-Durham, 45 and 47 Victoria Street	Cat B Listed	278974	570184	Regional	Late 18 <sup>th</sup> century single storey cottages located at the centre of Kilpatrick Durham village. Forms part of Kilpatrick Durham Conservation Area. The setting of this building is the built environment of the village and its relationship to the group of related buildings and other village features that surrounds it. Localised village setting	<b>High</b> (localised): village setting.	<b>High</b> (localised)	1-2	0	8.4	<b>Imperceptible:</b> views of the proposed turbines would be restricted by intervening topography.	Negligible
10189	Kirkpatrick-Durham, 54 Victoria Street	Cat B Listed	278997	570201	Regional	Late 18 <sup>th</sup> century single storey cottage located at the centre of Kilpatrick Durham village. Forms part of Kilpatrick Durham Conservation Area. The setting of this building is the built environment of the village and its relationship to the group of related buildings and other village features that surrounds it. Localised	<b>High</b> (localised): village setting.	<b>High</b> (localised)	3-5	0	8.4	<b>Imperceptible:</b> views of the proposed turbines would be restricted by intervening topography.	Negligible



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						village setting							
9744	Kells Parish Churchyard	Cat B Listed	263240	578337	Regional	1822 T-plan church with 3-stage tower to centre of south elevation.  Stands on a slightly southwest facing slope in a large graveyard (9743), immediately west of the A762 public road. The main elevations of the church are orientated north and south. A woodland shelterbelt present to the northwest (edging the A762) limits views in that direction. Churchyard setting.	<b>High:</b> churchyard setting.	<b>High</b>	9-11	9-11	8.5	<b>Low:</b> proposed turbines would be present 8.5 km to the east-south-east of the church and would not affect the immediate churchyard setting of the church.	
9743	Kells Parish Church (Church Of Scotland)	Cat B Listed	263210	578355	Regional	Rubble walled churchyard with many well-preserved earlier 18 <sup>th</sup> century dates. Setting for Kells Parish Churchyard (9744).	<b>High:</b> setting for Kells Parish Church.	<b>High</b>	9-11	9-11	8.5	<b>Low:</b> proposed turbines would be present 8.5 km to the east-south-east of the churchyard and the surrounding.	
10190	Old Bridge of Urr	Cat B Listed	277593	567714	Regional	2-arched stone built bridge spanning the Water of Urr. The bridge probably dates originally from the 16 <sup>th</sup> century but has been considerably rebuilt during the 18 <sup>th</sup> and 20 <sup>th</sup> centuries.  Located at the south end of Old Bridge of Urr and carrying the now B794 public road over the Water of Urr. Views from the bridge are concentrated along the Water of Urr to the northwest and southeast. Localised river setting.	<b>High</b> (localised): river setting.	<b>High</b> (localised)	6-8	1-2	8.9	<b>Imperceptible:</b> proposed turbines would be present nearly 9 km away in one arc of view to the northwest of the bridge and its river setting would be retained.	<b>Negligible</b>
50002	Old Bridge of Urr, Signpost at B794 Junction	Cat B Listed	277748	567776	Regional	Painted cast-iron signpost dated 1933.  The signpost stands at the north end of Old Bridge of Urr at the junction between the B794 public road and the Kirkpatrick Durham road. Erected during the inter-war period as a response to the increased use of the motor car. This example is well-preserved and has been listed in recognition of its attractive design, historic importance and present scarcity in Scotland. Localised road side setting.	<b>High</b> (localised): road side setting.	<b>High</b> (localised)	9-11	3-5	9.0	<b>Imperceptible:</b> proposed turbines would be visible in distant views (9 km) from the signpost and its road setting would not be affected.	<b>Negligible</b>
3704	Danevale Park Stables	Cat B Listed	273515	565426	Regional	Late 18 <sup>th</sup> /early 19 <sup>th</sup> century 2-storey, attic and basement house. Forming part of a designed landscape for unlisted Danevale House. The main elevations of the steading are orientated northwest to southeast. The building is partially surrounded by woodland which limits views out to the west, east and south. Views to the north overlook surrounding arable farmland.	<b>High:</b> standing in small designed landscape surrounding Danevale House, good appreciation of relationship between stables and house.	<b>High</b>	9-11	6-8	9.2	<b>Low:</b> proposed turbines would be visible in distant views (over 9 km) from the stables and its immediate woodland setting or the designed landscape in which it stands would be affected.	<b>Minor</b>
3424	Laurieston Hall Stables	Cat B Listed	267725	565731	Regional	Stable block with four single storey ranges grouped around a cobbled courtyard, circa 1840-50. The stables form part of the former designed landscape that surrounded Category B Listed Laurieston Hall (3418). The hall and its surrounding landscape now form part of	<b>Moderate:</b> former stable block standing in former designed landscape of Laurieston Hall which now forms part of a	<b>Medium</b>	1-2	0	9.2	<b>Imperceptible:</b> views to the proposed turbines would be restricted by intervening	Negligible

Heritage Asset no	Heritage Asset name	Status	Easting	Northing	Heritage Importance	Asset Description and Setting	Contribution of Setting	Significance of Setting	No of blade tips visible	No of hubs visible	Distance to nearest turbine (km)	Magnitude of Impact	Significance of Predicted Impact
						an Ecovillage and Commune. The stables stand on the southeast edge of a large walled garden (former walled garden of Laurieston House) which has been turned into a large allotment (vegetable plot) for the commune. Surrounded by woodland that restricts views from, and to, the surrounding landscape.	Ecovillage/Commune, still able to appreciate the relationship between the stables, the hall and the surrounding designed landscape.					topography.	
9665	Brooklands Lodge	Cat B Listed	281546	572797	Regional	19 <sup>th</sup> century 'Gothic' style cottage standing at the east entrance to Category B Listed Brooklands House. Forms part of the formal designed landscape that surrounds the lodge (see GDL below). Immediately north of the A712 public road; localised road side setting.	<b>High</b> (localised): forms part of the designed landscape that surrounds Brooklands House.	<b>High</b> (localised)	1-2	0	9.3	<b>Imperceptible:</b> views to the proposed turbines would be restricted by intervening topography.	<b>Negligible</b>
9666	Brooklands, Ornamental Walling opposite Brooklands Lodge	Cat B Listed	281580	572788	Regional	High rubble wall with coped embattled parapet with rounded-arched gateway, now been blocked, and arrow slits above. Forms part of a 'show' entrance to Brooklands Lodge (9665). Standing opposite the entrance to the east access road to Brooklands Lodge. Forms part of the formal designed landscape that surrounds the lodge (see GDL below). Bounding the southern side of the A712 public road; localised road side setting.	<b>High</b> (localised): forms part of the designed landscape that surrounds Brooklands House.	<b>High</b> (localised)	1-2	0	9.3	<b>Imperceptible:</b> views to the proposed turbines would be restricted by intervening topography.	<b>Negligible</b>
3418	Laurieston Hall	Cat B Listed	267598	565722	Regional	A large rambling country house of several building periods from 17 <sup>th</sup> to the 20 <sup>th</sup> centuries. The house, along with its stables (3424) and surrounding estate were bought in the 1970s and turned into an Ecovillage/Commune. The main elevations of the house are orientated north and south. Several buildings and other structures have been built in the former gardens surrounding the house for the Ecovillage, and the former walled garden has been turned into a large allotment (vegetable plot); it is still possible, however, to appreciate the layout of the house and other associated structures including the walled garden and stables (3424). The house is principally surrounded by woodland which restricts views from, and to, the house; although views out to the surrounding landscape may be afforded from the upper floors of the house.	<b>Moderate:</b> former country house standing in former designed landscape which now forms part of an Ecovillage/Commune, still able to appreciate the relationship between the house and its surrounding designed landscape.	<b>Medium</b>	6-8	3-5	9.3	<b>Low:</b> the proposed turbines would be visible in one arc of view to the northeast and views to the proposed turbines would be principally restricted by intervening woodland.	<b>Minor</b>
3707	Glenlochar House and Gatepiers	Cat B Listed	273452	564810	Regional	Late 18 <sup>th</sup> /early 19 <sup>th</sup> century 2-storey attic and basement house.  Situated on the east bank of Loch Ken (or River Dee). Main elevations of the house are orientated north and south. Generally surrounded by woodland, although there are open views to the northwest overlooking Loch Ken.	<b>High:</b> country house standing in own estate (principally woodland), good appreciation of the house and its immediate loch setting.	<b>High</b>	9-11	9-11	9.8	<b>Low:</b> proposed turbines would be present over 9 km to the north of the building and its woodland/loch side setting would be retained.	<b>Minor</b>
3425	Laurieston, Chestnut House	Cat B Listed	268226	564857	Regional	Early 19 <sup>th</sup> century house forming part of Laurieston village.  Situated at the centre of the village. Front elevation	<b>High</b> (localised): village setting.	<b>High</b> (localised)	9-11	1-2	9.9	<b>Low:</b> proposed turbines would be present over 9 km to	<b>Minor</b>

Heritage Asset no	Heritage Asset name	Status	Easting	Northing	Heritage Importance	Asset Description and Setting	Contribution of Setting	Significance of Setting	No of blade tips visible	No of hubs visible	Distance to nearest turbine (km)	Magnitude of Impact	Significance of Predicted Impact
						(main elevation) of house orientated northwest overlooking the high street (A762). The setting of this building is the built environment of the village and its relationship to the group of related buildings and other village features that surrounds it. Localised village setting.						the east of building and its village setting would be retained.	
	Grobdale	ASA	261917	565304	National	An extensive scatter of monuments of well-preserved archaeological and historic remains spanning the prehistoric and medieval periods. Particularly rich in settlement remains and field systems, spread along the upper slopes of Crack Hill, Ewe Hill and Bennan Hill and surviving in unmodified moorland.	<b>High</b> : well preserved relict landscape.	<b>High</b>	9-11	9-11	12.9 (from centre of ASA)	<b>Low</b> : views of the proposed turbines would be visible from limited in ASA, particularly on high summits.	<b>Minor</b>
	New Galloway	CA	263448	577551	National	New Galloway Conservation Area, including ten Category B Listed Buildings and ten Category C Listed Buildings. Small enclosed village setting with main buildings spread down either side of high street. Village spread along the western side of the Water of Ken at the headwaters of Loch Ken. Main views along river valley, although some long distance views afforded to the surrounding landscape particularly from the southern end of the Conservation Area.	<b>High</b> (localised): enclosed village setting containing several associated village buildings.	<b>High</b> (localised)	9-11	9-11	8.1	<b>Low</b> : occasional views of proposed turbines in far distance (over 8 km away) glimpsed from Conservation Area, some screening provided by intervening forestry plantation; enclosed village setting of Conservation Area would be retained.	<b>Minor</b>
	Kirkpatrick Durham	CA	278784	570168	National	Kilpatrick Durham Conservation Area, including ten Category B Listed Buildings and three Category C Listed Buildings. Small enclosed village setting with main buildings spread down both side of high street (Victoria Street) and St David's Street. Main views concentrated along the high street (Victoria Street), although some long distant views afforded to the southeast taking in surrounding farmland, particularly from the north and east ends of the Conservation Area.	<b>High</b> (localised): enclosed village setting containing several associated village buildings.	<b>High</b> (localised)	9-11	3-5	8.2	<b>Low</b> : occasional views of proposed turbines in far distance (over 8 km away) glimpsed from Conservation Area, some screening provided by intervening topography; enclosed village setting of Conservation Area would be retained.	<b>Minor</b>
	Brooklands	GDL	281108	572887	National	Formal designed landscape forming the setting for Category B Listed Brooklands House. The designed landscape is situated in the lee of Brooklands Hill, comprising of open parkland and woodland policies. Brooklands House stands at the northern edge of the designed landscape, overlooking the parkland that extends from the house to the A712 public road, to the south. Panoramic views are afforded from the house overlooking the parkland and taking in the surrounding upland farmland. This view (vista) forms a major factor in the situation of the house. The northern edge of the designed landscape comprises of woodland policies, which surround the north, west and east sides of the house and restricts views from, and to, the house in these directions. Other structures, including Category	<b>High</b> : designed landscape that forms the setting for Brooklands House.	<b>High</b>	9-11	9-11	8.8	<b>Low</b> : proposed turbines would be visible in one arc of view to the northwest, 8.8 km away; woodland on the northwest side (along Brookland Burn) of the GDL would restrict views out to the proposed turbines from the designed landscape. No views are predicted from the house or from its	<b>Minor</b>

Heritage Asset no	Heritage Asset name	Status	Easting	Northing	Heritage Importance	Asset Description and Setting	Contribution of Setting	Significance of Setting	No of blade tips visible	No of hubs visible	Distance to nearest turbine (km)	Magnitude of Impact	Significance of Predicted Impact
						B Listed walled garden, lodge (9665) and ornamental wall (9666) form part of the designed landscape. Historic Scotland note that the walled garden and woodland garden are of particularly outstanding horticultural significance.						walled garden. The turbines would not be visible in the main view (or vista) to the south from the house.	

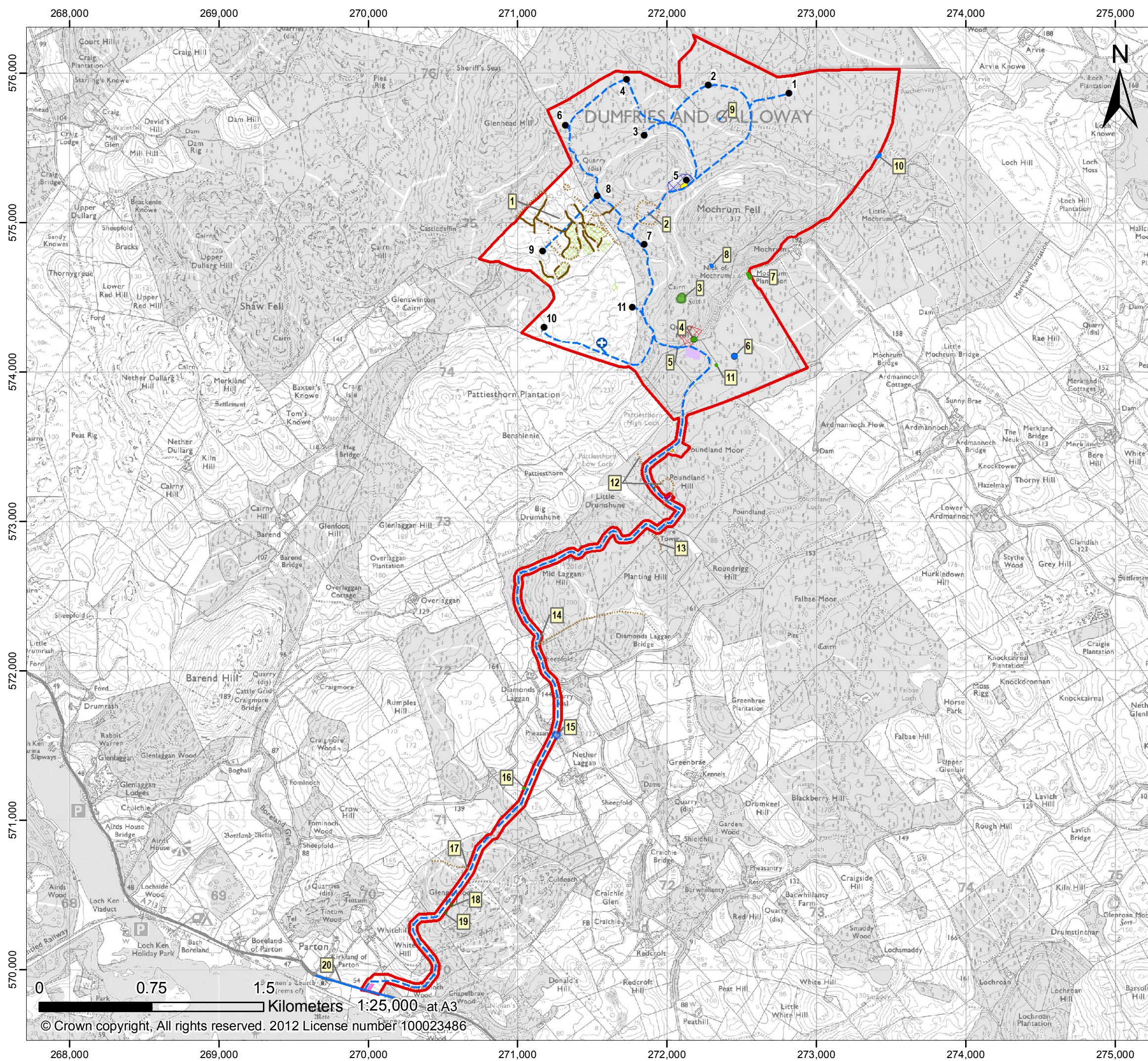


**Technical Appendix 7.4: Cultural Heritage Assets outwith 10 km from the proposed Mochrum Fell wind farm but specified by the DGC Archaeologist**

Heritage Asset no	Heritage Asset name	Status	Easting	Northing	Heritage Importance	Asset Description and Setting	Contribution of Setting	Significance of Setting	No of theoretical blade tips visible	No of theoretical hubs visible	Distance to nearest turbine (km)	Magnitude of Impact	Significance of Predicted Impact
90301/3408	Threave Castle	SM/Cat A Listed	273967	562254	National	<p>The monument comprises the ruins of a 14th century tower house and later artillery defenses which survive as earthworks, as substantial stone structures, and as buried archaeology, together with an area defined by the outer defenses. The castle is one of the earliest tower houses in Scotland, built by Archibald Douglas 'the Grim', in the late 14th century. It was abandoned in 1640 and partially dismantled at this time. In the early 19th century minor works were carried out on the tower house and it was used as a prison for French PoWs during the Napoleonic Wars. In 1913 the castle came into public care and conservation work began soon after, including the rebuilding of the stone vault in the tower house. The castle is a Historic Property in Care and promoted visitors site.</p> <p>The ruins of the castle stand on an isolated island in the River Dee. There are open views out in all directions from the castle, with extensive views up and down the river. The ruins of the castle are a prominent feature in the surrounding flat/open farmland.</p>	<b>High:</b> well-preserved ruins of medieval tower house (castle) within a island setting that has undergone little modification.	<b>High</b>	9-11	9-11	12.3	<b>Imperceptible:</b> intervening woodland that surrounds the island on which Threave Castle stands would primarily limit views to the proposed turbines. The presence of the proposed turbines would not discernibly change the immediate setting of the castle on its island site; neither would it affect views outwards from the castle in other directions. Views of the asset, best appreciated at relatively close quarters, would be largely unaffected.	<b>Negligible</b>
9829	Threave House	Cat B Listed	275288	560426	Regional	A 3-storey, attics and basement house with 4-storey drum tower built in 1872 by Charles Kinnear of Peddie and Kinnear. In the 1950s the house and its gardens (see Threave GDL below) were transferred to The National Trust for Scotland and in the 1960s the 'Threave School of Gardening' was set up to train amenity gardeners. The house and its associated stables (Cat B Listed) stand within the south-western half of the GDL. The principal rooms of the house have been restored to the way they were in the 1930s and are now open to visitors. The house is situated approximately 3 km to the southwest of Castle Douglas. The main elevations of the house are orientated west-south-west and east-north-east, and a tree-lined vista, taking in the surrounding countryside, is obtained from the house to the west-south-west across formal gardens. The house is surrounded by a designed landscape which was originally laid out in 1880s and then developed in the 1950s/60s onwards as part of the 'Threave School of Gardening' (for further details see Threave GDL below).	<b>High:</b> house standing in a designed landscape, good appreciation of the layout of the house and its gardens.	<b>High</b>	9-11	9-11	14.4	<b>Imperceptible:</b> views out to the surrounding landscape from the house are principally screened by vegetation and trees. The proposed turbines would not affect the main vista from the house which is orientated west-southwest, nor would it affect the relationship between the various listed buildings within the GDL.	<b>Negligible</b>
	Threave Gardens	GDL	275454	560579	National	Setting for late 19th century Category B Listed Threave House (9829: National Trust for Scotland property).	<b>High:</b> designed landscape that forms the	<b>High</b>	9-11	9-11	14.3	<b>Imperceptible:</b> At over 14 km away the	<b>Negligible</b>

Heritage Asset no	Heritage Asset name	Status	Easting	Northing	Heritage Importance	Asset Description and Setting	Contribution of Setting	Significance of Setting	No of theoretical blade tips visible	No of theoretical hubs visible	Distance to nearest turbine (km)	Magnitude of Impact	Significance of Predicted Impact
						Designated for its horticultural interest and architectural qualities. Enclosed wooded parkland.	setting for Threave House, good appreciation of the layout of the gardens.					proposed Mochrum Fell wind farm would not affect the relationship between the various listed buildings within the GDL, or between the buildings and other designed landscape elements, nor would it affect the main vista from the house which is orientated west-southwest. It would not detract from an appreciation of the gardens themselves and would not adversely affect the integrity and character of the gardens and designed landscape as a whole. They would be visible in long distant views out from the garden to the northwest but the proposed turbines would not be a dominant feature in the wider landscape views.	





**Legend**

- Site Boundary
- Turbine Location
- Proposed Access Tracks
- Substation
- Compound 1
- Compound 2
- Compound 3
- Permanent Met mast

**Borrow Pits**

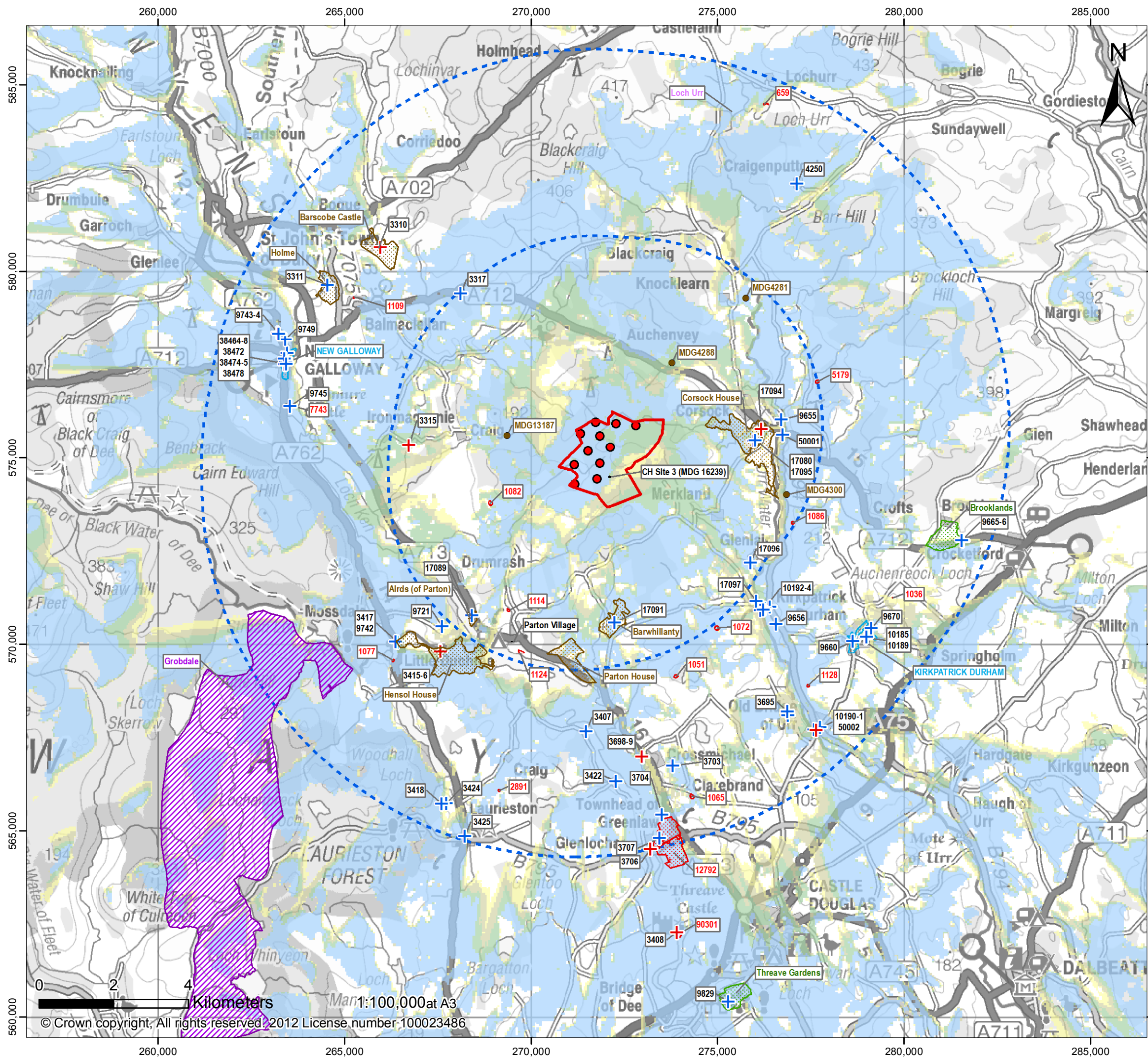
- Borrow Pit Search Area A
- Borrow Pit Search Area B
- Borrow Pit Search Area C
- Indicative Borrow Pit Location and Size
- Cultural Heritage sites which are upstanding
- Field Bank recorded during field survey
- Field Bank recorded from desk-based assessment
- Cultural Heritage sites which no longer survive as upstanding
- Rig and Furrow

**Mochrum Fell Wind Farm  
Environmental Statement**

**Figure 7.1: Cultural Heritage Constraints**

Drawn by: SW, CFA Archaeology Ltd  
Approved by: MH, CFA Archaeology Ltd  
Issue: 1  
Date: September 2013  
Project: Proposed Mochrum Fell Wind Farm  
Location: Dumfries and Galloway  
Project Number: UK1218172





**Legend**

- Mochrum Development Area
- Turbine Layout
- 5km and 10km Buffer
- Scheduled Monument
- Listed Building Category A
- Listed Building Category B
- Conservation Area
- Garden and Designed Landscape
- ASA
- NIDL
- NSR Site
- Undesignated Sites

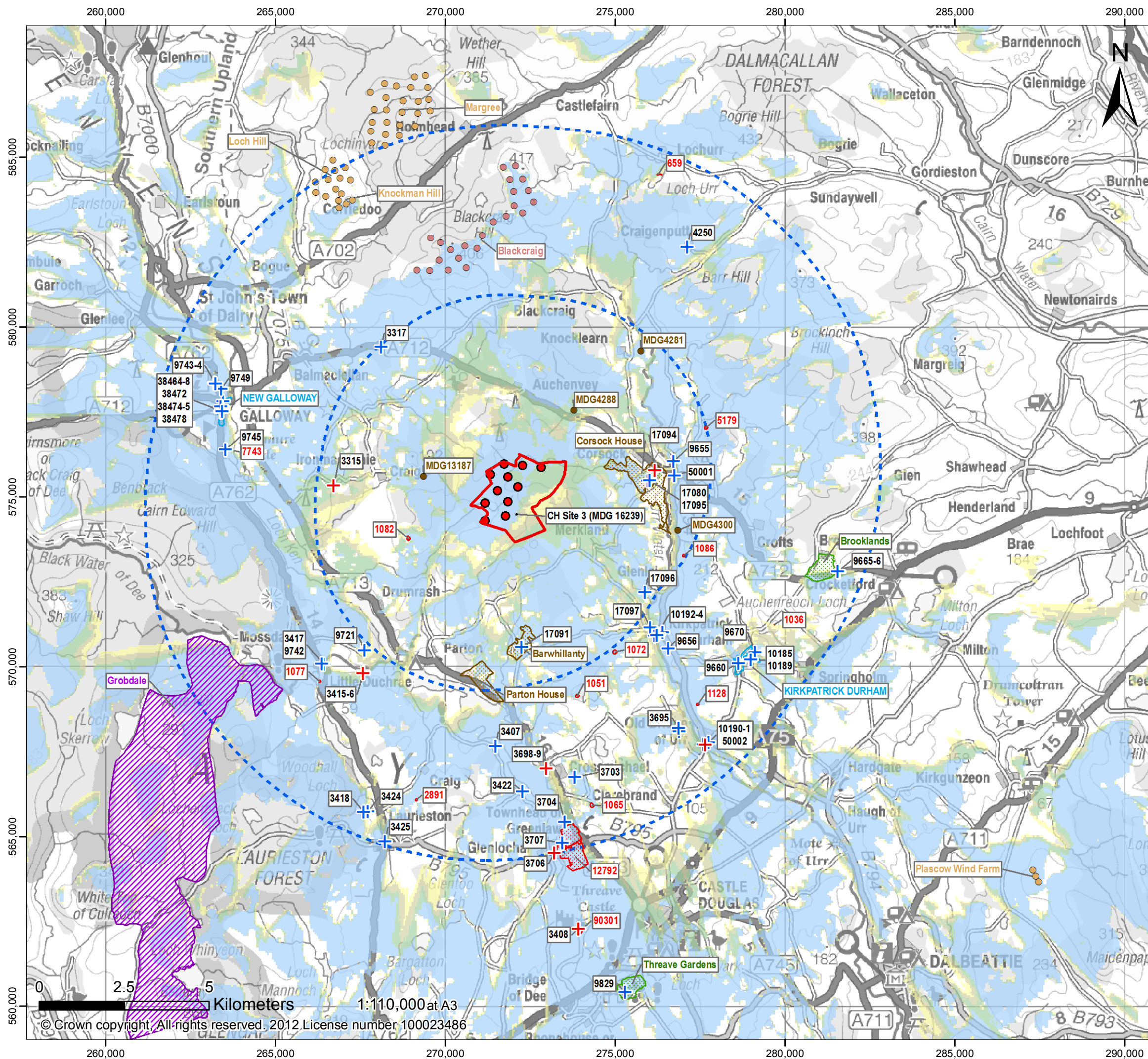
**Number of Visible Turbines**

- 1 - 2 turbines visible
- 3 - 5 turbines visible
- 6 - 8 turbines visible
- 9 - 11 turbines visible

**Mochrum Fell Wind Farm  
Environmental Statement**  
**Figure 7.2: Heritage Assets  
Setting Assessment**

Drawn by: SW, CFA Archaeology Ltd.  
Approved by: MH, CFA Archaeology Ltd  
Issue: 1  
Date: September 2013  
Project: Proposed Mochrum Fell Wind Farm  
Location: Dumfries and Galloway  
Project Number: UK1218172





- Legend**
- Mochrum Development Area
  - Turbine Locations
  - 5km and 10km Buffers
  - Scheduled Monuments
  - Listed Building Category A
  - Listed Building Category B
  - Conservation Area
  - Garden and Designed Landscape
  - ASA
  - NIDL
  - NSR Site
  - Undesignated Site
- Number of Visible Turbines**
- 1 - 2 turbines visible
  - 3 - 5 turbines visible
  - 6 - 8 turbines visible
  - 9 - 11 turbines visible
- Cumulative Wind Farms**
- Consented
  - Planning
  - Scoping
- Mochrum Fell Wind Farm Environmental Statement**

**Figure 7.3: Blade Tip ZTV, Cultural Heritage Assets and Cumulative Developments**

Drawn by: SW, CFA Archaeology Ltd  
Approved by: MH, CFA Archaeology Ltd  
Issue: 1  
Date: September 2013  
Project: Proposed Mochrum Fell Wind Farm  
Location: Dumfries and Galloway  
Project Number: UK1218172