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North Calliachar Wind Farm, Perth and Kinross

**Cultural Heritage Assessment** 

# ARCHAEOLOGY AND CULTURAL HEIRTAGE Scope of Assessment

- H1.1 This assessment has been carried out in accordance with the Institute for Archaeologist Code of Conduct (IfA 2010), and Standard and Guidance for Archaeological Desk-based Assessment (IfA 2011). The assessment has taken into account comments and information provided by Historic Scotland, Perth and Kinross Heritage Trust, and Perth and Kinross Conservation Officer, and includes consideration of the potential for direct effects on cultural heritage interests and effects on the settings of key heritage assets.
- H1.2 The assessment has identified and recorded cultural heritage features present within the proposed development site, through information derived from existing historic records (including Historic Scotland Warehouse Database, Royal Commissions on Ancient and Historic Monuments of Scotland database (RCAHMS) and the Perth and Kinross Heritage Trust Historic Environment Records (HER)), examination of historic maps and aerial photographic imagery and a reconnaissance walk-over survey. Using this data cultural heritage constraints were identified within the proposed development site and predicted construction (direct) effects assessed.
- H1.3 A wider study area, of 10 km from the outer proposed turbines, agreed in advance with Historic Scotland and Perth and Kinross Heritage Trust, was identified in which the potential for the proposed development to affect the settings of cultural heritage assets has been assessed. Cultural heritage assets with predicted theoretical visibility of the proposed development were identified using the blade tip and hub height zone of theoretical visibility (ZTVs) generated for the project. Field visits to key cultural heritage assets were carried out to assess the baseline setting of each relevant asset.
- H1.4 The potential cumulative effects of the proposed development on the setting of cultural heritage assets in the wider landscape have been assessed. The cumulative effects assessment has taken into consideration the consented Calliachar Wind Farm, the operational Griffin Wind Farm and other cumulative developments identified by the assessment of landscape and visual amenity (Annex G) in consultation with Scottish Natural Heritage (SNH) and Perth and Kinross Council.
- Mitigation measures, where appropriate, to off-set predicted significant adverse effects from the proposed development on cultural heritage assets have been proposed.

## Study Area and Sensitive Receptors

- H1.6 The cultural heritage study area consists of two parts:
  - The proposed development site: the area in which it is proposed to site the turbines and other infrastructure and the main access track corridor. Drawing H1 depicts the proposed development site and the locations of cultural heritage assets identified within this area. Appendix HA1 provides a gazetteer of these assets and an indication of the relative importance of each;
  - A wider study area: extending to 10 km from the outer turbines, provides the study area for the identification of sites with statutory protection (and those with national non-statutory designations) whose settings may be affected by the proposed development. The study area was agreed with Historic Scotland and Perth and Kinross Heritage Trust. Drawing H2 shows the proposed development in its wider landscape setting with the blade tip ZTV and the locations of cultural heritage assets within 10 km of the proposed development that are predicted to have a view of the turbines. A list of the cultural heritage assets within 10 km of the proposed development and have predicted visibility of the proposed turbines are provided in Appendix HA2. Sites identified as receptors include Scheduled Monuments, Category A and B Listed Buildings, Conservation Areas and Gardens and Designed

Landscapes. Assessment of effects on Category C Listed Buildings is restricted to those within 5 km of the proposed development as these are generally minor vernacular building types, of the local historic environment, with localised geographical settings.

The wider study area (extending to 10 km from the outer turbines): also provided the study area for the assessment of potential cumulative effects of the proposed development in combination with other operation, consented and proposed wind energy developments. Drawing H3 shows the proposed development in its wider landscape setting together with the locations of other operational, consented and application stage wind farms, along with the locations of cultural heritage assets within 10 km which are predicted to have views of the proposed development.

## **Policy Context**

- Primary planning guidance on cultural heritage comprises the Scottish Planning Policy (SPP), Scottish Historic Environment Policy (SHEP), and Planning Advice Note 2/2011 (PAN 2) (Scottish Government 2011) at national level, and the TAYplan Strategic Development Plan 2012-2032 (2012) and the Highland Area Local Plan (2000) at the regional and local levels.
- H1.8 Scotland's historic environment contributes to the Scotlish Government's strategic objectives and to the target of improving the state of Scotland's historic buildings, monuments and environment, and is identified as a national indicator and target under the National Performance Framework. SHEP sets out Scotlish Ministers' 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, Scotlish Ministers wish to achieve three outcomes for Scotland's historic environment.
  - That the historic environment is cared for, protect 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 its visitors value, understand and enjoy the historic environment.
- H1.9 Historic environment resources include statutory and non-statutory designations, as defined in SPP.
- **H1.10** Sites with statutory designations relevant in the context of the proposed development are:
  - Scheduled Monuments.
  - Listed Buildings.
  - Conservation Areas.
  - Gardens and Designed Landscapes.
- H1.11 Sites with non-statutory designations and relevant in the context of the proposed development are:
  - Other Historic Environment Interests.
- H1.12 SPP requires that planning authorities ensure that development plans provide a framework for the protection, conservation and enhancement of the historic environment its setting (para 112). PAN2/2011 advises that, in determining planning application, planning authorities should take into account the relative importance of archaeological sites (para 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 (para 6). The desirability 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 (para 14).

## Sites with Statutory Designations

#### Scheduled Monuments

H1.13 Under the Ancient Monuments and Archaeological Areas Act 1979 (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. Further information on development control procedures relating to Scheduled Monuments is provided in the SHEP, SPP and PAN 2/2011.

### **Listed Buildings**

H1.14 Under the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 (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**

H1.15 Under the Planning (Listed Buildings and Conservation Areas) Scotland Act 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.

#### Gardens and Designed Landscapes

H1.16 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) 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 planning authorities must consult Historic Scotland on any development that may affect a site contained in the Inventory

# Sites with Non-Statutory Designations Other Historic Environment Interests

H1.17 There is a range of other non-designated archaeological sites, monuments 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. Sites 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**

## TAYplan Strategic Development Plan 2012-2032 (Approved June 2012)

- H1.18 Policy 3 (Managing TAYplan's Assets) states that there will be an understanding and respect of regional distinctiveness and scenic value of the TAYplan area through safeguarding archaeology, historic buildings and monuments and allowing development where it does not adversely impact upon or preferable enhances these assets.
- H1.19 Policy 6 (Energy and Waste/Resource Management Infrastructure) states that Local Development Plans and development proposals should ensure that all areas of search, allocated sites, routes and decisions on development proposals for energy management infrastructure have been justified, at a minimum, on the basis of sensitivity of listed and scheduled buildings and structures.

## **Local Policy**

### The Highland Area Local Plan (Approved November 2000)

- H1.20 Policy 19 states that: The Council will protect and seek to enhance [designated] Historic Gardens and Designed Landscapes.
- Policy 25 states that: The Council will safeguard the settings and archaeological landscapes associated with Scheduled Monuments (protected under the Ancient Monuments and Archaeological Areas Act 1979), in the absence of reasons of overriding proven public interest.
- H1.22 Policy 26 states that: The Council will seek to protect unscheduled sites of archaeological significance and their settings. Where development is proposed in such areas, there will be a strong presumption in favour of preservation in situ and where in exceptional circumstances preservation of the archaeological features is not feasible, the developer, if necessary through appropriate conditions attached to planning consents, will be required to make provision for the excavation and recording of threatened features prior to development commencing.
- H1.23 Policy 27 states that: Where it is likely that archaeological remains may exist, the prospective developer will be required to arrange for an archaeological evaluation to be carried out by a professionally qualified archaeological organisation or archaeologist before the planning application is determined.
- H1.24 Policy 28 states that: There will be a presumption against the demolition of Listed Buildings and against works detrimental to their essential character. There will be a presumption in favour of consent for development involving the sympathetic restoration of a Listed Building, or other buildings of architectural value. The setting of Listed Buildings will also be safeguarded.

## **Existing Environment**

#### Methodology

### Consultation Responses

H1.25 Scoping opinions, addressing cultural heritage issues, were received from Historic Scotland and Perth and Kinross Council. Post-scoping consultation was also undertaken with Historic Scotland, Perth and Kinross Heritage Trust and Perth and Kinross Conservation Office regarding the proposed assessment methodology and cultural heritage viewpoints. Summaries of the consultation responses are set out below in Table H1.

**Table H1: Consultation Responses** 

Consultee			Issues Raised	Response / Action Taken	
Historic	Scotland	(Formal	No issues.	N/a	
Scoping 0	3.08.12)		Welcomed the approach set out		

	in the Scoping Report.  Noted that there are no Scheduled Monuments within the proposed development site.	
Historic Scotland (Further Consultation 07.12.12)	No issues. Content with approach to assessment.	N/a
Historic Scotland (Further Consultation 07.12.12)	No issues.  Welcomed that visualisations will be provided from Dunhill Fort (4587), Grandfully Chapel (90155 / 11831) and Grandfully Castle (11830).	Wireframes have been included in the assessment, see Table H10 for details.
Perth and Kinross (Formal Scoping 19.07.12)	No issues.  Agreed with scope of archaeology assessment.	N/a
Perth and Kinross (Further Consultation 18.12.12)	No issues.  Content with the approach to the indirect effect (setting) assessment.	N/a
Perth and Kinross Conservation Officer (Formal Scoping 01.08.12)	Requested that the effect of the proposed development on the setting of cultural heritage assets be assessed within the EIA.	The effects of the proposed development on the setting of cultural heritage assets are assessed in paragraphs H1.84-H1.108.

#### Baseline Assessment

- H1.26 Up-to-date information was obtained from appropriate sources on the locations of cultural heritage assets (archaeology and built heritage) with statutory protection and non-statutory designations both within the proposed development area and within 10 km of the outermost of the proposed turbines.
- H1.27 Details of the locations and extents of Scheduled Monuments, Listed Buildings, Garden and Designed Landscapes and Conservation Areas were downloaded as GIS data from the Historic Scotland Data Warehouse (Historic Scotland 2012).
- H1.28 Information on known cultural heritage assets within the proposed development was obtained from Perth and Kinross Heritage Trust HER.
- H1.29 Additional information on the character and condition of known archaeological sites and features within the proposed development area was obtained from the Royal Commission on Ancient and Historic Monuments of Scotland database (RCAHMS 2012).
- H1.30 Ordnance Survey maps (1st and 2nd Edition maps) and other historic maps held by the Map Library of the National Library of Scotland were examined to provide information on sites or features of potential cultural heritage interest and on historic land-use development.
- H1.31 An assessment was made of vertical aerial photograph collections held by the Royal Commission on the Ancient and Historic Monuments of Scotland (RCAHMS 2012). Sorties

- dating from 1947and 1968 were available for examined. In addition modern aerial photographic imagery (GoogleEarth<sup>TM</sup>; Bing<sup>TM</sup>) was also examined
- H1.32 Bibliographic references were consulted to provide background and historical information (Dalland 2012).
- H1.33 The Historic Land-Use Assessment Data for Scotland (HLAMap) (RCAHMS 2012) was consulted for information on the historic land use character of the proposed development area.
- H1.34 The Scottish Palaeoecological Database (SPAD) (Coles et al 1998) which records the distribution of known palaeoecological sites across Scotland was consulted for information on such sites within or adjacent to the proposed development area.
- H1.35 A reconnaissance walk-over field survey was undertaken in November 2012, with the following aims:
  - To assess the baseline condition of the known archaeology and heritage features identified through the desk-based assessment.
  - To identify any further features of cultural heritage interest not detected through the deskbased assessment.
  - To identify areas with the potential to contain currently unrecorded buried archaeological remains.
- H1.36 Areas of dense commercial forestry were not surveyed in detail due to access difficulties. Attempts were made to access the proposed turbine locations, but the close planting of the forestry made this impossible.
- H1.37 The position of identified assets (and where appropriate their extents) were logged using a FLINT S852 Handheld GNSS running Penmap encore v.9. 50 and using channel GPS+Galileo with SBAS and NTRIP (Trimble VRS service) data corrections via SIM card. The device has typical accuracy with NTRIP corrections 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.

# Identification of Key External Cultural Heritage Assets and Characterisations of their Settings

- H1.38 Details were obtained for cultural heritage assets with statutory designations in the landscape surrounding the proposed development. The turbine-blade tip height ZTV map, generated for the proposed development, was used to identify those assets within 10 km of the outer turbines of the proposed development from which there would be theoretical visibility of one or more of the turbines. The assessment of the degree of visibility of the proposed development from key heritage assets also employed the hub height ZTV to give a comparative analysis of overall turbine visibility.
- H1.39 The baseline setting of each relevant asset or related group of assets was characterised on a case-by-case basis. Site visits were undertaken to assess the character and sensitivity of the settings of the identified assets, and to assess the effect of the proposed development on those settings. Site visits focused on cultural heritage assets most likely to receive significant impacts on their settings (i.e. those closest to the development area and those specifically identified as requiring assessment by Historic Scotland).
- H1.40 Characterisation of the setting of an asset was based upon its properties and location, and took into account the factors set out in the guidance issued by Historic Scotland (Historic Scotland 2010);
  - The location and orientation of the site:

- Importance of views of or from principal facades;
- The importance, if applicable, of designed settings; and
- Any obvious views or vistas.

The outcome of this work has been an understanding, involving the application of professional judgement, of the key characteristics that define the setting of each asset.

### **Cultural Heritage Baseline**

H1.41 Fourteen sites and features of cultural heritage interest have been identified within the proposed development site, two of which (11 and 13) have been fully excavated and removed during mitigation work on the Calliachar Wind Farm project. The locations and extents of these are shown on Drawing H1. Appendix HA1 provides detailed gazetteer information on the character and baseline condition of the sites and features identified by the study. Two sites (3 and 4) originally identified during the preliminary desk-based assessment have been excluded from the final list of features assessed (one (3) was established early on as not being archaeological and one (4) is a quarry more than 300 m north of turbine WTG7 and therefore not relevant to the assessment). However, for simplicity, the original numbering system has been retained, which explains why the numbering on Drawing H1 and in Appendix HA1 is from 1 to 16 but only 14 sites are discussed. Numbers in brackets and in bold in the following sections, refer to site numbers shown on Drawing H1 and listed in Appendix HA1.

#### **Cultural Heritage Assets within the Proposed Development Site**

- H1.42 There are no Scheduled Monuments and no Listed Buildings within the proposed development area. No part of the development area lies within a Conservation Area or Garden and Designed Landscape.
- H1.43 The Perth and Kinross HER and the RCAHMS database hold no records for any cultural heritage asset within the proposed development area.
- H1.44 No cultural heritage assets were identified from the examination of historic cartographic sources and aerial photographs.
- H1.45 Archaeological work carried out in advance of the construction of the Calliachar Wind Farm by Headland Archaeology Ltd (Dalland 2012) identified six cultural heritage assets that lie within the southern end of the proposed development area, a possible grouse butt (11), two clusters of shieling hut(s) and associated enclosures (12 and 13), a hut-circle (14), a man-made hollow (15) and a further possible shieling hut (16).
- H1.46 Recent field survey carried out for this assessment identified nine additional cultural heritage features within the proposed development area, one quarry (1), a trackway (2) and six grouse butts (5, 6, 7, 8, 9 and 10).
- H1.47 The HLAMap data does not yet cover this part of Scotland and SPAD provided no relevant information specific to the proposed development area.

#### **Prehistoric Features**

H1.48 Evidence of prehistoric activity within the area may be indicated by the identification of a possible hut circle (14) which was recorded during mitigation field survey for the Calliachar Wind Farm (Dalland 2012). The remains of the possible hut circle survive in poor condition as a low sub-circular platform, approximately 0.2 m high, with an irregular dished interior. The hut-circle is considered to be of local heritage importance. However, this possible hut circle lies amidst a group of other small structures identified and recorded as being shieling huts and it may in fact be related to that currently undated group of features.

#### **Pre-improvement Agricultural Remains**

- H1.49 A cluster of shieling huts (12a e and 13a-b) and two associated enclosures (12f and 13c) were recorded by previous field survey (Dalland, 2012). The shieling huts survived in a fair condition as stony covered banks covered in thick heather vegetation. Shieling huts were used as temporary summer accommodation when people moved their stock away from permanent dwellings to exploit areas of summer upland pasture. They are considered to be of medieval or later date.
- H1.50 Four of the shielings huts (12a-c and 13b) and an enclosure (13c) have been excavated by Headland Archaeology as part of post-consent mitigation works for the Calliachar Wind Farm (information provided by email from Headland Archaeology; January 2013).
  - The interiors of shieling huts (12a c) were fully excavated and slots excavated across the shieling hut walls; the remaining sections of wall have been left in-situ. These structures are considered to be of negligible importance.
  - The interior of shieling hut (13b) was fully excavated and slots excavated across the walls of the shieling hut. The southern part of the structure has been crossed by the main access road for Calliachar Wind Farm and no longer survives; the northern part of the hut still survives in situ. This structure is considered to be of negligible importance.
  - Enclosure (13c) has been fully excavated and completely removed during construction works, no remains of this hut now survive. The site has no heritage importance.
- H1.51 The remaining sheiling huts (12d –e, and 13a) are all considered to be of local heritage importance.

#### Miscellaneous Features

H1.52 Six dry-stone walled grouse butts (5 – 10) (Plate H1) are present within the proposed development site. The grouse butts are arranged in two rows along the south-western slopes of Monadh nam Mial. They are all of a similar construction, comprising L-shaped dry-stone walls in varying conditions, and are probably contemporary in date. Their presence attests to the use of the area for recreational shooting; most likely during the 19<sup>th</sup> and 20<sup>th</sup> century. They are considered to be of lesser heritage importance.



Plate H1 Grouse Butt (6) from the south

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- H1.53 A further possible grouse-butt (11) was recorded during previous field survey (Dalland 2012). This feature was fully excavated by Headland Archaeology as part of post-consent mitigation works for the Calliachar Wind Farm. The excavation uncovered a deep pit containing several deposits of charcoal and a 'massive' post-hole at the base of the pit. The exact function of this feature is unknown although one suggestion was that it may have functioned as a shooting butt for large game; an interpretation later discounted as unlikely (Dalland pers comm). The feature no longer survives, having been removed by construction works for the main access road to Calliachar Wind Farm.
- H1.54 A former quarry (1), surviving as turf-covered hollows surrounded by spoil heaps and discarded stone material, was identified by the recent field survey. A section of trackway (2), probably associated with the quarry, was also identified. The quarrying and trackway are not depicted on cartographic sources and are of uncertain date but are considered to be of lesser heritage importance.
- H1.55 A sub-rectangular man-made hollow (15), situated on the eastern side of a small stream, was recorded by Headland Archaeology (Dalland 2012). The hollow, which may be the remains of a small shieling hut, is considered to be of unknown but no more than local heritage importance.
- H1.56 A second rectangular hollow (16) 1.5 m long by 0.7 m wide, framed by a low bank and measuring 4.8 m by 2.2 m externally overall may also be the remains of a small shieling hut. It too is considered to be of unknown but no more than local heritage importance.

# Assessment of the Archaeological Potential of the Proposed Development Site

- H1.57 Today the proposed development site consists principally of commercial forestry fringed by rough, unimproved moorland with heather vegetation. Pre-afforestation deep ploughing is likely to have caused substantial damage to or destruction of any buried archaeological remains which may have been present within the now forested area.
- The RCAHMS database holds records for few known cultural heritage sites and features in the area immediately surrounding the proposed development, although there are several prehistoric sites in the wider area. These include the remains of a stone circle and cup-marked rock at Urlar (HER Ref: MPK1022), approximately 1 km to the north of the proposed development; a possible burial cairn on the upper slopes of Meall Odhar (RCAHMS Ref: NN84SE 1), just over 1 km to the south; the remains of a prehistoric fort at Dun Hill (RCAHMS Ref: NN84NE 3), approximately 2.5 km to the north-east, and substantial prehistoric settlement remains at Scotston (RCAHMS Ref: NN94SW 7) and along the Cochill Burn (RCAHMS Ref: NS94SW 1) approximately 5 km to the south-west.
- H1.59 Recent archaeological field work carried out as mitigation in advance of the construction of Calliachar Wind Farm (Dalland 2012), to the south of the proposed development has recorded two possible hut-circles, one of which lies within the southern end of the proposed development (14) and the other to the north-west of Meall Odhar along with the remains of a possible burial cairn (Dalland 2012, Sites 4b and 10).
- H1.60 Other recorded sites within the proposed development area primarily relate to the agricultural use of the land, and include a number of shieling huts recorded in the southern part of the proposed development area (12, 13 and 16), two groups of shieling huts 700 m to the west of the proposed development site (HER Ref: MPK12000 & MPK13471) at Calliachar Burn and several shieling huts 1 km to the south-west (Dalland 2012, Sites 4, 5, 7, 8 and 9) along with a shepherd's cairn (Dalland 2012, Site 13).
- H1.61 Given the ground disturbance caused by pre-afforestation ploughing in advance of forestry plantation it is considered that the potential for archaeological remains to survive in the forested areas is low to negligible. In areas that have not been disturbed by forestry plantation it is considered that there is a low to moderate potential for buried archaeological remains to

survive. Given the land-take required by the various elements of the proposed wind farm the probability of encountering sites of archaeological significance during the course of construction is considered to be low.

## Cultural Heritage Assets within 10 km of the proposed development

- H1.62 The blade tip height ZTV for the proposed development indicates that there are 16 Scheduled Monuments, two Category A Listed Buildings, seven Category B Listed Buildings, two Conservation Areas and three Inventory Gardens and Designed Landscapes within 10 km of the proposed development from where there is predicted visibility of the turbines. There are no Category C Listed Buildings within 5 km of the proposed development that have predicted visibility of the turbines.
- H1.63 The cultural heritage assets predicted to have visibility of the proposed development vary greatly in character and date, and include: prehistoric burial cairns, cup and marked stones, forts and other prehistoric (and later) settlements. Amongst the listed buildings there are a number of parish churches and country houses, a castle and 19<sup>th</sup> century farmsteads.

#### **Evaluation Criteria**

## **Assessing Significance**

H1.64 The importance of cultural heritage assets reflects the relative weight given to them in SPP and SHEP. Table H2 summarises the relative importance of cultural heritage assets.

Table H2: Importance of Cultural Heritage Assets

Heritage Importance	Definition
National / International	Sites of national or international importance, including:
	World Heritage sites.
	Scheduled Monuments and sites proposed for scheduling.
	Category A Listed Buildings.
	Inventory Gardens and Designed Landscapes.
	Outstanding Conservation Areas (where this designation persist).
	Inventory Historic Battlefields.
	Designated Wreck sites.
Regional	Sites of regional importance, including:
	Archaeological sites and areas of distinctive regional importance.
	Category B Listed Buildings.
	Conservation Areas
Local	Sites of local importance, including:
	Archaeological sites of local importance.
	Category C Listed Buildings,
	Unlisted buildings and townscapes with local (vernacular) characteristics.
Lesser	Sites of little or no importance, including:
	Artefact find-spots.
	Unlisted buildings of minor historic or architectural interest.
	Poorly preserved examples of particular types of feature.

## **Assessment of Construction (Direct) Effects**

H1.65 Criteria for assessing the magnitude of a direct effect, which measures the degree of change to the baseline condition of the heritage asset that could result from the construction of one or more elements of the proposed development, are presented in Table H3.

**Table H3: Magnitude of Change** 

Level of Magnitude	Description of change
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 Direct (Construction) Effects

H1.66 The importance of the asset (Table H2) and the magnitude of the predicted change (Table H3) are used to inform the professional judgement of the likely significance of the direct effects. Table H4 summarises the criteria for assigning significance of direct effects.

Table H4: Significance of Construction (Direct) Effects

Magnitude of	Heritage Importance ▶				
Change ▼	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	

H1.67 Major and moderate effects are considered to be 'significant' in the context of the Town and Country Planning (Environment Impact Assessment) (Scotland) Regulations 2011 (EIA Regulations). Minor and negligible effects are 'not significant'.

### Assessment of Effects on Setting (Operational Effects)

- H1.68 Historic Scotland's guidance document Managing Change in the Historic Environment: Setting (Historic Scotland 2010) notes that "setting should be thought of as the way in which the surroundings of an historic asset or place contribute to how it is experienced, understood and appreciated. Setting often extends beyond the immediate property boundary of an 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.
- H1.69 The guidance recommends that for each asset where a potential effect on setting has been identified, the assessment of possible effects should adopt a four-stage approach:
  - Identification of the characteristics of the setting of the asset.
  - Assessment of the sensitivity of that setting.

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- Identification of how the presence of the proposed development will affect that setting (magnitude of effect).
- Assessment of significance of effect.

## Criteria for Assessing Sensitivity of Setting

- H1.70 Sensitivity of setting has been assessed by considering two factors:
  - The relative weight which statue and policy attached to the asset and its setting (Table H2); and
  - The degree to which the baseline setting contributes to the understanding and/or appreciation, and hence value, of the asset (Table H5).

Table H5: 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.

These two criteria (Table H2 and H5) are combined to assess the overall sensitivity of a setting, as set out in Table H6. Assets of lesser importance are not assessed for effects on their settings therefore do not appear in the table below. Table H6: Sensitivity of Setting of an Asset

Heritage Importance ▼	Contribution to 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 Change on Setting

H1.71 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 development the asset is not considered further in the assessment. For the remaining assets, the magnitude of change on setting has been assessed according to the thresholds set out in Table H7.

Table H7: Magnitude of Change on Setting

Level of Magnitude	Definition of Change
High	A fundamental material effect obviously changing the surroundings of an asset, such that its baseline is substantially or totally altered.
Medium	An effect discernibly changing the surroundings of an asset, such that its baseline setting is partly and materially altered.
Low	A slight, but detectable effect 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 Effects on Setting

H1.72 The significance of an effect depends on both the magnitude of change and the sensitivity of the setting of the asset. Table H8 presents the matrix that was used to inform the determination of the significance of effects on setting.

Table H8: Significance of Effect on Setting

Magnitude of Change	Sensitivity of Setting ▶			
▼	High	Medium	Low	
High	Major	Major	Minor	
Medium	Major	Moderate	Minor	
Low	Minor*	Minor	Negligible	
Imperceptible	Negligible	Negligible	Negligible	

<sup>\*</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'.

H1.73 Major and moderate effects are deemed to be 'significant' in the context of the EIA Regulations (Scottish Government 2011). Minor and negligible effects are 'not significant'.

#### **Cumulative Assessment**

H1.74 The assessment of cumulative effects on cultural heritage is based upon consideration of the effects of the proposed development on the settings of assets with statutory designations within 10 km of the proposed development in addition to the likely effects of other operational, consented and proposed wind farm developments (at the application stage). The assessment takes into account the relative scales (i.e. size and number of turbines), of the various

developments, their distance from the affected asset, and the potential degree of visibility from the assets of the various developments.

## **Evaluation of Construction (Direct) Effects**

- H1.75 The assessment of construction (direct) effects has been carried out with reference to the proposed development layout and the cultural heritage constraints shown on Drawing H1.
- H1.76 Any ground breaking activities associated with the construction of the proposed development (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 cultural heritage interest. Other construction activities, such as vehicle movements, soil and overburden storage and landscaping also have the potential to cause direct, permanent and irreversible effects on the cultural heritage.
- H1.77 Using the criteria detailed in Paragraphs H1.65 H1.67 (Assessment of Construction (Direct) Effects), Table H9 summarises the predicted direct effects on the cultural heritage assets within the proposed development site. The effects are discussed in more detail below.

Table H9: Predicted direct effects on cultural heritage assets within the proposed development site

Site name / type	Heritage Importance	Predicted Effect	Magnitude of Effect	Significance of Effect
Grouse butts (6-7 and 9-10))	Lesser	Direct: excavation of a proposed borrow pit would result in the loss of these four grouse butts	High	Minor
Sheiling hut (13a)	Local	Direct: construction of the hardstanding for Turbine WTG2 would disturb the structure	High	Moderate
Shieling hut (13b)	Lesser	Direct: construction of the hardstanding for Turbine WTG2 would result in the loss of the remaining parts of this structure	High: the shieling hut has been largely excavated and recorded as part of mitigation works for Calliachar Wind Farm and only partially survives in-situ	Minor
Hut-circle (possible) (14)	Unknown (Local)	Direct: construction of the hardstanding for Turbine WTG2 would result in the loss of the structure	High	Moderate

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H1.78 A direct effect is predicted for the remains of four grouse butts (6-7 and 9-10) which would be affected by the excavation of a proposed borrow pit.

*Sensitivity*: The structures form part of a group of grouse-butts present on the south-western slopes of Monadh nam Mial that are probably of 19<sup>th</sup>/20<sup>th</sup> century date and are considered to be of lesser heritage importance.

Magnitude of effect: Excavation of the proposed borrow pit would result in the loss of the grouse-butts and the predicted effect is considered to be of high magnitude.

Sensitivity of effect: The direct effect on the grouse-butts would be of minor significance and no mitigation is required to off-set the effect.

H1.79 Construction of the hardstanding for Turbine WTG2 would directly affect the remains of a shieling hut (13a).

Sensitivity: The shieling hut is considered to be of local heritage importance.

Magnitude of effect: Construction of the turbine hard-standing would without mitigation result in substantial damage to or total loss of the shieling hut and the predicted effect is therefore considered to be of high magnitude.

Significance of effect: The direct effect on the shieling hut would be of moderate significance. Mitigation to off-set the direct effect is provided below.

H1.80 Construction of the hardstanding for Turbine WTG2 would directly affect the remains of a shieling hut (13b).

Sensitivity: The shieling hut has been largely excavated and recorded in detail as part of post-consent mitigation for Calliachar Wind Farm and only partially survives. The surviving remains are considered to be of lesser heritage importance.

Magnitude of effect: Construction of the turbine hard-standing would result in the loss of the remaining northern part of the shieling hut. The direct effect on the partial remains of the shieling hut would be of no more than high magnitude (resulting in the loss of the remaining parts of the feature).

Significance of effect: The direct effect on the shieling hut would be of minor significance and (as the feature has been recorded in sufficient detail already) no mitigation is required to off-set the effect.

H1.81 Construction of the hardstanding for Turbine WTG2 would directly affect the remains of a possible hut-circle (14).

Sensitivity: The possible hut-circle is considered to be of local heritage importance.

Magnitude of effect: Construction of the turbine hard-standing would result in the loss of the hutcircle and the predicted effect is considered to be of high magnitude.

Significance of effect: The direct effect on the hut-circle would be of moderate significance. Mitigation to off-set the direct effect is provided below.

H1.82 In addition to the site specific predictions, stated above, excavations associated with the construction of the proposed development could have an adverse effect on unrecorded, buried archaeological remains present in affected areas. Taking into account the limited extent of the proposed ground disturbance required for elements of the proposed scheme, including cable routes, access tracks, turbine bases etc, the likelihood of encountering remains of archaeological significance is considered to be low.

## **Evaluation of Operational Effects**

- H1.83 Appendix HA2 provides tabulated summary assessments, on a site-by-site basis of the potential effects on the settings of cultural heritage assets up to 10 km from the outer turbines, where the blade tip ZTV (Drawing H2) indicates that there will be theoretical views of one or more turbines.
- H1.84 The assessment considers assets with designations of national and regional importance (Scheduled Monuments, Category A and B Listed Buildings, Conservation Areas and Inventory Garden and Designed Landscapes) within 10 km of the proposed development (Appendix H2). Assessment of effects on Category C Listed Buildings is restricted to those within 5 km of the proposed development as these are generally minor vernacular building types, of the local historic environment, with localised geographical settings.
- H1.85 The assessment of magnitude of effect has been based on an analysis of the turbine blade tip height ZTV and hub height ZTV, taking into account the distance of the assessed asset from the proposed development, the number of tips visible, and the present baseline setting of each asset. The ZTV model is based on bare-earth surface topography and maximum blade tip / hub heights and takes no account of obstructions to Intervisibility resulting from existing forestry and other vegetation, or buildings and other man-made features. Therefore, professional judgement has been used to assess the significance of effects; informed by assessment of the hub height and blade tip ZTVs, site visits and the use of other, desk-based, resources.

#### **Effects Assessment**

- H1.86 Analysis of the ZTV indicates that there would be theoretical visibility of the turbines from sixteen Scheduled Monuments, two Category A Listed Buildings, seven B Listed Buildings, two Conservation Areas and three Inventory Gardens and Designed Landscapes. No Category C Listed buildings within 5 km of the proposed development are predicted to have visibility of the proposed turbines.
- H1.87 Sites judged to have the most sensitive settings have been assessed in more detail using wireframes (Table H10) and are discussed below in detail. A list of proposed visualisation locations was provided to Historic Scotland and to Perth and Kinross Heritage Trust for their agreement (see Table H1). Both stakeholders agreed the suitability of the visualisation locations.

**Table H10: Cultural Heritage Wireframe Viewpoints** 

Site no	Site name	Status	Drawing no	Comments
4587	The Dun, fort	Scheduled Monument	Drawing H4	-
90155/ 11831	Grandtully, St Mary's Church	Scheduled Monument & Category A Listed Building	Drawing H5	-
11830	Grandtully Castle	Category A Listed Building	Drawing H6	Wireframe produced for a location at approximate height of the south-facing upper (attic) floor of the castle (estimated as 10.5m above ground level)

- H1.88 The assessment of the effect of the proposed development on other assets in the wider landscape predicted to have visibility of the proposed development is provided in Appendix HA2.
- H1.89 It is considered that the proposed development would not have any significant adverse effects on any key cultural heritage assets identified by the study.

#### General Observations

- H1.90 The proposed development would stand on the slopes of Monadh nam Mial, to the north of Loch Hoil, and mainly within an area that is currently commercial forestry plantation. The ZTV indicates that visibility of the proposed development would be contained by surrounding topography with visibility of the turbines being restricted to areas immediately surrounding the development itself and to higher slopes that surround the development (including Meall Mor, Meall Odor, Meall Dun Dhombnuilt and Monadh nam Mial).
- Visibility of the turbines from further afield would be afforded in an arc from Lawers, in the west, to Grandtully, in the north-east, principally from along the upper slopes along the north side of the River Tay valley, while the natural rising topography of hills in the east and south would limit views of the proposed development from these directions (see Landscape and Visual Chapter: Figure X.X). The proposed turbines would be seen together with the consented Calliachar Wind Farm, effectively as one slightly larger wind farm.
- H1.92 The assessment of effects on setting takes account of the baseline context, which includes the operational Griffin Wind Farm (68 turbines) and the consented Calliachar Wind Farm (14 turbines).

#### The Dun, fort (4587) - Drawing H4

- H1.93 The well-preserved remains of this scheduled prehistoric fort survive on a south-facing slope just north of the summit of Dun Hill, 3 km to the north-east of the nearest proposed turbine. The site comprises the tumbled ruins of a stone wall defining a roughly oval area with the remains of three ditches on the south side. There are no obvious features within the interior of the fort, although possible entrances are visible in the east and west side. Extensive views are gained from the fort, particularly to the north taking in Aberfeldy, and are focussed along the River Tay valley, to the north-west and north-east, and along the Glen Cochill, to the south-east. Views to the south and west take in higher hill slopes, although wide views of the landscape are restricted by a rise in topography from the fort to the summit of Dun Hill. The fort itself stands in a clearing within a large swathe of commercial forestry plantation (Falls of Moness Forestry).
- H1.94 The fort is of national heritage importance and although the fort stands in a forest clearing, its original setting, with wide open views focussed along two valleys, can still be appreciated and it

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is judged that its setting makes a moderate contribution to its understanding and appreciation. It is therefore considered that its setting is of high sensitivity.

- H1.95 The ZTV indicates that there is very limited visibility from the monument with views of the turbines being afforded only from the higher, south-eastern portion of the fort. A wireframe view produced for the site (Drawing H4) shows that in the absence of the surrounding forestry, the majority of the proposed development would be screened from view by intervening topography and that two turbine hubs and one additional turbine tip would be visible beyond the skyline. The proposed turbines would be visible along with two turbine hubs and one turbine tip of the consented Calliachar Wind Farm (Drawing H4) Together they would be visible as one wind energy development in a small arc of view (approximately 22 degrees) from the monument in views to the south-east. None of the turbines from the operational Griffin development are visible from the fort (LVIA Chapter: Drawing AP15).
- H1.96 The proposed development would not be a dominant feature in the landscape surrounding the fort and would not affect the setting of the fort or affect the ability to appreciate or understanding the monument. It is therefore assessed that the proposed development would have an effect on the setting of the fort of **imperceptible** magnitude (a slight and barely distinguishable change to baseline conditions) and of **negligible** significance.

#### Grandtully, St Mary's Church (90155 / 11831) - Drawing H5

- H1.97 The 16<sup>th</sup> century St Mary's Church stands just west of Nether Pitcairn Farm and around 3 km north-east of Aberfeldy. The church is both a Scheduled Monument and Category A Listed Building and is currently in the care of Historic Scotland. The church comprises a plain rectangular building, orientated east to west, standing in a small walled graveyard. Access to the church is gained through Nether Pitcairn Farm and the entrance door to the church is on its south side. The church and its graveyard are surrounded by open farmland and views out from the graveyard take in the River Tay valley, to the west, and the surrounding hill slopes. The church, which is a promoted visitor site, is particularly important for its well-preserved wooden painted ceiling which dates from the 1630s.
- H1.98 The church is of national heritage importance and it stands in an open setting close to Grandfully Castle that makes a high contribution to its understanding and appreciation. It is therefore considered that its setting is of high sensitivity.
- H1.99 The church stands to the north-east of the proposed development and would be 6.7 km from the nearest turbine. A wireframe (Drawing H5) produced for the site shows that intervening topography would limit the views of the proposed turbines from the church, with only the tips of three turbines being theoretically visible beyond the skyline. These turbines tips would, in the absence of the forestry on Craig Formal and Monadh nam Mial surrounding the proposed development the skyline, be visible along side four additional turbine tips of the consented Wind Farm (Drawing H5), all seen together as one slightly larger development in a one small arc of view to the south-west. None of the turbines from the operational Griffin development are visible from the church (LVIA Chapter: Drawing AP15).
- H1.100 The proposed turbines would be nearly 7 km from the church and even in the absence of the commercial forestry would not be a dominant feature in the landscape surrounding the church. Therefore the character of the landscape in which the church stands, and which it looks out over would not be materially altered by the development and the effect on the setting of the church is considered to be of imperceptible magnitude and of negligible significance.

## Grandtully Castle (11830) and its Garden and Designed Landscape - Drawing H6

H1.101 Category A Listed Grandtully Castle stands immediately south of the A827 public road, on the south side of the River Tay, and just under 4 km to the north-east of Aberfeldy. The castle which was a former stronghold of the Stewarts was constructed in the 15<sup>th</sup> and 16<sup>th</sup> centuries with later additions. The castle was abandoned in the 19<sup>th</sup> century but then restored and

reoccupied in the 1920s (Scottish Places). The main elevation (front/entrance elevation) is oriented to face the north. The castle stands at the centre of a small designed landscape which was first set out in the 16<sup>th</sup> century, then extensively remodelled/redesigned in the 17<sup>th</sup> century and again in the late 19th century (Inventory of Gardens and Designed Landscapes: Historic Scotland). Terraces to the north and east of the castle formed the original gardens, although only a small part of the original wall defining these gardens now survives. The view along the north terrace is thought to be the model for Beatrix Potter's illustration in 'The Tale of the Flopsy Bunnies', while the eastern terrace was levelled in the late 19th century to form an 'Italian Garden' but was abandoned in the 1930s and is now laid with grass. Further terraces were added in the 1960s to the south-west of the castle. An avenue of lime trees, which date back to the 17<sup>th</sup> century and which defined the original entrance to the castle, now stands in the gardens to the north of the castle. The castle and its gardens are surrounded by woodland polices and the Inventory of Historic Garden and Designed Landscape notes that the wooded policies and the top (roof and upper floors) of the castle contribute to the views from the A827 public road in views from the road to the east. Partial views of the castle and woodlands can also be gained from farm access roads in the south-west (around Westpark Farm); while views taking in the castle from other directions are principally screened by the surrounding wooded policies. The castle is not visible whilst travelling south-west along the A827 from Grandfully village as trees and intervening topography screen any views of the building.

- H1.102 The castle and its garden and designed landscape are of national heritage importance and they have a setting within the Tay valley that makes a high contribution to their understanding and appreciation. It is therefore considered that they have a setting that is of high sensitivity.
- H1.103 Grandtully Castle and its designed landscape would be to the north-east of the proposed development and 7.5 km from the nearest proposed turbine. Screening provided by the woodland policies that surround the castle would restrict views of the proposed turbines from the castle grounds and from the lower floors of the castle. A wireframe (Drawing H6) produced for a location at the approximate height of the upper levels (attic level) of the castle shows that views of the proposed turbines would theoretically be gained from the upper levels of the castle. The tips of four turbines would be theoretically visible beyond the skyline and the majority of the proposed development would be screened from view by intervening topography. This screening would be increased by the forestry on Craig Formal and Monadh nam Mial surrounding the proposed development. The proposed turbines would in any event be visible along with five turbine tips of the consented Calliachar Wind Farm (Drawing H6) which would all be viewed together, as one slightly larger development, in a small arc of view to the south-east of the castle. None of the turbines from the operational Griffin development are visible from the castle (LVIA Chapter: Drawing AP15).
- H1.104 At over 7 km from the castle and its designed landscape the proposed development would not be a dominant feature in the surrounding landscape. Its presence would not fundamentally affect the setting of the designed landscape as a whole and would not detract from the appreciation of the relationship of the castle and its designed landscape. None of the proposed turbines would be visible in views from the west from the A827 public road, which take in the castle and its policies and would not therefore affect these views. Taking this into account it is considered that the setting of the castle and its designed landscape would not be significantly affected by the development; the effect judged to be of **imperceptible** magnitude and of **negligible** significance.

## Castle Menzies and its Garden and Designed Landscape

H1.105 Category A Listed Castle Menzies stands on the northern bank of the River Tay immediately north of the B846 public road and approximately 1.5 km west of Aberfeldy. The castle was constructed in the 16<sup>th</sup> century and was a stronghold for the Clan Menzies for 400 years. In the 1950s the castle ruins were saved by the Menzies Clan Society who restored the castle and opened it as a visitor site. The main (front) elevation of the castle is oriented to face south looking across the River Tay.

- H1.106 The castle stands within a designed landscape which includes a Category B Listed walled garden and east lodge gate piers, and Home Farmhouse (Category C Listed) and steading (Category B Listed). The designed landscape was originally laid out in the 19<sup>th</sup> century and comprises fragmentary parkland and woodland spread along the northern bank of the River Tay; the floodplain of the Tay forming the setting for the parkland, while to the north of the castle the land rises steeply to the Rock of Weem on Weem Hill. In the 20<sup>th</sup> century the estate was broken up, with the eastern end of the former parkland developed for private housing and the northern woodland (Weem Hill) replanted with commercial forestry, the designed landscape now only partially surviving. Nevertheless, Castle Menzies and its designed landscape are highly significant features in the landscape, particularly in views from the B846 which passes the designed landscape on its southern side. Views from the castle's parkland and from around the castle itself are however confined to the Tay valley.
- H1.107 Castle Menzies and its designed landscape would be to the north of the proposed development and 5.4 km from the nearest proposed turbine. The ZTV indicates that visibility of the proposed turbines would be restricted to views from the higher wooded slopes (Weem Hill) along the northern edge of the designed landscape. Paired ZTVs (LVIA Chapter: Drawings AP8 and AP12 also indicate that the operational Griffin Wind Farm and the consented Calliachar turbines would be visible from the northern edge of the garden and designed landscape together with the proposed turbines. There would however be no visibility of the proposed turbines, nor the Calliachar and Griffin Wind Farms, from Castle Menzies itself or any other associated listed buildings or structures (i.e. the walled garden, Home Farm and east lodge gatepiers) that are constituent elements of the designed landscape. Therefore views out from the castle and its parkland would not be affected by the proposed development. Views of the castle from wider afield are limited principally to the B846, on its southern side, with intervening commercial forestry or woodland shelterbelts running along road sides screening views of the castle from the west, north and east.
- H1.108 Taking this into account it is considered that the setting of the castle and its designed landscape would not be significantly affected by the proposed development; the effect being judged to be of **imperceptible** magnitude and **negligible** significance.

#### **Cumulative Effects**

- H1.109 The proposed turbines stand on the western slopes of Monadh nam Mial and immediately north of the consented Calliachar Wind Farm (14 turbines), which is currently under construction (Drawing H3); the proposed turbines being an extension to the consented wind farm. From most locations in the wider landscape the proposed turbines would always be seen in the context of and in combination with the Calliachar Wind Farm, as one scheme of 21 turbines (LVIA Chapter: Drawing AP12). The addition of the proposed North Calliachar turbines would result in a small cumulative effect on the setting of heritage assets in the wider landscape in combination with the consented Calliachar Wind Farm. The cumulative effect would be of low magnitude and of minor significance.
- H1.110 The proposed development would also be visible in combination with other wind farms in the surrounding landscape:
  - Operational Griffin Wind Farm, comprising 68 turbines (124m tip height) and approximately
     4.5km east of the proposed turbines.
  - Consented Balmacnaughton scheme, comprising two turbines (46.9m tip height) and approximately 6.8km west of the proposed development.
- H1.111 Analysis of the paired ZTVs (LVIA Chapter: Drawings AP8 and AP15) indicates that there are only limited areas from where there would be views of the proposed development in combination with either the operational Griffin Wind Farm or the consented Balmachaughton

turbines, or both together. Combined views of these schemes would be principally restricted to locations along the higher northern slopes of the Tay Valley.

- H1.112 The paired ZTV (LVIA Chapter: Drawing AP15) indicates that views of the Balmacnaughton turbines (two x 46.9m high turbines) are limited to only one heritage asset that also has predicted views of the proposed North Calliachar turbines: Castle Menzies Gardens and Designed Landscape. In this case, views of the proposed turbines along with the Balmacnaughton scheme would be possible only from the most north-western corner of the castle's designed landscape; within an area of forestry north of the castle. The cumulative effect on the setting of the castle and its designed landscape would be of imperceptible magnitude and negligible significance.
- H1.113 Cumulative effects from the proposed turbines in combination with the operational Griffin Wind Farm (LVIA Chapter: Drawing AP8) would occur in relation to five Scheduled Monuments and one Garden and Designed Landscape
  - Scotston settlement and field system (4860);
  - Carnserney Burn shielings (7524);
  - Glassie cup and ring marked stone (5911);
  - Glassie cup-marked rock (9682);
  - Glassie standing stone (9685); and,
  - Castle Menzies Garden and Designed Landscape.
- H1.114 From each of these assets the proposed turbines would also be visible in conjunction with the consented Calliachar turbines. The operational Griffin Wind Farm, the proposed development and the consented Calliachar Wind Farm would all be visible, in different arcs of views, from the heritage assets and in all bar one case (Scotston settlement and field system (4860)) the turbines would be visible only in distant views; more than 6km away. In each of these cases, the cumulative effect on the setting of the assets would be of low magnitude and minor significance.
- H1.115 In the case of Scotston settlement and field system (4860) there would be a cumulative effect on the setting of the asset with turbines being visible in views from the asset to the east and west; the operational Griffin turbines (to the east) being the closest to the heritage asset. The cumulative effect of the addition of the proposed development to the existing baseline represented by Griffin and Calliachar on the setting of the asset would be of low magnitude and minor significance.
- H1.116 Overall, it is considered that the addition of the proposed North Calliachar turbines to the landscape that already contains the operational Griffin Wind Farm, and the consented Calliachar development, would result in only a minor cumulative effect on the settings of heritage assets in the area.

## **Mitigation Measures**

H1.117 All mitigation works presented in the following paragraphs would take place prior to, or during, the construction of the development. All works would be conducted by a professional archaeological organisation, and the scope of works would be detailed in a Written Scheme of Investigation (WSI). The WSI would make provision for appropriate post-excavation analysis and dissemination of the results of the mitigation works, as well as for archiving of the project materials and records. The WSI would be subject to approval of the Perth and Kinross Heritage Trust.

#### **Preservation In Situ**

H1.118 Other than those that would be directly affected by the construction works (see below) there are no heritage assets that lie in close proximity to construction areas and fencing-off or marking out of heritage assets would not be required during the construction works.

### Watching Briefs and Archaeological Excavations

- H1.119 The scope of any watching brief/archaeological evaluation/excavation would be agreed in advance of the development with Perth and Kinross Heritage Trust. The details of the agreed scope would be set out in the WSI. A small number of heritage features would be directly affected by construction works and in order to ensure their proper recording an archaeological evaluation or excavation would be carried out prior to construction works in these areas.
  - A programme of archaeological evaluation/excavation, to the specification required by Perth and Kinross Heritage Trust, would be carried out on a shieling hut (13a) and on a hut-circle (14) prior to their loss due to the construction of hardstanding for Turbine WTG2. The purpose of the evaluation/excavation would be to record the make-up of the shieling hut and hut-circle in detail, record any sequence of occupation and, if possible, to recover some dating evidence for their construction and/or abandonment.
  - A watching brief would be carried out during any ground breaking / topsoil removal for the construction of Turbine WTG2 as it lies in close proximity to a group of shieling huts (13a-13c) and a possible hut-circle (14). The purpose of the watching brief would be to identify and record any buried remains that may be associated with the shieling huts and hut-circle and to recover some dating evidence for their use.
  - Two shieling huts (13b and 13c), which lie in the proposed hard-standing area for Turbine WTG2, were both excavated as part of post-consent mitigation works for the Calliachar Wind Farm and no further mitigation is required.

#### **Post-Excavation**

H1.120 If significant discoveries are made during archaeological monitoring and preservation in situ of any sites or features 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 analysis and publications of the results of the works, where appropriate.

#### **Construction Guidelines**

Written guidelines would be issued for use by all construction contractors, outlining the need to avoid causing unnecessary damage to know sites. That document would contain arrangements for calling upon retained professional support in the event that buried archaeological 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.

## **Findings**

- H1.122 A desk-based assessment and field reconnaissance survey have been carried out for the proposed development. The assessment has been informed by comments and information supplied by Historic Scotland, Perth and Kinross Heritage Trust and Perth and Kinross Conservation Officer.
- H1.123 Fourteen cultural heritage assets have been identified within the proposed development site, including a possible prehistoric hut-circle, several medieval or later shieling huts and a group of 18-19<sup>th</sup> century grouse-butts. These sites are of no more than local heritage importance. There are no sites within the proposed development site that are considered to be of national or

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regional importance. Several of the sites recorded within the proposed development site have already been excavated and recorded during pre-consent mitigation for the consented Calliachar Wind Farm (Dalland 2012) and the results of this mitigation have been taken into account in the assessment.

- H1.124 The proposed development site consists principally of commercial forestry surrounded by unimproved moorland. Given the ground disturbance caused by pre-afforestation ploughing in advance of forestry plantation it is considered that there is a low to negligible potential for archaeological remains to survive in the forested area. In areas that have not been disturbed by forestry plantation it is considered that there is a low to moderate potential for buried archaeological remains to survive, although taking into account the land-take required by the various elements of the proposed wind farm the probability of encountering sites of archaeological significance during the course of construction is low.
- H1.125 Seven construction effects are predicted for cultural heritage assets within the proposed development site. These effects can be offset by mitigation.
  - A construction effect of moderate significance has been predicted on the remains of a shieling hut (13a) and the remains of a possible hut-circle (14);
  - A construction effect of minor significance has been predicted on four grouse-butts (6-7 and 9-10); and
  - A construction effect of negligible significance has been predicted on a shieling hut (13b).
- H1.126 No significant operational effects have been predicted on the setting of key cultural heritage assets in the wider landscape.
- H1.127 It is considered that the cumulative effect from the proposed North Calliachar Wind Farm and other wind energy schemes in the wider landscape on the setting of key cultural heritage assets would be minimal and not significant.
- H1.128 Mitigation measures during construction have been proposed, where appropriate, to offset the predicted negative effects arising from the proposed development. A summary of likely effects of the proposed wind farm is summarised in Table H11.

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### Aerial Photographs

Sortie	Date	Frame Run	Library Ref.	Scale
CPE/UK/0303	26.09.1947	4164-4166	B-0199	1:10,000
OS68_282	19.08.1968	163-164	OS_68_282	1:27,000

**Table H11: Summary of Effects** 

Project Phase	Receptor	Value	Description of Change	Mitigation Measure	Nature of	Change		Magnitude of Change	Residual Significance
					Positive/ Negative	Permanent/ Temporary	Reversible/ Irreversible		
Construction	Grouse butts (6-7 and 9-10)	Lesser	Excavation of a proposed borrow pit would result in the loss of these four grouse butts	The grouse butts are off 19 <sup>th</sup> /20 <sup>th</sup> century date and of lesser heritage importance, no mitigation is recommended to off-set the construction effect.	Negative	Permanent	Irreversible	Minor	Not significant
Construction	Shieling hut (13a)	Local	Construction of the hardstanding for Turbine WTG2 would disturb the structure	Archaeological evaluation/excavation set out to specification required by Perth and Kinross Heritage Trust would be carried out on the shieling hut prior to construction work	Negative	Permanent	Irreversible	High	Significant (off set through mitigation)
Construction	Shieling hut (13b)	Lesser	Construction of the hardstanding for Turbine WTG2 would result in the loss of the remains of this structure	The shieling hut has been largely excavated and recorded as part of mitigation works for the consented Calliachar Wind Farm and only partially survives, no further mitigation is recommended.	Negative	Permanent	Irreversible	High	Not significant
Construction	Hut-circle (possible) (14)	Local	Construction of the hardstanding for Turbine WTG2 would result in the loss of the structure	Archaeological evaluation/excavation set out to specification required by Perth and Kinross Heritage Trust would be carried out on the hut-circle prior to construction work	Negative	Permanent	Irreversible	Moderate	Significant (off set through mitigation)
Operation	16 Scheduled Monument	National	Operational effect on the	No mitigation required	Negative	Temporary	Reversible	Low – Imperceptible	Not significant

Project Phase	Receptor	Value	Description of Change	Mitigation Measure	Nature of	Change		Magnitude of Change	Residual Significance
					Positive/ Negative	Permanent/ Temporary	Reversible/ Irreversible		
	(2621, 2664, 2666, 4318, 4587-4589, 4850, 4860, 6251, 7524, 9511-9512, 9682, 9685 and 90155)		setting of the Scheduled Monuments						
Operation	Two Category A Listed Buildings (11830 and 11831)	National	Operational effect on the setting of the Listed Buildings	No mitigation required	Negative	Temporary	Reversible	Low- Imperceptible	Not significant
Operation	Seven Category B Listed Buildings (11861-11863, 13789, 17817, 17827 and 19831)	Regional	Operational effect on the setting of the Listed Buildings	No mitigation required	Negative	Temporary	Reversible	Low- Imperceptible	Not significant
Operational	Three Inventory Garden and Designed Landscapes (Castle Menzies, Cluny House and Grandtully Castle)	National	Operational effect on the setting of the Inventory Garden and Designed Landscapes	No mitigation required	Negative	Temporary	Reversible	Low- Imperceptible	Not significant
Operational	Two Conservation Areas (Aberfeldy and Grandtully / Strathtay)	Regional	Operational effect on the setting of the Conservation Areas	No mitigation required	Negative	Temporary	Reversible	Imperceptible	Not significant

# Appendix HA1: Cultural Heritage Assets within the Proposed Development Area

Site No.	Site Type	Easting	Northing	Source(s)	Description	Importance
1	Quarry	284474	744492	Field survey	Field survey identified a small area of quarry working. The quarried area is visible as a small spoil heap approximately 5m in diameter and 0.7m high with a spread of abandoned quarried rocks, with square-cut edges, in the vicinity. The entire workings cover an area measures approximately 13m x 7m.	Lesser
2	Trackway(s)			Field survey	Field survey identified a trackway; visible as a slight holloway up to 0.5m deep and ranging in width between 2.5m and 3m. The trackway runs from 284489 744493 to 284485 744417 and a separate diverging length runs from 284476 744432 to 284472 744400. The trackway was probably used to access an area of quarrying (1).	Lesser
3 4 5	Number not used					
4	Number not used					
5	Grouse Butt	285851	743924	Field survey	Field survey identified a grouse butt of dry-stone wall construction. It measures approximately 4m x 3m and has an entrance on the southeastern side. The walls are approximately 0.5m high and 0.4m thick and are overgrown with grass and heather.	Local
6	Grouse Butt	285892	743904	Field survey	Field survey identified a grouse butt of dry-stone wall construction. It measures approximately 3m in diameter and has an entrance on the southern side. The walls survive to a height of approximately 0.7m and are approximately 0.4m thick and overgrown with heather.	Local
7	Grouse Butt	285931	743891	Field survey	Field survey identified a grouse butt of dry-stone wall construction. It measures approximately 4m x 3m and has an entrance on the southeastern side. The walls survive to a height of approximately 0.7m and are approximately 0.4m thick.	Local
8	Grouse Butt (possible)	285867	743960	Field survey	Field survey identified the remains of a possible grouse butt. The ephemeral remains survive in poor condition. A possible entrance is located on the south-western side. The south-western corner of the grouse butt is formed from a natural rock outcrop, and the other sides are barely visible due to being overgrown with heather and grass. The grouse butt measures approximately 3m in diameter and is a maximum of 0.6m in height.	Local
9	Grouse Butt	285973	743918	Field survey	Field survey identified the remains of a grouse butt which survive in a partially collapsed state. The grouse butt is of dry-stone wall construction, and measures approximately 3m in diameter. The walls are a maximum of 0.5m high and 0.4m wide. The grouse butt is overgrown with grass.	Local
10	Grouse Butt (possible)	285934	743933	Field survey	Field survey identified the remains of a possible grouse butt, visible as a single line of stones with an entrance on the south-eastern side. The grouse butt measures approximately 3m x 2m and is a maximum of 0.3m high. The feature is overgrown with heather and grass.	Local

Site No.	Site Type	Easting	Northing	Source(s)	Description	Importance
11	Grouse Butt (possible)	285448	743845	Dalland (2012 <sup>1</sup> )	Archaeological field work carried out by Headland Archaeology (2012) in advance of construction of Calliacher Wind Farm recorded a rounded hollow (Headland Site No. 2) 3.2m in diameter and 0.8m deep which was cut into a natural ridge. The hollow was surrounded by a low bank up to 2.5m wide and 0.3m high. The pit and bank were covered in the same kind of vegetation as their surroundings indicating that it is not a recent feature.	
					This feature was fully excavated and found to be a 2m deep pit containing several deposits of charcoal and a 'massive' post-hole at the base of the pit. The function of this feature is unknown but one proposal is that it may have functioned as a shooting butt for large game (Dalland pers comm).	
12	Shieling hut(s); Enclosure			Dalland (2012)	Archaeological field work carried out by Headland Archaeology (2012) in advance of construction of Calliacher Wind Farm recorded a group of five shieling huts and an enclosure (Headland Site Nos. 3a – f); described as follows:  Site 12a (Headland Site No. 3a) At 285249 743804 is a shieling hut, cut into the south side of a ridge. Its sub-rectangular interior measures 1.5m by 2m. The interior east, north and west sides are lined with randomly coursed stone up to 0.7m in height. A low bank, 1.2m wide forms the southern side of the structure.  The interior of the structure was fully excavated and slots excavated across the shieling hut walls; the remaining sections of wall have been left in situ. The excavated structure is considered to be of lesser importance  Site 12b (Headland Site No. 3b) At 285280 743811 is a shieling hut, located on the southern side of the ridge. It is oval in plan, aligned northwest to south-east and measures 3.5m by 1.5m internally, defined by stony banks up to 3.5m wide and 0.5m high. There is an entrance to the south-east.  The interior of the structure was fully excavated and slots excavated across the shieling hut walls; the remaining sections of wall have been left in situ. The excavated structure is considered to be of lesser importance  Site 12c (Headland Site No. 3c) At 285287 743817 is an oval shieling hut,	Lesser
					aligned east to west and measuring 2.4m x 1.8m internally. The walls are up to 2.5m wide and 0.5m high. There is an entrance approximately 0.45m wide on the eastern side.	

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<sup>&</sup>lt;sup>1</sup> Dalland, M (2012) Calliacher Wind Farm, Perth & Kinross, Walkover Survey of the Proposed Cable Route, Road Layout and Borrow Pits, Headland Archaeology Ltd, Report Ref CALL 11/003 (07/02617/FUL)

Site No.	Site Type	Easting	Northing	Source(s)	Description	Importance
					The interior of the structure was fully excavated and slots excavated across the shieling hut walls; the remaining sections of wall have been left in situ. The excavated structure is considered to be of lesser importance	
					<b>Site 12d</b> (Headland Site No. 3d) At 285288 743807 is a shieling hut, visible as two curving banks up to 1.4m wide and 0.6m high that are built up against the vertical face of a large boulder which forms the north-east side of the structure. The shieling measures 2m x 3m internally with a 0.5m wide entrance on the south-eastern side. The structure is overgrown with heather. The structure survives in-situ and is considered to be of local importance.	
					<b>Site 12e</b> (Headland Site No. 3e) At 285276 743802 is an oval shieling hut aligned east to west and measuring 2.3m by 1.6m internally. A 0.5m wide entrance is located towards the west end of the southern wall. The walls are up to 1.5m wide and 0.6m high and covered in deep heather. Two flat stones set on edge form the internal north-east corner. The structure survives in-situ and is considered to be of local importance.	
					<b>Site 12f</b> (Headland Site No. 3f) At 285244 743783 is a D-shaped enclosure. It measures 3.4m x 3.9m internally. The south-east side is cut into the base of a north-west facing slope. The remaining part of the enclosure is defined by the footings of a dry-stone wall 0.8m wide and surviving up to a height of 0.5m. The structure survives in-situ and is considered to be of local importance.	
13	Shieling hut(s); Enclosure			Dalland (2012)	Archaeological field work carried out by Headland Archaeology (2012) in advance of construction of Calliacher Wind Farm recorded two shielings and a small enclosure (Headland Site Nos. 14 a $-$ c); described as follows:	
					<b>Site 13a</b> (Headland Site No. 14a) At 285259 743868 is a small oval shieling hut located at the top of a north-facing slope. It is aligned northeast to south-west and measures 1.4m by 2.4m internally within low banks spread to 1.5m wide and up to 03m high. The structure is mainly covered in deep heather. A forestry fence, enclosing a plantation which is located to the north, cuts across the feature. The structure survives in-situ and is considered to be of local importance.	
					Site 13b (Headland Site No. 14b) At 285247 743845 is a sub-rectangular structure, approximately 20m to the south-west of shieling 13a. It is aligned north-north-west to south-south-east and measures 2m by 4.2m internally and is defined by banks spread to 2.5m wide and up to 0.8m	

Site No.	Site Type	Easting	Northing	Source(s)	Description	Importance
					high. The entrance is in the north-east corner. A 6m long and 0.9m wide 'corridor' defined by banks up to 0.5m high and 1.8m wide on either side, leads to the entrance from the north-east. A second parallel 'corridor' 11m long by 0.8m wide is formed by a third bank up to 3.2m wide and 0.5m high that runs to the north and curves round to join the north-west corner of the building. With the exception of the interior, the entire structure is covered in deep heather. The interior of the structure was fully excavated and slots were excavated across the walls of the shieling hut. The southern part of the structure has been crossed by the main access road for Calliachar Wind Farm and no longer survives; only the northern part of the hut still survives in situ. The site is of lesser importance.	
					Site 13c (Headland Site No. 14c) At 285251 743831 is a small U-shaped structure defined by low banks up to 0.2m high and 1.1m wide enclosing an area 1.1m by 2.2m. The entire structure is covered in deep heather. The structure was fully excavated by Headland Archaeology and has since been removed by the construction of the access route. The site has no heritage importance.	
14	Hut Circle (possible)	285289	743867	Dalland (2012)	Archaeological field work carried out by Headland Archaeology (2012) in advance of construction of Calliacher Wind Farm recorded a possible hut circle (Headland Site No. 15). The structure is located on top of a low rise with boggy areas to the east, south and west. It is defined as a low subcircular platform 0.2m high with an irregular dished interior. The site is largely covered in heather and survives in-situ.	
15	Man-made hollow	285490	743873	Dalland (2012)	Archaeological field work carried out by Headland Archaeology (2012) in advance of construction of Calliacher Wind Farm recorded a man-made hollow (Headland Site No. 16). The sub-rectangular hollow is located on the eastern side of a small stream. It is 0.7m deep and has well-defined steep sides. The feature measures 1.2m by 1.9m internally and is aligned east to west. The entrance into the hollow is from the west. There is no clear evidence of any banks surrounding the hollow. With the exception of the base, the feature is covered in deep heather and survives in-situ.	(Local)
16	Shieling hut (possible)	285114	743889	Dalland (2012)	Archaeological field work carried out by Headland Archaeology (2012) in advance of construction of Calliacher Wind Farm recorded a possible shieling hut (Headland Site No. 18). The feature comprises a rectangular hollow, 1.5m long by 0.7m wide, framed by a low bank and measures 4.8m by 2.2m externally.	(Local)

# Appendix HA2: Cultural Heritage Assets within 10km of the Proposed Development Area with Predicted Visibility of the Proposed Turbines

Site No.	Site name	Status	Easting	Northing	Distance to nearest turbine (km)	No of turbine tips visible	No of turbine hubs visible	Heritage Importance		Contribution to Setting	Sensitivity of Setting	Effects Magnitude	Significance of Predicted Effect
2621	Tomtayewen, dun	SM	288382	750229	6.2	1	0	National	The fragmentary remains of a possible dun standing in a modern grazed enclosure behind the abandoned village of Tomtaywen. Only the north-west arc of the structure is still visible.  Stands on a north-west facing slope overlooking the River Tay valley; views from the structure are particularly concentrated down the river valley, to the south-west and north-east.	possible prehistoric settlement remains standing in	Low	Imperceptible: visibility of proposed turbines limited by intervening topography; only tip of one turbine would be visible from the monument	
2664	Dunvorist, dun 180m S of	SM	289035	750537	8.4	5	3	National	The poorly preserved remains of two structures, though to be the possible remains of two duns, survive within a pasture field south-east of The Ale House. The remains stand on a north-west facing slope overlooking the River Tay valley; views from the structure are particularly concentrated down the river valley, to the south-west and north-east.	possible prehistoric settlement remains	High	Low: views of the proposed turbines would be visible only in distant views from the dun (over 8km), in views to the south-west (one small arc of view – 12 degrees). Would not affect the immediate farmland in which the remains of the duns sit nor affect views out from the structure along the river valley.	
2666	Middleton of Derculich, chambered cairn 70m SE of	SM	288593	752496	8.4	5	3	National	The scant remains of a chambered cairn situated on a slight knoll within an arable field just south-east of Middleton of Derculluch.  The poorly preserved burial monument stands on a south-east facing slope with views from the cairn concentrated principally along the River Tay valley, to the north-east and south-west. A large modern farm steading stands just south of the monument.	prehistoric burial monument standing in modified		Low: views of the proposed turbines would be visible only in distant views from the monument (over 8km away), in views to the south-west (one small arc of view – 11 degrees). Would not affect the farmland in which the monument sits, nor affect the understanding of the monument in its wider setting.	
4318	Balenduin, cairn 80m SE of	SM	289504	753159	9.3	5	4	National	The upstanding remains of a prehistoric burial monument standing in a woodland shelterbelt just south-east of Balenduin Farm. Surrounding trees limit visibility out to the surrounding landscape; monument surrounded by flat farmland.	prehistoric burial		Low: views of the proposed turbines would be visible only in distant views from the monument (over 9km away) in views to the south-west (one small arc of view – 11 degrees). Would not affect the immediate woodland setting of the monument nor the farmland that surrounds it	
4587	The Dun, fort 400m ESE of Tyndun	SM	286330	747544	3.0	3	2	National	The well-preserved upstanding remains of a prehistoric fort situated just north of the summit of Dun Hill on a north facing slope.  Views from the fort are particularly concentrated to the north, along the River Tay valley, to the north-east and south-west, and down Glen Cohill, to the south-east. Views to the south and west take in surrounding hill-tops, although views are restricted by a rise in topography to the summit of Dun Hill. The monument stands in a forestry clearing and is surrounded by large swathes of forestry.	remains of hill fort near to summit of hill, yet surrounded by commercial forestry	(	Int.  Imperceptible: (Drawing H5) the wireframe produced for the monument indicates that there would be limited views of the proposed turbines in a small arc (22 degrees) in views to the SSW. Only two turbine hubs and one turbine tip	

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Site No.	Site name Statu	s Easting	Northing	Distance to nearest turbine (km)	No of turbine tips visible	No of turbine hubs visible	Heritage Importance	Setting	Contribution to Setting	Sensitivity of Setting	Effects Magnitude	Significance of Predicted Effect
											would be visible against the skyline; the majority of the proposed turbines being screened by intervening topography.	
4588	Urlar, ring cairn 700m SE of and cup marked boulder 750m E of	284897	746411	1.8	1	0	National	The upstanding remains of a prehistoric ceremonial or burial monument (ring cairn) and a free-standing boulder bearing three cup marks on its upper horizontal surface. The features form two distinct scheduled areas ( <i>Drawings H2/H3</i> ). Both sites stand in small clearings in a commercial forestry plantation (Falls of Moness). Views out from the site are restricted by intervening forestry.	prehistoric remains standing in single species	Low	Imperceptible: very limited visible of the proposed development, with only one turbine tip being visible from a small area of the southern edge of the cairn; and surrounding commercial forestry would restrict any views of the development.	
4589	Urlar, settlement 550m E of SM	284790	746656	2.1	1	0	National	Upstanding remains of probably pre-improvement farmstead, comprising of four buildings and several field boundaries which survive within a small clearing in a commercial forestry plantation (Falls of Moness). Views out from the site are restricted by intervening forestry.	early settlement remains	Low	Imperceptible: only the tip of one turbine is predicted to be visible from the most southerly edge of the settlement remains; and surrounding commercial forestry would restrict any views of the development.	
4850	Findynate, homestead 450m SM SW of	290005	752774	9.2	4	0	National	The well-preserved remains of a probable medieval homestead standing on the north brink of a river terrace of the River Tay. Fragments of a rampart and ditch that once surrounded the homestead are still visible particularly on the northern side. A modern access track has truncated the north-west side of the monument. River side setting with views particularly concentrated down the river valley to the south-west and north-east. Currently situated in an area of woodland which limits views out from and to the monument.	remains of homestead standing on the northern banks of the River Tay currently surrounded		Imperceptible: limited view of turbine tips visible in small arc of view (8 degrees) to the south-west, views of turbines from monument restricted by surrounding woodland. Presence of turbines would not affect the river setting of the monument.	
4860	Scotston, settlement & field SM system 700m NNW of	290444	743215	4.9	1	0	National	The remains of a settlement and field system spread out along a south-west facing slope just NNW of Scotscon Farm. The settlement remains comprise at least 8 possible hut-circles along with extensive remains of field boundaries and around 110 field clearance cairns. The settlement remains are situated in rough moorland and are surrounded by large swathes of commercial forestry on its north-west, north, east and south-west sides. Views from the settlement look out over moorland and the Cochill Burn valley to the south-east; with views particularly concentrated along the burn valley to the north-west and south.	preserved settlement remains surviving in area of moorland.		Imperceptible: Intervening topography limits views to monument; only tip of one turbine visible from south-western end of settlement remains in views over 4km away.	
6251	Tom of Cluny, chambered SM cairns 450m SSW of	287284	751146	6.7	4	2	National	The robbed remains of two prehistoric chambered cairns that are overlain by a ruinous late field wall. Both cairns stand in an improved pasture field just north of Tom-an-Droighne Farm.  Situated on a steep south facing slope overlooking the River Tay valley, with views particularly concentrated along the river valley to the south-west and over Aberfeldy.	poorly- preserved prehistoric burial monuments	High	Low: limited views of the proposed turbines visible over 6.5km from the monument and visible in a small arc of view (12 degrees). The presence of the turbines would not affect the immediate farmland setting of the monument nor significantly detract from an appreciation of the views from the	

Site No.	Site name Status	Easting	Northing	Distance to nearest turbine (km)	No of turbine tips visible	No of turbine hubs visible	Heritage Importance	Setting	Contribution to Setting	Sensitivity of Setting	Effects Magnitude	Significance of Predicted Effect
											cairns down the River Tay valley.	
7524	Camserney Burn, shielings SM 900m S of Sliabh Fada	279867	751407	8.3	7	7	National	The remains of at least 14 shieling huts situated at the confluence of the Camserney Burn and an unnamed tributary. The shieling hut remains sit in a clearing within an extensive commercial forestry plantation (Dull Wood).  Localised setting concentrated on the Camserney Burn. Surrounded by rough moorland and commercial forestry. Forestry restricts views from site out to surrounding area.	of shieling huts (summer grazing settlement remains) present in		Low: views of proposed turbines from the site would be restricted by surrounding commercial woodland.	
9511	Glassie, cup-and-ring- marked stone and cup- marked stones NW of	284957	751241	6.6	7	4	National	This site comprises three rocks (three distinct scheduled areas – <i>Drawings H2/H3</i> ) on which are cup and ring marks.  The rocks are situated in flat farmland just north-west of Glassi Farm and on a south-east facing slope overlooking the River Tay valley. Localised setting in modified farmland.	Moderate (localised): rocks situated in modified improved		Imperceptible: visibility of the proposed turbines in distant views (over 6km away) will not affect the immediate farmland setting of the cup and ring marked rocks, nor detract from an appreciation/or understanding of the site.	
9512	Edradynate Castle, SM earthwork 120m E of Milton of Cluny	288088	752162	7.9	4	2	National	The upstanding remains of a medieval earthwork, probably a motte and the foundations of associated buildings, possibly the remains of a castle surviving on top of the motte. The monument is located on the east brink of a deep stream gully and is over grown with trees and rhododendrons.  Situated just east of Miltown of Cluny Farm and surrounded by flat pasture fields. Views out from monument restricted by vegetation.	of possible motte now overgrown with vegetation and		Imperceptible: limited views of the proposed turbines in small arc of view (10 degrees) to the south-west, views from monument restricted by woodland.	
9682	Glassie, cup-marked rock SM 720m W of	284714	751026	6.4	7	4	National	A smooth out-crop of rock with a number of cup-marks on situated on the edge of a commercial forestry plantation.  Trees restrict any views to and from the site.	Negligible:	Low	Imperceptible: views from site to proposed development restricted by intervening commercial plantation.	
9685	Glassie, standing stone SM 960m NW of	284717	751591	7.0	7	6	National	Situated in open moorland on a gentle south facing slope and on the west bank of the Boltachan Burn. The stone stands to a height of 0.9m and has cupmarks on its south-west side.  The setting of the stone if the rough moorland in which it stands and out over which it looks. Views are afforded from the monument particularly to the south and focused on the River Tay valley. Views in other directions are limited by intervening topography.	standing stone standing in unmodified moorland	High	Low: The proposed development would be visible on the skyline in distant views (7km away) and would not affect the moorland setting of the monument, nor detract from an understanding or appreciation of the site.	
90155 / 11831	Grandtully, St Mary's Church Listed HS Property in Care	′	750639	6.7	3	0	National	16 <sup>th</sup> century plain rectangular church situated on slightly raised ground immediately west of Nether Pitcairn Farm. The church itself stands in a small rectangular graveyard and is orientated east to west with an entrance door on its south side. The church is a Historic Scotland Property in Care and a promoted visitor site. The interior of the church has a particularly fine wooden painted ceiling dating from the 1630s.  The church is surrounded by open farmland and views out from the graveyard take in the River Tay valley, to the west and the surrounding hill tops.	standing in small graveyard		Imperceptible: (Drawing H6) the tips of tree turbines would be visible above the skyline in views to the southwest. The majority of the proposed development being screened from view by intervening topography. The presence of the proposed turbines in views over 6.5km away	

Site No.	Site name	Status	Easting	Northing	Distance to nearest turbine (km)	No of turbine tips visible	No of turbine hubs visible	Heritage Importance	Setting	Contribution to Setting	Sensitivity of Setting	-	Significance of Predicted Effect
												would not affect the church and its setting, nor detract from an appreciation of the church or its understanding.	
11830	Grandtully Castle	A Listed	289117	751342	7.5	4	0	National	Grandtully Castle stands immediately south of the A827 public road, on the south side of the River Tay. The castle which was constructed in the 15th/16th century with later additions. The castle was abandoned in the 19th century but then restored and reoccupied in the 1920s. The main elevation (front/entrance elevation) is aligned to the north. The castle stands at the centre of a small designed landscape (see below). The castle and its gardens are surrounded by woodland polices and the wooded policies and the top (roof and upper floors) of the castle contribute to the views from the A827 public road in views from the road to the east. Partial views of the castle and woodlands can also be gained from farm access roads in the south-west (around Westpark Farm), while views taking in the castle from other directions are principally screened by the surrounding wooded policies. The castle is not visible whilst travelling down (south) the A827 as trees and intervening topography screen any views of the building.	standing in designed landscape	_	Imperceptible: (Drawing H7) views of the proposed development would be limited with the tips of only four turbines visible beyond the skyline and in distant views, with the majority of the proposed development being screened from view by intervening topography.	Negligible
11861	Fyndynate House	B Listed	290190	753139	9.6	6	3	Regional	4-storey Victorian manse which has been extensively remodelled. Main elevations are orientated NNW and SSE. The house stands in a small designed landscape comprising parkland and woodland. House surrounded by trees which provides the building with a localised enclosed setting and provides screening from the surrounding area. House stands on a south facing slope overlooking the River Tay valley and views out from the house and its surrounding parkland are concentrated on the river valley.	house standing in small designed landscape.		Low: limited views of proposed turbines in distant views potentially from upper floors of house, would not affect the immediate surroundings of the house or its parkland/woodland.	Minor
11862	Fyndynate Lodge	B Listed	290126	752948	9.4	5	1	Regional	Single storey gate lodge for Fyndynate House (11861). Road side setting; surrounded by trees which provide an enclosed and localised setting.	(localised):		Imperceptible: views to turbines principally screened by trees, would not affect the localised road side setting of the building.	
11863	Clochfoldich House	B Listed	289591	753044	9.3	4	3	Regional	Two storey country house (c. 1828). Main elevations orientated north-west to south-east. The house stands in a small area of parkland along with associated Listed C Clochfoldich stables (11864). House stands on a south facing slope overlooking the River Tay valley and views out from the house and its surrounding parkland are concentrated on the river valley.	house standing in small designed landscape.	_	Low: limited views of proposed turbines in distant views from building, would not affect the immediate surroundings of the house or its parkland.	
13789	Laidnaskea Farmhouse	B Listed		751593	8.0	5	0	Regional	Picturesque style farmhouse (c. 1845) standing in farmland on a north facing slope over looking the River Tay valley.  Stands just south-west of an associated Category C Listed steading (11866). Main elevations are orientated north-west to south-east. Localised farm setting.	(localised): farmhouse and associated steading standing in open farmland.		Low: limited views of turbine tips only in distant views from the building, would not affect the localised farm setting, its relationship with its associated steading, or the immediate farmland in which it stands.	
17817	Weem Manse, Parish Churc Manse	Cn   B Listed	284415	/49905	5.3	1	0	Regional	Church manse (c. 1830 ) forming part of Weem Village. Located just north-east of Weem's Parish		High (localised)	Imperceptible: Visibility of proposed turbines	

Site No.	Site name	Status	Easting	Northing	Distance to nearest turbine (km)	No of turbine tips visible	No of turbine hubs visible	Heritage Importance		Contribution to Setting	Sensitivity of Setting	Effects Magnitude	Significance of Predicted Effect
									Church. Surrounded by other residential buildings. Standing on a south facing slope with views concentrated along the River Tay valley. Localised village setting.	forming part of small village.		limited by intervening topography; only one turbine tip visible from manse in views to the SSE.	
17827	Derculich House	B Listed	289003	752385	8.4	4	1	Regional	Original Georgian villa that has been extensively remodelled during the 1930s. Main elevations orientated WNW and ESE. Standing in an area of woodland just north-east of a large modern farmstead (The Laigh of Derculich). House stands on a south facing slope overlooking the River Tay valley. Surrounding woodland limits views out from and too the building, and provide an enclosed setting for the house.	house standing in woodland.		Imperceptible: limited views of proposed turbines in distant views; surrounding woodland would limit views of the proposed development.	
19831	Killiechassie, Dovecot	B Listed	286298	750437	5.9	3	0	Regional	Gothic style dovecot (c. 1850) standing just north of Killiechassie House and forming part of the small designed landscape that surrounds the Category C Listed House.  The dovecot stands in a field on the southern edge of an area of woodland and just west of Killiechassie House walled garden. No intended long views out from the structure – localised setting.	(localised): dovecot forming part of a small designed		Imperceptible: limited views of proposed turbines (restricted to 3 turbine tips); immediate surrounding of dovecot not be affected and its relationship with the Killiechassie House and other elements within the surrounding designed landscape would not be affected.	
	Castle Menzies	GDL	283357	749753	5.4	7	5	National	The garden and designed landscape was laid out in the 19th century and forms the setting for Category A Listed Castle Menzies. It comprises fragmentary parkland and woodland, along with an arboretum and a walled garden. The designed landscape is spread out along the northern bank of the River Tay valley, the floodplain of the Tay forming the setting for the parkland, while to the north of the castle the land rises steeply to the Rock of Weem on Weem Hill. Castle Menzies and its woodland are highly significant in the landscape from the B846 which passes on the southern side of the designed landscape. Views from the park and from around the castle itself are confined to the Tay valley. The designed landscape only partially survives with its layout having been affected and altered by 20th century fragmentation of the estate by development of private housing and the introduction of commercial forestry - the eastern end of the former parkland has been developed in recent years for private housing, and the northern woodland was replanted with commercial forestry in the 1950s and now owned by The Forestry Commission.  The ZTV indicates that there is no visibility of the proposed turbines from the listed buildings within the designed landscape including Category A Listed Castle Menzies, Category B Listed walled garden, home farm and its steading and the East Lodge gatepiers. Visibility of the proposed development is limited specifically to the high wooded slopes along the northern edge of the designed landscape.	partial surviving designed landscape fragmented by housing development and commercial forestry	High	Imperceptible: The ZTV indicates that visibility of the proposed turbines would be restricted to views from the higher wooded slopes (Weem Hill) along the northern edge of the designed landscape, and that there would be no predicted visibility from Castle Menzies itself or any other associated listed buildings or structures (i.e. the walled garden, Home Farm and east lodge gatepiers) that are constituent elements of the designed landscape. Therefore views out from the castle and its parkland would not be affected by the proposed development. Views of the castle from wider afield are limited principally to the B846, on its southern side, with intervening commercial forestry or woodland shelterbelts running along road sides screening views of the castle from the west, north and east.	

Site No.	Site name	Status	Easting		Distance to nearest turbine (km)	No of turbine tips visible	No of turbine hubs visible	Heritage Importance		to Setting	of Setting	Effects Magnitude	Significance of Predicted Effect
	Cluny House	GDL	287906	751400	7.1	4	2	National	Outstanding woodland garden developed in the 1950s by the Materstons who planted many unique plants collected from the Himalayas and China. The designed landscape, situated between Weem and Strathtay, is spread out along a hillside above the steep wooded slopes of the Tay Valley. The woodland forms the setting for undesignated Cluny House, which stands on a broad terrace with gardens extending from the terrace down the steep wooded hillside. The gardens are open to the public through the Perthshire Big Tree Country Heritage and Access Project, and co-ordinated by Perth and Kinross Countryside Trust.  Views out from the garden are principally screened by the woodland canopy, although glimpses out to the surrounding landscape can be gained from the garden particularly focused along the River Tay valley to the south-east.	woodland garden	High	Low: limited visibility of the proposed development with only four turbine tips and two turbine hubs being visible in one small arc of view to the southwest. The turbines would be visible in distant views (over 7km away) and above the skyline. There presence would not affect the immediate and enclosed setting of the woodland garden, nor detract from the appreciation of the gardens	
	Grandtully Castle	GDL	289122	751278	7.5	3	0	National	The garden and designed landscape is situated 0.5 miles from the south bank of the River Tay to the north-east of Aberfeldy and immediately south of the A827 public road. The designed landscape forms the setting for Category A Listed Grandtully Castle (11830).  The gardens surrounding the castle were first set out in the 16th century and extensively remodelled/redesigned in the 17th century and then again in the late 19th century. The original gardens, terraces to the north and east of the castle, were originally enclosed with a wall although only a small part of this wall survives today. One of the terraces was levelled c.1890 when it was created into an 'Italian Garden'; this garden was abandoned in the 1930s and is now laid to grass. The view along the north terrace is supposed to be the model for the illustration in Beatrix Potter's 'The Tale of the Flopsy Bunnies'. Further terraces were added in the 1960's to the south-west of the castle.  The castle itself stands at the centre of woodland policies and these along with the top (roof and upper floors) of the castle contribute to the views from the A827 public road from the west. An avenue of lime trees, dating from the 17th century, and which the original driveway to the castle went through, now stands in the garden to the north of the castle. Partial views of the castle and woodlands can also be gained from farm access roads in the south-west (around Westpark Farm), while views taking in the castle from other directions are principally screened by the surrounding wooded policies.  The castle is not visible whilst travelling south-east along the A827 from Grandtully village as trees and intervening topography screen any views of the building.	preserved designed landscape forming the setting of Category A Listed Grandtully Castle	-	Imperceptible: (Drawing H7) Screening provided by the woodland policies that surround the castle would restrict views of the proposed turbines from the castle grounds and from the lower floors of the castle. A wireframe (Drawing H6) produced for a location at the approximate height of the upper levels (attic level) of the castle shows that views of the proposed turbines would theoretically be gained from the upper levels of the castle; although only the tips of four turbines would be theoretically visible beyond the skyline and the majority of the proposed development would be screened from view by intervening topography. This screening would be increased by the forestry on Craig Formal and Monadh nam Mial surrounding the proposed development.	
	Aberfeldy	CA	285473	749107	4.5	1	0	Regional	The Conservation Area is located on the southern side of the River Tay concentrated in the flat valley floor within a bend of the river. The main core of the town is generally formed around the Moness Burn and the Crief and Taybridge Roads. The civic centre of the town is located within The Square, within the northern half of the town, which contains the main commercial and public buildings. Outside the core of the town are several Victorian villas with mature gardens which		High	Imperceptible: visibility of proposed turbines limited by intervening topography; only tip of one turbine visible in distant views from the Conservation Area.	

Site No.	Site name	Status	Easting		Distance to nearest turbine (km)	No of turbine tips visible	No of turbine hubs visible	Heritage Importance	Setting	Contribution to Setting	Sensitivity of Setting	Effects Magnitude	Significance of Predicted Effect
									enrich the townscape setting of the Conservation Area.  Principal views within the Conservation Area are focused along the main streets of the town (for example Crief Road, Kenmore Road and Dunkeld Road), taking in the buildings of the town and surrounding wooded slopes of the River Tay valley, and out to Victoria Park present on the north-western edge of the town.				
	Grandtully and Strathtay	CA	291120	753269	10.2	6	2	Regional	This Conservation Area takes in the village of Grandtully, located on the southern banks of the River Tay, and Strathtay, on higher slopes just north of the River Tay. A road bridge that crosses the River Tay links both villages. The villages are principally of Victorian date, having developed as holiday and second home resort during this period.  Grandtully village is a linear development with the village buildings spread out along the southern side of the River Tay; while Strathtay village lies in the foothills on the north side of the river and has a less formal layout.  Principal views within the Conservation Area are concentrated on the River Tay, to the SSW and NNE, from the bridge that links the two villages and focused along the narrow streets of Strathtay to the north.		High	Imperceptible: views of the proposed turbines are limited principally to the higher northern slopes of Strathtay, no predicted views of the turbines from Grandtully. Turbines would be over 10km away and the majority of the turbines screened from view by intervening topography. The presence of the proposed turbines would not affect the river setting of the Conservation Area.	





