

CHAPTER 12 CULTURAL HERITAGE

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12. Cultural Heritage

12.1 Executive Summary

- 12.1.1 This Chapter identifies the archaeological and cultural heritage value of the Site and assesses the likely significant effects on archaeological features and heritage assets resulting from the construction, operation and decommissioning of the Proposed Development. This Chapter also identifies measures that should be taken to mitigate predicted likely significant adverse effects and reports on the residual effects of the Proposed Development on heritage assets.
- 12.1.2 Impacts upon the setting of designated heritage assets have generally been mitigated through the iterative design process. A significant effect has been identified on the setting of Dail Langwell, Broch (Asset 45) Scheduled Monument. However, it is concluded that the asset's key relationship with the River Cassley and the glen would still be appreciable and the ability to understand its defensive position would not be diminished as a result of the Proposed Development. On this basis, there would not be an adverse effect upon the integrity of the asset's setting.
- 12.1.3 This assessment has identified six known non-designated heritage assets within the Site. These assets are primarily post-medieval or modern in date and relate to estate management. Where possible, the Proposed Development has been designed to avoid direct impacts upon known heritage features within the Site. However, two assets, the fractured remains of boundaries/ fence lines (Assets 51 & 52), could potentially be directly impacted by the Proposed Development. Both assets are considered to be of Negligible importance and impacts would be at worst of negligible magnitude. This is because any disturbance of these features would be restricted to very small elements of the assets and would lead to a barely measurable loss of information content. As such, no mitigation is required.
- 12.1.4 The possibility of cumulative effects has been assessed. No significant cumulative effects were identified.
- 12.1.5 Given the presence of large zones of, generally shallow, peat moorland within the Site, there is a low probability that currently unknown buried remains might be disturbed by ground-breaking works on the Site during construction. Accordingly, a representative proportion of these works, in areas of relatively greater archaeological potential, would be subject to an archaeological watching brief during these works. The extent and location of such works would be agreed with The Highland Council's Historic Environment Team through a Written Scheme of Investigation (WSI).

12.2 Introduction

- 12.2.1 This Chapter considers the issues associated with the potential cultural heritage effects of the proposed Achany Extension Wind Farm (the Proposed Development), located on the adjoining land to the north-west of the operational Achany Wind Farm near Lairg, Sutherland. The Proposed Development comprises 20 Wind Turbine Generators (WTGs) with a maximum tip height of up to 149.9m and an installed capacity anticipated to be in excess of 80MW. The Proposed Development is described in detail in Chapter 3: Description of Development.
- 12.2.2 This Chapter has been produced by AOC Archaeology Group which is a Registered Organisation of the Chartered Institute for Archaeologists (CIfA). The assessment has been undertaken by AOC employees with 11 and 16 years of experience working on cultural heritage assessments.
- 12.2.3 This assessment has been carried out in accordance with the standards of professional conduct outlined in the CIfA Code of Conduct (CIfA, 2019a) and Regulations for Professional Conduct (CIfA, 2019b), as well as the CIfA Standard and guidance for commissioning work on, or providing consultancy advice on, archaeology and the historic environment (CIfA, 2014a); Standard and guidance for historic environment desk- based assessment (CIfA, 2017); field evaluations (CIfA, 2020) and other relevant guidance.
- 12.2.4 This assessment considers the potential for direct physical effects upon archaeological remains as well as the potential for operational and cumulative setting effects upon designated heritage assets. Where appropriate and if necessary, measures to mitigate or offset such effects are identified. An assessment of the significance of residual effects following the implementation of any mitigation is also made.
- 12.2.5 This Chapter is supported by Figures 12.1 – 12.2 and a visualisation from Dail Langwell Broch included in Figures 12.3.1-12.3.3. It is also supported by Technical Appendix 12.1: Site Gazetteer and Technical Appendix 12.2: Photographic Plates. Technical Appendix 12.3 provides details of the setting assessment. All asset numbers referred to in the text and Figures relate to heritage assets listed in the Site Gazetteer.

12.3 Scope of Assessment

Study Area

- 12.3.1 Three study areas were identified for this assessment:
- A 1km Study Area around the Site boundary identifying all previously recorded designated and non-designated assets and previous archaeological investigations (events) to allow for assessment of the potential for direct effect on known heritage assets and to assess the potential for hitherto unknown buried assets to survive on-site and thus potentially be impacted upon (Figure 12.1);
 - A 5km Study Area for assessment of potential effects on the settings of all designated heritage assets (Figure 12.2); and
 - A 10km Study Area for the assessment of potential effects on the settings of all designated heritage assets which are considered to be nationally important including Scheduled Monuments; Category A Listed Buildings; Inventoried Gardens and Designed Landscapes, Inventoried Battlefields and World Heritage Sites (Figure 12.2).

- 12.3.2 Each heritage asset referred to in the text is listed in the Gazetteer in Technical Appendix 12.1. Each has been assigned an 'Asset No.' unique to this assessment, and the Gazetteer includes information regarding the type, period, grid reference, National Record of the Historic Environment (NRHE) number, The Highland Council Historic Environment Record (HER) number, statutory protective designation, and other descriptive information, as derived from the consulted sources.

Consultation Responses

- 12.3.3 An EIA Scoping Opinion was received from the Energy Consents Unit (ECU) on behalf of Scottish Ministers in October 2019. A summary of consultation responses received as part of the Scoping Opinion, as well as other consultation responses of relevance to cultural heritage, is included in Table 12.1 below.

Table 12.1: Consultation

Consultee	Summary of Response	Where and How Addressed
ECU Scoping Opinion	The Scoping Opinion indicated that the EIAR should include full consideration of impacts upon the Scheduled Dail Langwell, broch and other heritage assets that might be impacted.	An assessment of the potential for effects upon the setting of Dail Langwell Broch (Asset 45) is set out in paragraphs 12.7.6 to 12.7.8 and this is supported by a photomontage (Figure 12.3.3). The potential for effects on the setting of other heritage assets has been undertaken and has been informed by Zones of Theoretical Visibility (ZTV) analysis and site visits. The results of this assessment are presented in Section 12.7 and Technical Appendix 12.3.
Historic Environment Scotland (HES)	In their response to the Scoping Report, HES confirmed that there are no designated heritage assets within the Site, although they noted there are some within the surrounding area. It was noted that Dail Langwell, broch 1675m NW of Croich (SM1852) is located approximately 2km south-west of the Proposed Development's boundary. It was recommended that further consideration be given to assessing any impacts thereto and requested that such consideration include visualisations that assess the impact of the Proposed Development on the setting of the broch. Any other heritage assets that might be impacted by the Proposed Development to also be assessed.	As above.
The Highland Council	In their response to the Scoping Report THC noted the requirement to identify all designated assets with the potential to be affected directly or indirectly by the	The potential for effects on the setting of heritage assets has been undertaken and has been informed by ZTV

Consultee	Summary of Response	Where and How Addressed
	Proposed Development. They noted that the assessment should contain a full appreciation of the settings of the assets and the likely impact on their settings.	analysis and asset visits. The results of this assessment are presented in Section 12.7 and Technical Appendix 12.3.
HES	In their response to the Scoping Refresh HES reiterated their points made in the original Scoping Response and their advice remained the same.	As per HES Scoping Response noted above.
The Highland Council Historic Environment Team (HET)	In their response to the Scoping Refresh HET reiterated the points made by THC in the original Scoping Response as set out above.	The potential for effects on the setting of heritage assets has been undertaken and has been informed by ZTV analysis and asset visits. The results of this assessment are presented in Section 12.7 and Technical Appendix 12.3.
HES	In their response to the Gate Check consultation, HES confirmed that they are content that the details given in the Gate Check Report reflect their involvement with, and advice regarding, the EIA process for the Proposed Development.	Noted. No further action required.

12.4 Legislation, Policy and Guidance

12.4.1 Relevant legislation, policy and guidance have been taken into consideration during this assessment.

Legislation

12.4.2 The statutory framework for heritage in Scotland is outlined in:

- The Ancient Monuments and Archaeological Areas Act 1979 (as amended);
- The Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 (as amended);
- The Planning etc. (Scotland) Act 2006;
- Historic Environment (Amendment) (Scotland) Act 2011;
- Historic Environment (Scotland) Act 2014; and
- The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended).

Planning Policy

12.4.3 Planning policy relevant to this Chapter is contained within:

- Scottish Planning Policy (SPP) (Scottish Government 2020);
- Historic Environment Policy for Scotland (HEPS) (HES 2019a); and
- The adopted Highland-wide Local Development Plan (The Highland Council (THC) 2012).

12.4.4 SPP expresses the following policy principles:

“The planning system should:

- *promote the care and protection of the designated and non-designated historic environment (including individual assets, related settings and the wider cultural landscapes) and its contribution to sense of place, cultural identity, social well-being, economic growth, civic participation and lifelong learning; and*
- *enable positive change in the historic environment which is informed by a clear understanding of the importance of the heritage assets affected and ensure their future use. Change should be sensitively managed to avoid or minimise adverse impacts on the fabric and setting of the asset, and ensure that its special characteristics are protected, conserved or enhanced” (Scottish Government 2020, Para 137).*

12.4.5 HEPS (HES, 2019b) sets out the Scottish Government’s policy for decision making that affects the historic environment. It contains six policies for managing the historic environment, all of which favour protection, understanding and promotion of the historic environment as well as the preservation of the benefits of the historic environment for future generations. Historic environment policies 3 and 4 both state *‘if detrimental impact on the historic environment is unavoidable, it should be minimised. Steps should be taken to demonstrate that alternatives have been explored, and mitigation measures should be in place’* (HES, 2019b). The following historic environment policies are relevant to this assessment:

- HEP1
Decisions affecting any part of the historic environment should be informed by an inclusive understanding of its breadth and cultural significance.
- HEP2
Decisions affecting the historic environment should ensure that its understanding and enjoyment as well as its benefits are secured for present and future generations.
- HEP3
Plans, programmes, policies and strategies, and the allocation of resources should be approached in a way that protects and promotes the historic environment.
If detrimental impact on the historic environment is unavoidable, it should be minimised. Steps should be taken to demonstrate that alternatives have been explored and mitigation measures should be put in place.
- HEP4
Changes to specific assets and their context should be managed in a way that protects the historic environment. Opportunities for enhancement should be identified where appropriate.
If detrimental impact on the historic environment is unavoidable, it should be minimised. Steps should be taken to demonstrate that alternatives have been explored, and mitigation measures should be put in place.

12.4.6 THC’s approach to proposals that affect the historic environment is set out in Policy 57 of the HwLDP which states that:

“development proposals will be assessed taking into account the level of importance and type of heritage features, the form and scale of the development, and any impact on the feature and its setting”.

Guidance

- 12.4.7 Recognition has been taken of the following best practice guidelines/guidance in preparing this assessment:
- THC Supplementary Guidance: Historic Environment Strategy (2013);
 - PAN2/2011 'Planning and Archaeology' (Scottish Government 2011);
 - Chartered Institute for Archaeologists (CIfA) Standards and Guidance for Historic Environment Desk Based Assessments (CIfA 2017) and Commissioning Work or Providing Consultancy Advice on the Historic Environment (CIfA 2014);
 - HES "Managing Change in the Historic Environment" guidance note series, particularly Historic Environment Scotland's Managing Change in the Historic Environment: Setting (HES 2020);
 - NatureScot's published guidance for 'Assessing the Cumulative Impact of Onshore Wind Energy Developments' (SNH 2012); and
 - NatureScot & Historic Environment Scotland's Environmental Impact Assessment Handbook v5 (SNH & HES 2018).
- 12.4.8 HES's setting guidance defines setting as '*the way the surroundings of a historic asset or place contribute to how it is understood, appreciated, and experienced*' (HES 2020). The guidance further notes that '*planning authorities must take into account the setting of historic assets or places when drawing up development plans and guidance, when considering various types of environmental and design assessments/statements, and in determining planning applications*' (*ibid*). It advocates a three-stage approach to assessing potential impacts upon setting:
- Stage 1: identify the historic asset;
 - Stage 2: define and analyse the setting; and
 - Stage 3: evaluate the potential impact of the proposed changes.
- 12.4.9 THC's Supplementary Guidance on the historic environment (2013) supports the policy on the historic environment and provides a definition of THC's approach to the protection of the historic environment through the planning process. This strategy is implemented through strategic aims. Those of particular relevance to this assessment are:
- Strategic Aim 6: That listed buildings within Highland are protected from harmful developments...which may affect their special architectural and historic interest or their setting;
 - Strategic Aim 13: That scheduled monuments – and their setting – within Highland are protected from harmful developments that may affect their national importance; and
 - Strategic Aim 17: To ensure no asset or its setting is lost or altered without adequate consideration of its significance and of the means available to preserve, record and interpret it in line with national and local policy.

12.5 Methodology

Desk Study

- 12.5.1 The following sources were consulted for the collation of data:

- The Highland Council Historic Environment Record extract received 21 February 2020;
- The walkover survey data and heritage assessment undertaken for the previously proposed Glencassley Wind Farm (SSE Renewables 2012);
- The National Record for the Historic Environment (NRHE) as held by HES; and
- Spatial data and descriptive information for designated assets held on Historic Environment Scotland Data website.

Site Visits

- 12.5.2 An archaeological walkover survey of the Site was undertaken by AOC Archaeology Group for the previous Glencassley application (SSE Renewables 2012) in August 2011 with the aim of identifying any previously unknown archaeological remains. All known and accessible heritage assets were assessed in the field to establish their survival, extent, significance, and relationship to other sites. Weather and any other conditions affecting the visibility during the survey were also recorded. All features were marked on plans, at a relevant scale, and keyed by means of Grid References to the Ordnance Survey mapping. AOC understands that there have been no material changes to land use on-site and as such the walkover survey was not repeated for the current assessment, and this Chapter relies upon AOC's previous work on the Site.
- 12.5.3 Visits were made to designated heritage assets to inform the setting assessment on 03 – 05 November 2020. Weather conditions were dry and sunny giving good visibility.

Assessment of Likely Effect Significance

- 12.5.4 This assessment distinguishes between the terms 'impact' and 'effect'. An impact is defined as a physical change to a heritage asset or its setting, whereas an effect refers to the significance of this impact. The first stage of the assessment involves establishing the significance and importance of the heritage assets and assessing the sensitivity of those assets to change (impact). Using the proposed design for the Proposed Development, an assessment of the impact magnitude is made and a judgement regarding the level and significance of effect is arrived at.

Criteria for Assessing Sensitivity of Heritage Assets

- 12.5.5 The definition of cultural significance is readily accepted by heritage professionals both in the UK and internationally and was first fully outlined in the Burra Charter, which states in article one that 'cultural significance' or 'cultural heritage value' means aesthetic, historic, scientific, social or spiritual value for past, present or future generations (ICOMOS 2013, Article 1.2). This definition has since been adopted by heritage organisations around the world, including HES. HEPS notes that to have cultural significance an asset must have a particular "*aesthetic, historic, scientific or social value for past, present and future generations*" (HES 2019a). Heritage assets also have value in the sense that they "*...contribute to sense of place, cultural identity, social wellbeing, economic growth, civic participation and lifelong learning*" (Scottish Government 2020, 33).
- 12.5.6 All heritage assets have significance; however, some heritage assets are judged to be more important than others. The level of that importance is, from a cultural resource management perspective, determined by establishing the asset's capacity to contribute to our understanding or appreciation of the past (HES 2019b). In the case of many

heritage assets their importance has already been established through the designation (i.e. Scheduling, Listing and Inventory) processes applied by HES.

- 12.5.7 The rating of importance of heritage assets is first and foremost made in reference to their designation. For non-designated assets importance will be assigned based on professional judgement and guided by the criteria presented in Table 12.2, which itself relates to the criteria for designations as set out in HES's Designation Policy and Selection Guidance (HES 2019b) and Scotland's Listed Buildings (HES 2019c).

Table 12.2: Criteria for Establishing Importance of Heritage Assets

Importance	Receptors
Very High	World Heritage Sites (As protected by SPP, 2020); Other designated or non-designated assets with demonstrable Outstanding Universal Value.
High	Scheduled Monuments (as protected by the Ancient Monuments and Archaeological Areas Act 1979 (the "1979 Act"); Category A Listed Buildings (as protected by the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997) (the "1997 Act"); Inventory Gardens and Designed Landscapes (as protected by the 1979 Act, as amended by the Historic Environment (Amendment) (Scotland) Act 2011); Inventory Battlefields (as protected by the 1979 Act, as amended by the 2011 Act); Outstanding examples of some period, style or type; Non-designated assets considered to meet the criteria for the designations as set out above (as protected by SPP, 2020).
Medium	Category B and C Listed Buildings (as protected by the 1997 Act); Conservation Areas (as protected by the 1997 Act); Major or representative examples of some period, style or type; or Non-designated assets considered to meet the criteria for the designations as set out above (as protected by SPP, 2020);
Low	Locally Listed assets; Examples of any period, style or type which contribute to our understanding of the historic environment at the local level.
Negligible	Relatively numerous types of assets; Findspots of artefacts that have no definite archaeological remains known in their context. The above non-designated assets are protected by Paragraph 137 of SPP, 2020.

- 12.5.8 Determining cultural heritage significance can be made with reference to the intrinsic, contextual and associative characteristics of an asset as set out in HEPS (HES 2019a) and its accompanying Designation Policy and Selection Guidance (HES 2019b). HEPS

Designation Policy and Selection Guidance (2019b) indicates that the relationship of an asset to its setting or the landscape makes up part of its contextual characteristics. The Xi'an Declaration (ICOMOS 2005) set out the first internationally accepted definition of setting with regard to heritage assets, indicating that setting is important where it forms part of or contributes to the significance of a heritage asset. While SPP does not differentiate between the importance of the asset itself and the importance of the asset's setting, HES's Managing Change Guidance, in defining what factors need to be considered in assessing the impact of a change on the setting of a historic asset or place, states that the magnitude of the proposed change should be considered "*relative to the sensitivity of the setting of an asset*" (HES 2020, 11); thereby making clear that assets vary in their sensitivity to changes in setting and thus have a relative sensitivity.

- 12.5.9 The EIA Handbook suggests that cultural significance aligns with sensitivity but also states that "*the relationship between value and sensitivity should be clearly articulated in the assessment*" (HES and SNH 2018, 184). It is therefore recognised (ibid) that the importance of an asset is not the same as its sensitivity to changes to its setting. Elements of setting may make a positive, neutral, or negative contribution to the significance of an asset. Thus, in determining the nature and level of effects upon assets and their settings by a development, the contribution that setting makes to an asset's significance and thus its sensitivity to changes to setting need to be considered.
- 12.5.10 This approach recognises the importance of preserving the integrity of the setting of an asset in the context of the contribution that setting makes to the understanding, appreciation and experience of a given asset. It recognises that setting is a key characteristic in understanding and appreciating some, but by no means all, assets. Indeed, assets of High or Very High importance do not necessarily have high sensitivity to changes to their settings (e.g. do not necessarily have a high relative sensitivity). An asset's relative sensitivity to alterations to its setting refers to its capacity to retain its ability to contribute to our understanding and appreciation of the past in the face of changes to its setting. The ability of an asset's setting to contribute to an understanding, appreciation and experience of it and its significance also has a bearing on the sensitivity of that asset to changes to its setting. While heritage assets of High or Very High importance are likely to be sensitive to direct effects, not all will have a similar sensitivity to effects on their setting; this would be true where setting does not appreciably contribute to their significance. HES's guidance on setting makes clear that the level of effect may relate to "*the ability of the setting [of an asset] to absorb new development without eroding its key characteristics*" (2020, 11). Assets with Very High or High relative sensitivity to settings effects may be vulnerable to any changes that affect their settings, and even slight changes may erode their key characteristics or the ability of their settings to contribute to the understanding, appreciation and experience of them. Assets whose relative sensitivity to changes to their setting is lower, may be able to accommodate greater changes to their settings without having key characteristics eroded.
- 12.5.11 The criteria used for establishing an asset's relative sensitivity to changes to its setting is detailed in Table 12.3. This table has been developed based on AOC's professional judgement and experience in assessing setting effects. It has been developed with reference to the policy and guidance noted above including SPP (Scottish Government 2020), HEPS (HES 2019a) and its Designation Policy and Selection Guidance (HES 2019b), the Xi'an Declaration (ICOMOS 2005), the EIA Handbook (SNH & HES 2018) and HES's guidance on the setting of heritage assets (HES 2020).

Table 12.3: Criteria for Establishing Relative Sensitivity of a Heritage Asset to Changes to its Setting

Relative Sensitivity	Criteria
Very High	An asset, the setting of which, is critical to an understanding, appreciation, and experience of it should be thought of as having Very High Sensitivity to changes to its setting. This is particularly relevant for assets whose settings, or elements thereof, make an essential direct contribution to their cultural significance (e.g. form part of their Contextual Characteristics (HES, 2019b, Annex 1)).
High	An asset, the setting, of which, makes a major contribution to an understanding, appreciation, and experience of it should be thought of as having High Sensitivity to changes to its setting. This is particularly relevant for assets whose settings, or elements thereof, contribute directly to their cultural significance (e.g. form part of their Contextual Characteristics (HES, 2019b, Annex 1)).
Medium	An asset, the setting of which, makes a moderate contribution to an understanding, appreciation, and experience of it should be thought of as having Medium Sensitivity to changes to its setting. This could be an asset for which setting makes a contribution to significance but whereby its value is derived mainly from its other characteristics (HES 2019b).
Low	An asset, the setting of which, makes some contribution to an understanding, appreciation, and experience of it should generally be thought of as having Low Sensitivity to changes to its setting. This may be an asset whose significance is predominantly derived from its other characteristics.
Negligible	An asset whose setting makes minimal contribution to an understanding, appreciation, and experience of it should generally be thought of as having Negligible Sensitivity to changes to its setting.

12.5.12 The determination of a heritage asset's relative sensitivity to changes to its setting is first and foremost reliant upon the determination of its setting and the key characteristics of setting which contribute to its cultural significance and an understanding and appreciation of that cultural significance. This aligns with Stage 2 of the HES guidance on setting (2020, 9). The criteria set out in Table 12.3 are intended as a guide. Assessment of individual heritage assets is informed by knowledge of the asset itself; of the asset type if applicable and by site visits to establish the current setting of the assets. This will allow for the use of professional judgement and each asset is assessed on an individual basis.

Criteria for Assessing Magnitude of Impact

12.5.13 Potential impacts, that is the physical change to known heritage assets, and unknown buried archaeological remains, or changes to asset settings, in the case of the Proposed Development relate to the possibility of disturbing, removing or destroying in situ remains and artefacts during the construction phase or the placement of new features within their setting during the operational phase.

12.5.14 The magnitude of the impacts upon heritage assets caused by the Proposed Development is rated using the classifications and criteria outlined in Table 12.4.

Table 12.4: Criteria for Classifying Magnitude of Impact

Impact Magnitude	Criteria
High	Substantial loss of information content resulting from total or large-scale removal of deposits from an asset; Major alteration of an asset's baseline setting, which materially compromises the ability to understand, appreciate and experience the contribution that setting makes to the significance of the asset and erodes the key characteristics (HES 2020) of the setting.
Medium	Loss of information content resulting from material alteration of the baseline conditions by removal of part of an asset; Alteration of an asset's baseline setting that effects the ability to understand, appreciate and experience the contribution that setting makes to the significance of the asset to a degree but whereby the cultural significance of the monument in its current setting remains legible. The key characteristics of the setting (HES 2020) are not eroded.
Low	Detectable impacts leading to minor loss of information content; Alterations to the asset's baseline setting, which do not affect the observer's ability to understand, appreciate and experience the contribution that setting makes to the asset's overall significance.
Negligible	Loss of a small percentage of the area of an asset's peripheral deposits; A reversible alteration to the fabric of the asset; A marginal alteration to the asset's baseline setting.
None	No effect predicted.

Criteria for Assessing Magnitude of Impact

- 12.5.15 The predicted level of effect on each heritage asset is then determined by considering the asset's importance and/or relative sensitivity in conjunction with the predicted magnitude of the impact. The method of deriving the level of effect is provided in Table 12.5.

Table 12.5: Level of Effect based on Inter-Relationship between the Importance and/or Sensitivity of a Heritage Asset and/or its setting and the Magnitude of Impact

Magnitude of Impact	Importance and/or Sensitivity				
	Negligible	Low	Medium	High	Very High
High	Minor	Moderate	Moderate	Major	Major
Medium	Negligible /Neutral	Minor	Moderate	Moderate	Major
Low	Negligible /Neutral	Negligible/ Neutral	Minor	Minor	Moderate
Negligible	Negligible /Neutral	Negligible /Neutral	Negligible/ Neutral	Minor	Minor

- 12.5.16 The level of effect is judged to be the interaction of the asset's importance and/or relative sensitivity (Tables 12.2 and/or 12.3) and the magnitude of the impact (Table 12.4). In order to provide a level of consistency, the assessment of importance and relative sensitivity, the magnitude of impact and the assessment of level of effect are guided by pre-defined criteria. However, a qualitative descriptive narrative is also provided for each asset to summarise and explain each of the professional value judgements that have been made in establishing importance and/or sensitivity and magnitude of impact for each individual asset.
- 12.5.17 Using professional judgment and with reference to the Guidelines for Environmental Impact Assessment (as updated) (IEMA 2017), and the EIA Handbook (2018), the assessment considers moderate and greater effects to be significant (shaded grey in Table 12.5), while minor and lesser effects are considered not significant.

Integrity of Setting

- 12.5.18 SPP notes that where there is potential for a proposed development to have an adverse effect on a Scheduled Monument or on the integrity of its setting, permission should only be granted where there are 'exceptional circumstances' (Scottish Government 2020, para 145). Adverse effects on integrity of setting are judged here to relate to whether a change would seriously adversely affect the asset's key attributes or elements of setting which contribute to an asset's significance to the extent that that the setting of the asset can no longer be understood or appreciated.
- 12.5.19 In terms of effects upon the setting of heritage assets, it is considered that only those effects identified as 'significant' in the assessment will have the potential to adversely affect integrity of setting. Where no significant effect is found, it is considered that the integrity of an asset's setting will remain intact. This is because for many assets, setting may make a limited contribution to their significance and as such changes would not affect the integrity of their settings. Additionally, as set out in Table 12.4, lower ratings of magnitude of change relate to changes that would not obscure or erode key characteristics of setting.
- 12.5.20 Where significant effects are found, a detailed assessment of adverse effects upon integrity of setting is made. Whilst non-significant effects are unlikely to affect integrity of setting, the reverse is not always true. That is, the assessment of an effect as being 'significant' does not necessarily mean that the adverse effect to the asset's setting will harm its integrity. The assessment of adverse effect upon the integrity of an asset's setting, where required, will be a qualitative one, and will largely depend upon whether the effect predicted would result in a major impediment to the ability to understand or appreciate the heritage asset and therefore reduce its cultural significance.

Cumulative Effect Assessment

- 12.5.21 It is necessary to consider whether the effects of other schemes in conjunction with the Proposed Development would result in an additional cumulative change upon heritage assets, beyond the levels predicted for the Proposed Development alone. The in-combination effect also needs to be considered. However, only those assets which are judged to have the potential to be subject to significant cumulative effects will be included in the detailed cumulative assessment provided.
- 12.5.22 The cumulative assessment will have regard to the guidance on cumulative effects upon heritage assets as set out in Environmental Impact Assessment Handbook V5 (SNH & HES

2018) and will utilise the criteria used in determining effects from the Proposed Development as outlined in Tables 12.2 to 12.5 above. The assessment of cumulative effects will consider whether there would be an increased impact, either additive or synergistic, upon the setting of heritage assets as a result of adding the Proposed Development to a baseline, which may include operational, under construction, consented or proposed developments as agreed with THC.

12.5.23 In determining the degree to which a cumulative effect may occur as a result of the addition of the Proposed Development into the cumulative baseline a number of factors are taken into consideration including:

- the distance between wind farms;
- the interrelationship between their Zones of Theoretical Visibility (ZTV);
- the overall character of the asset and its sensitivity to wind farms;
- the siting, scale and design of the wind farms themselves;
- the way in which the asset is experienced;
- the placing of the cumulative wind farm(s) in relation to both the individual proposal being assessed and the heritage asset under consideration; and
- the contribution of the cumulative baseline schemes to the significance of the effect, excluding the individual proposal being assessed, upon the setting of the heritage asset under consideration.

12.5.24 This assessment is based upon a list of operational or consented developments along with developments where planning permission has been applied for. Cumulative developments are consistent with those assessed as part of the Landscape and Visual Impact Assessment (Chapter 7 of this EIA Report). While all have been considered, only those which contribute to, or have the possibility to contribute to cumulative effects on specific heritage assets, are discussed in detail in the text. Additionally, given the emphasis NatureScot place on significant effects, cumulative effects have only been considered in detail for those assets where the effect on setting from the Proposed Development alone, has been judged to be minor or greater. The setting of assets which would have a magnitude of impact of negligible or less are judged to be unlikely to reach the threshold of significance as defined in Table 12.5.

Requirements for Mitigation

12.5.25 National and local planning policies and planning guidance outlined in Section 12.3 of this report, require a mitigation response that is designed to take cognisance of the possible impacts upon heritage assets by a proposed development and avoid, minimise, or offset any such impacts as appropriate. The planning policies and guidance express a general presumption in favour of preserving heritage remains in situ [wherever possible]. Their 'preservation by record' (i.e. through excavation and recording, followed by analysis and publication by qualified archaeologists) is a less desirable alternative (SPP 2020, paras 137, 150).

Assessment of Residual Effect Significance

12.5.26 The residual effect is what remains following the application of mitigation and management measures, and construction has been completed and is thus the final level of impact associated with the Proposed Development. The level of residual effect is defined using criteria outlined in Tables 12.2 to 12.5. No direct mitigation is possible for setting effects (beyond embedded mitigation by design) and therefore residual effects on

the setting of heritage assets would be the same as predicted for the operational phase. The predicted level of effect on each heritage asset is determined by considering the asset's sensitivity in conjunction with the predicted magnitude of the impact.

Limitations to Assessment

- 12.5.27 This assessment is based upon data obtained from publicly accessible archives as described in the Data Sources in Section 12.4.1. HER data was received from THC in February 2020 and NRHE data and HES Designation data was downloaded from HES in September 2020 and checked in March 2021. This assessment does not include any records added or altered after this date.
- 12.5.28 This assessment has relied upon previous work undertaken on this site, which was undertaken in association with proposed Glencassley Wind Farm in 2011 and 2012. In particular, it relies on the desk-based research undertaken for that assessment in terms of review of aerial photography and the results of the walkover survey. A thorough walkover survey was undertaken in 2011 and as the previous surveyors AOC holds all the relevant data and records obtained during that survey. Further, AOC understands that there have been no material changes to land use on-site and, as such, it was not considered necessary to repeat the walkover survey for the current assessment.

12.6 Baseline

Context

- 12.6.1 Desk-based assessment and the previous walkover survey have identified six non-designated heritage assets within the Site (Figure 12.1). These include fence lines (Assets 51 & 52), cairns (Assets 56 & 59), a stalker's path (Asset 49) and a sheiling hut (Asset 47). These assets are primarily post-medieval or modern in date and relate to management of the estate.
- 12.6.2 Within 5km from the Site, there are ten Scheduled Monuments, which include brochs (Assets 44 & 45), settlement (Assets 27, 31, 33 & 42), chambered cairns (Assets 35 & 36), and stone circles (Assets 37 & 38). There are seven Category B Listed Buildings (Assets 2, 3, 5, 7-9 & 14) and six Category C Listed Buildings (Assets 4, 6 & 10-13).
- 12.6.3 Between 5km and 10km from the Site, there are a further 21 Scheduled Monuments (Assets 15-26, 28-30, 32, 34, 39-41 & 43), which include prehistoric dwellings and burial monuments, a dun, stone circles, and post-medieval settlement, enclosures, and field systems. There is also one Category A Listed Buildings (Asset 1) and an Inventory Battlefield (Asset 46).

Archaeological and Historical Background

Prehistoric (8000 BC – AD 43) and Roman (AD 43 – 410)

- 12.6.4 There are no heritage assets of prehistoric or Roman date within the Site. The cairns identified on historic mapping and during the walkover survey in 2011 appear to be walkers' or marker cairns of later date.
- 12.6.5 There are no heritage assets of prehistoric or Roman date recorded within 1km of the Site. Several of the Scheduled Monuments located within 10km of the Site are prehistoric in date and include brochs, burnt mounds, hut circles, burial cairns, and standing stones and stone circles. The majority of the assets are located to the south-east of the Site along

Loch Shin and Achany Glen or to the east of the Site within Dalchork Wood. Only Dail Langwell broch (Asset 45) lies within Glen Cassley itself. The broch dates to the Iron Age and comprises the remains of a complex stone built round house surviving as roughly circular dry-stone wall structure (HES 2021a).

- 12.6.6 On the basis of current evidence, there is judged to be low potential for archaeological remains of prehistoric or Roman date to survive within the Site.

Early Historic and Medieval (AD 410 – 1600)

- 12.6.7 While there are no known heritage assets of Early Historic date within the Site, it is possible that 'Cassley', and earlier forms such as 'Chassil' (Gordon 1636; Blaeu 1654), derives from the Middle Irish casel, or caiseal, meaning a stone wall or a stone fort (Watson 1916, 516), suggesting that the river and valley are named after Dail Langwell broch (Asset 45), which stands on the western bank of the River Cassley, c. 2.39km to the north-west of the Site and 3.44km from the nearest proposed turbine.

- 12.6.8 There are no heritage assets of clearly medieval date within the Site, though it is possible that several of the small farming settlements identifiable on early post-medieval historic maps within the valley of the River Cassley, and beyond the 1km Study Area, such as Glenmuick may date to this period.

- 12.6.9 While the evidence above indicates the use of Glen Cassley during the Early Historic and medieval periods, this activity appears to have been concentrated along the river and at lower elevations of the glen. As such, the potential for hitherto unknown remains of Early Historic or medieval date to survive on the Site is considered to be low.

Post-medieval (AD 1600 – 1900)

- 12.6.10 There are six previously recorded heritage assets of likely post-medieval date within the Site (Assets 47, 49, 51, 52, 56 & 59). This includes the remains of a rectangular structure, interpreted by the NRHE as a possible shieling hut in close proximity to Loch an Rasail (Asset 47). The other assets include a fence line (Asset 52), marker cairns (Assets 56 & 59), a stalker's path (Asset 49) and boundary markers (Asset 51). All of which likely relate to the management of the estate from the post-medieval period onwards.

- 12.6.11 Just beyond the 1km Study Area and along Glen Cassley, there are numerous post-medieval heritage assets, the majority being structures associated with agricultural and gamekeeping activity within the low-lying valley of the River Cassley, to the north-west and south-west of the Site. The east side of Glen Cassley formed part of the Rosehall Estate in the 18th century, which was let as a sheep farm (Bangor-Jones 2002, 198).

- 12.6.12 Pre-Ordnance Survey historic maps tend to lack detail and be schematic in nature. However, settlement is marked at 'Glenmuick' on Robert Gordon's map of between 1636 and 1652, while Blaeu's map of 1654 depicts 'Glenmuick' (not illustrated). Both Gordon and Blaeu refer to the area as 'Glenchassil'. The farmstead of Glenmuick is depicted on the 1st Edition Ordnance Survey map of 1873 (not illustrated), together with settlement at Croich, Badintagairt, Glencassley Castle and Rossal, and a number of sheep fanks and enclosures. All the structures are located on the valley floor close to the River Cassley.

- 12.6.13 There are 13 19th century Listed Buildings within 5km of the Site, which include bridges at Invernauld, Invercassley and Brae Doune (Assets 2, 5 & 8), houses at Rosehall, Achinduich, Achany and Aultnagar (Assets 3, 4, 7, 9 & 14), churches and associated buildings at Rosehall and Lairg (Assets 6 & 10-12), and the dam and power station at Lairg (Asset 13).

- 12.6.14 While the evidence above indicates the use of Glen Cassley during the post-medieval period, this activity appears to have been concentrated along the river and at the lower elevations of the glen. As such, the potential for hitherto unknown remains of post-medieval date to survive on the Site is considered to be low.

Modern (AD 1900 -)

- 12.6.15 There are no modern assets recorded within the Site, though continued use of the assets within the Site, as identified above, is likely to have occurred. While Glen Cassley continues to be used, this use remains concentrated along the river and at the lower elevations of the glen. As such, the potential for hitherto unknown modern remains to survive on the Site is considered low.

Walkover Survey

- 12.6.16 A systematic walkover survey of the site was undertaken between 08 and 17 August 2011 to investigate the condition and significance of known archaeology on the Site and identify any previously unknown remains. All assets recorded during this survey have been included in this assessment and are detailed in the post-medieval section above. The survey covered a larger area than that now proposed for development. As the previous surveyors, AOC holds all the relevant data and records obtained during that survey. Receptors Brought Forward for Assessment

Receptors Brought Forward for Assessment of Direct Effects

- 12.6.17 A total of six cultural heritage assets have been identified within the Site. Their relative importance has been classified according to the method shown in Table 12.2 and is discussed below and summarised in Table 12.6.

Table 12.6: Assets Brought Forward for Assessment

Asset Number	Asset Name	Designation	Description	Importance
47	Loch an Rasail	Non-designated	Shieling Hut (Possible)	Low
49	Stalker's Path	Non-designated	Stalker's Path	Low
51	Boundary	Non-designated	Boundary	Negligible
52	Fence Line/Boundary	Non-designated	Fence Line/Boundary	Negligible
56	Walker's Cairn	Non-designated	Walkers Cairn	Low
59	Cairn (Possible)	Non-designated	Cairn (Possible)	Low

- 12.6.18 The possible shieling hut at Loch an Rasail (Asset 47), stalker's path (Asset 49) and probable walkers' or marker cairns (Assets 56 and 59) represent activity on the Site in the post-medieval and modern period attesting to use of the estate and land. On the basis

that they could contribute to an understanding of the historic environment at a local level they are judged to be of Low importance.

- 12.6.19 The two boundaries or fence lines (Asset 51 & 52) were identified from the 2nd edition Ordnance Survey mapping, estate maps and on aerial photographs. During the 2011 walkover survey they were found to be in a state of deterioration and largely represented by the remains of wooden posts. While these boundaries indicate previous land division within the estate, and in the case of Asset 51, the district and ward boundaries around Loch na Fuaralaich, Loch an Rasail and Loch Sheila, they represent extremely common remains in poor condition. They are unlikely to provide any information further to that recorded on maps and aerial photographs. As such they are judged to be of Negligible importance.

Receptors Brought Forward for Assessment of Setting Effects

- 12.6.20 Within 10km of the Site, there are 31 Scheduled Monuments (Assets 15-45). ZTV analysis indicates that there would be no visibility from the 13 assets noted below (See Figure 12.2 for ZTV with Assets) and, as such, they have not been taken forward for assessment:

- Loch Tigh na Creig farmstead (Asset 17);
- Creagan Tigh na Creige shielings (Asset 18);
- Invershin Primary School settlement (Asset 19);
- Langwell fort and dun (Asset 23);
- Invershin Farm standing stone (Asset 29);
- Achinduich hut circle (Asset 31);
- The Ord prehistoric complex (Asset 33);
- Lairg Moor South chambered cairn (Asset 34);
- Achany cairn (Asset 35);
- Achany chambered cairn (Asset 36);
- Achinduich stone circle (Asset 37);
- River Shin stone circle (Asset 38); and
- Sallachy broch (Asset 44).

- 12.6.21 There are 13 Category B and C Listed Buildings within 5km of the Site. ZTV analysis indicates that there would be no visibility from the nine assets noted below and, as such, they have not been taken forward for assessment:

- Invernauld Bridge (Asset 2);
- Old Achinduich House (Asset 7);
- Brae Doune Foot Bridge (Asset 8);
- Achany House (Asset 9);
- Lairg Free Church of Scotland (Asset 10);
- Lairg Free Church of Scotland Church Hall (Asset 11);
- Lairg Free Church of Scotland Manse (Asset 12);
- Lairg Dam and Power Station (Asset 13); and
- Aultnagar Lodge (Asset 14).

12.6.22 All other assets identified on Figure 12.2 and in Technical Appendix 12.1: Site Gazetteer have been found to lie within the ZTV and, as such, have been carried forward for detailed assessment. These assets are indicated in Table 12.7.

Table 12.7: Assets Brought Forward for Assessment

Asset Number & Name	Designation	Distance to nearest proposed turbine
Asset 1 Shin Railway Viaduct	Category A Listed Building	3.44km east
Asset 3 Rosehall House and walled garden	Category B Listed Building	5.23km north
Asset 4 Rosehall, North Lodge and adjoining walls	Category C Listed Building	5.03km north
Asset 5 Cassley Bridge, Rosehall	Category B Listed Building	4.55km north
Asset 6 United Free Church, Rosehall	Category C Listed Building	5.44km north-north-west
Asset 15 Loch Tigh na Creige, house 200m N of E end of	Scheduled Monument	14.99km south-west
Asset 16 Meall Meadhonach, hut circles, field system and shielings 750m SW of	Scheduled Monument	14.10km south-west
Asset 20 Invershin Farm, settlement and burnt mound 1200m E of	Scheduled Monument	15.14km north-west
Asset 21 Invershin Farm, settlement and burnt mound 500m E of	Scheduled Monument	14.60km north-west
Asset 22 Invershin primary School, settlement 600m E of	Scheduled Monument	14.50km north-west
Asset 24 Altbreck, homestead 1800m ESE of Dalchork Bridge	Scheduled Monument	12.26km south-west
Asset 25 Loch Tigh na Creige, settlement 650m W of W end of loch	Scheduled Monument	13.14km west-south-west
Asset 26 Loch Tigh na Creige, sheepfold 300m NW of NE corner of	Scheduled Monument	14.65km south-west
Asset 27 Achany Glen, settlement 900m to 1850m S of Lairg Station	Scheduled Monument	11.22km north-west
Asset 28 Lairg Muir North, chambered cairn 500m NW of Culbuie	Scheduled Monument	11.93km west

Asset Number & Name	Designation	Distance to nearest proposed turbine
Asset 30 Invershin Station, chambered cairn 400m N of	Scheduled Monument	15.17km north-west
Asset 32 Balcharn, chambered cairn 120m W of	Scheduled Monument	12.22km west
Asset 39 Altbreck, broch 1650m ESE of Dalchork Bridge	Scheduled Monument	12.16km south-west
Asset 40 Loch Dola, hut circles and clearance cairns 270m E of	Scheduled Monument	13.78km west-south-west
Asset 41 Creag Innse Chombaig, hut circles SSW of	Scheduled Monument	14.89km west-north-west
Asset 42 Druim Baile Fuir, stone circle, cairns, hut circles and enclosure	Scheduled Monument	9.51km north-west
Asset 43 Loch Tigh Na Creige, hut circle 350m N of NE corner	Scheduled Monument	14.69km south-west
Asset 45 Dail Langwell, broch 1675m NW of Croich	Scheduled Monument	3.44km east
Asset 46 Battle of Carbisdale	Inventory Battlefield	14.93km north-west

12.7 Potential Effects

Construction

- 12.7.1 During construction, direct physical impacts could occur from site vegetation clearance, earthmoving operations, creation of the substation, track construction, and construction of all associated infrastructure (turbine bases, compounds, drainage etc.). Setting impacts may occur due to the introduction of construction machinery on-site, additional construction traffic and construction of compounds. Given the nature of such impacts setting impacts are only likely to occur in close proximity to the proposed works. Given that the closest designated asset to the Site, Dail Langwell broch (Asset 45), lies 3.34km from the nearest element of proposed infrastructure and 3.44km east of the nearest turbine, no significant construction effects on setting are anticipated. Any effects of construction activities upon setting would be temporary, short-term and reversible and would be, at worst, of negligible significance.
- 12.7.2 The Proposed Development has been designed to avoid direct impacts on known heritage assets where possible. Two of the six non-designated assets that have been identified on the Site could potentially be directly impacted by the Proposed Development (Assets 51 and 52) (Figure 12.1). These assets both represent the fractured remains of boundaries/fence lines. Asset 51 would be crossed once by the access track at the southern extent of the Site and once to the south of Turbine 16, and the hardstanding

associated with Turbine 18 would overlie a c. 55m section of the feature. Two areas of the fence line (Asset 52) would also be crossed, once by the access track between Turbines 8 and 5 and once by the hardstanding associated with Turbine 5.

- 12.7.3 Both assets are considered to be of Negligible importance and, while they would be crossed in places by the proposed access tracks and areas of hardstanding, impacts would be at worst of negligible magnitude. This is because any disturbance of these features would be restricted to very small elements of the assets and would lead to a barely measurable loss of information content. Indeed, given the rare survival of posts associated with Asset 52, the impact on this feature might be non-existent. At worst, these impacts would represent **negligible** level effects, which are **not significant**. As such, no mitigation is recommended.

Operation

- 12.7.4 Operational phase effects have the potential to impact upon the settings of assets such as Scheduled Monuments, Listed Buildings and Inventory Battlefields. There are no Inventory Gardens and Designed Landscapes, Conservation Areas or World Heritage Sites within the Study Areas. ZTV analysis and mapping have been used to identify those assets that could potentially be affected by changes to their settings during the operational phase of the Proposed Development and the assets that have been carried forward for detailed assessment have been outlined in Table 12.7. The detailed assessments have included a review of the contextual characteristics of each asset using information drawn from their designation documentation, supplemented by observations on the morphology, condition and character of each asset and the nature of their settings made during site visits undertaken in November 2020.
- 12.7.5 With the exception of Dail Langwell broch (Asset 45), on which the settings assessment found the Proposed Development would have a **moderate**, and therefore significant effect, it was found that the effect of the Proposed Development upon the setting of the designated assets would not be significant as the effect levels would range from **negligible** to **minor**. A summary of the effects is presented below in Table 12.3.1 in Technical Appendix 12.3 and this is accompanied by a detailed qualitative assessment for each asset. Given the potential significant effect upon Dail Langwell, broch (Asset 45) it is discussed below.

Dail Langwell (Asset 45)

- 12.7.6 The Scheduled broch at Dail Langwell (Asset 45), situated 1.675km north-west of Croich, is a complex stone-built substantial roundhouse located on a northeast-facing slope about 24m above the River Cassley (Plates 12.1-12.3; Technical Appendix 12.2). Standing walls remain but much of the structure has collapsed forming a large debris field. The outer wall of the asset has an external diameter of 21m and measures up to 3.4m in height; the surviving evidence suggesting it was a tall broch tower. Being large, complex structures, brochs could have accommodated either an extended family or a small community and are often understood in terms of being an elite settlement. Other interpretations stress their likely role as fortified or defensive sites, possibly serving a community across a wider area. Whichever purpose it served, Dail Langwell would have been associated with the land to the west and east for agricultural purposes.
- 12.7.7 Dail Langwell sits in a prominent position on a steep-sided hillock directly above a narrow and relatively shallow point in the River Cassley that provides a natural fording point. When viewed at a distance, from the road during the site visit, in its current condition the

broch merges somewhat into the backdrop and is not a prominent feature. The broch does, however, command open views along the river valley to the north and south. Like many broch's, it has likely been positioned to be a prominent feature in the local landscape, with good natural defences and views of the surrounding landscape. As such, the broch was clearly built with its vertical and visual planes in mind, with the likely intention of being seen from, and commanding wide views of, the valley and the route ways along it, together with being visible from the hills on the east side of the valley. It is, therefore, considered to be of high relative sensitivity to change, particularly within its immediate setting of the river crossing and land to the base of the hills on the eastern side of the valley. The cumulative wireline presented in Figure 12.3.1 indicates that the very extreme tips of three turbines from the Rosehall Wind Farm are visible from the broch, though given the extremely limited proportion of tip visible these were not perceptible during the site visit. No turbines of the operational Achany Wind Farm are visible from the broch.

- 12.7.8 The nearest turbine of the Proposed Development would be 3.44km to the east-south-east of the asset. The ZTV indicates that between 15 and 20 turbines would be visible from the asset. Figure 12.3.1 to 12.3.3 provides a baseline photograph, wireline and photomontage from the broch indicating that, of the 17 turbines visible, eight of these would be blade tips or extreme tips and nine would be hubs or higher. The majority of turbines would be viewed beyond the ridgeline and outwith the broch's important valley setting, with only Turbine 8 appearing on the western side of the ridge line along the eastern side of the valley. However, as the photomontage demonstrates, the Proposed Development would not diminish the ability to understand and appreciate the vertical location of the broch in the landscape, nor would it impede the ability of the viewer to understand its defensive advantages. The near, and key views from the broch over the river crossing, the agricultural land to the east, and the open views to the north and south, up and down the glen, would still be understandable and remain appreciable. However, there may be some effect on the current aesthetic experience of the asset, as the Proposed Development would introduce relatively large modern features above the glen, where previously development has been of a smaller scale. Stone from the broch may have been re-used to construct the adjacent, relatively modern, sheep fank, which affects the current experience in terms of both the aesthetics of the broch and the understanding of its form and function. At worst there is judged to be a medium magnitude of setting impact from the Proposed Development. Overall, this would lead to a **moderate** level of effect, which is considered to be **significant** in EIA terms.

- 12.7.9 Whilst there would be a potentially significant effect upon the setting of the broch, as noted above the asset's key relationship with the River Cassley and the glen would still be appreciable and the ability to understand its defensive position would not be diminished. On this basis there would not be an adverse effect upon the integrity of the asset's setting.

Decommissioning

- 12.7.10 Detailed assessment of impacts on cultural heritage assets arising from the decommissioning phase have been scoped out of this assessment. A detailed assessment of the cultural heritage impacts of decommissioning the Proposed Development has not been undertaken as part of the EIA because: (i) the future baseline conditions (environmental and other developments) cannot be predicted accurately at this stage; (ii) the detailed proposals for decommissioning are not known at this stage, and (iii) the

best practice decommissioning guidance methods will likely change during the lifetime of the Proposed Development.

- 12.7.11 In general, it is anticipated that direct impacts during the decommissioning phase would be limited and would only occur if new ground works are required beyond the areas disturbed during the original construction works and as such no significant direct effects are expected to arise from the decommissioning phase of the Proposed Development. All indirect operational effects upon the settings of designated assets would be reversed with the removal of the turbines following decommissioning, leading to a neutral and not significant effect.

12.8 Mitigation

- 12.8.1 National planning policies and planning guidance as well as the local planning policies require that account be taken of potential effects upon heritage assets by proposed developments and that where possible such effects are avoided. Where avoidance is not possible effects should be minimised or offset.

Development Design

- 12.8.2 The Proposed Development has been subject to an iterative design process whereby environmental (including setting effects) and technical constraints have been given due consideration (see Chapter 2: Site Selection and Design Evolution for further details).
- 12.8.3 The design has considered the presence and setting of the Scheduled Dail Langwell Broch (Asset 45) and sought to reduce impacts upon the setting of it, particularly by limiting the number of turbines that can be seen from within the glen and by moving turbines south towards the existing Achany Wind Farm. When compared with the previous 2012 Glencassley application this has reduced the effect upon the setting of the broch by limiting the views from the broch in which turbines would be seen and by moving the majority of turbines behind the ridgeline which marks the eastern extent of the glen. Further detail of the design evolution is provided in Chapter 2: Site Selection and Design Evolution. Beyond these steps taken during the iterative design process to minimise impacts upon the setting of the broch, there are no direct measures that can be offered to further mitigate the predicted effects. However, it is reiterated, as set out above, that the asset's key relationship with the River Cassley and the glen would still be appreciable and the ability to understand its defensive position would not be diminished. On this basis there would not be an adverse effect upon the integrity of the asset's setting.

Additional Mitigation and Enhancement

- 12.8.4 The known archaeological remains within the Site are mostly of negligible or local cultural value, and furthermore, direct impacts of only negligible level effects are predicted on two heritage assets. However, given the presence of large zones of (generally shallow) peat moorland within the Site there is a low probability that currently unknown buried remains might be disturbed by ground-breaking works on the Site during construction. Accordingly, a representative proportion of these works, in areas of relatively greater archaeological potential, would be subject to an archaeological watching brief during these works. The extent and location of such works would be agreed with THC Historic Environment Team. The purpose of such a watching brief would be to determine the presence, character, extent and significance of any currently unknown archaeological features or artefacts that may be disturbed by ground-breaking works.

- 12.8.5 In areas where no Watching Brief is required there will still be some potential for the presence of unknown archaeological subsurface features or structures. Guidelines for all construction contractors undertaking any ground works, without archaeological supervision, will be issued by an Archaeological Consultant to include the procedure for calling upon professional archaeological support in the event that buried remains with archaeological potential are discovered during the absence of a watching brief (see Technical Appendix 3.1: Outline CEMP). Should an adverse impact thereafter be identified for an unknown heritage asset, a mitigation strategy allowing works to proceed would be proposed and agreed with THC Historic Environment Team by way of a Written Scheme of Investigation (WSI).

12.9 Residual Effects

Construction

- 12.9.1 As stated in Paragraphs 12.7.2 and 12.7.3, the Proposed Development has been designed to avoid direct impacts on known heritage assets where possible. Two non-designated assets (Assets 51 and 52) could potentially be directly impacted by the construction of Proposed Development, however at worst, these impacts would be negligible, and no mitigation is recommended. No significant residual impacts on known heritage assets are therefore anticipated during construction.

Operation

- 12.9.2 As the mitigation measures taken to reduce setting impacts on designated cultural heritage assets have largely been implemented through the development design (as described in Paragraph 12.8.2 and 12.8.4) the predicted residual impacts on the settings of designated heritage assets will be the same as assessed for the potential effects.

12.10 Cumulative Effects

- 12.10.1 Cumulative effects relating to cultural heritage are for the most part limited to operational effects upon the settings of heritage assets. While there can in some rare cases, be cumulative direct effects, none are anticipated to result from the construction, operation or decommissioning of the Proposed Development. As such this assessment will consider the potential for cumulative effects upon the setting of heritage assets which have the potential to occur during the operational phase.
- 12.10.2 With regard to potential cumulative effects on cultural heritage assets, the assessment considers operational, consented and within-planning developments at distances up to 20km from the Proposed Development. The locations of the cumulative developments are shown on Figure 7.7.1. Developments at the scoping stage are not considered. Cumulative effects from the operational/under construction developments at Achany, Rosehall and Lairg; the consented developments at Braemore, Creag Riabhach and Lairg Extension; and the application/appeal developments at Meall Buidhe, Strath Tirry and Lairg Extension are included. While all have been considered, only those which contribute to, or have the possibility to contribute to, cumulative effects on specific heritage assets are discussed in detail in the text.
- 12.10.3 Cumulative effects have been considered for those assets where the effect upon setting from the Proposed Development alone has been judged to be of minor level or greater and/or for assets which have been identified by consultees as requiring further assessment. This is because it is judged to be unlikely that cumulative effects upon the

setting of those monuments which would be subject to low level effects (based on the Proposed Development itself) are unlikely to reach the EIA Regulation significance threshold. The assets considered for cumulative effects are detailed in Table 12.9.

Table 12.9: Summary of Cumulative Effects

Asset Number	Receptor Name	Receptor Sensitivity	Cumulative Impact Magnitude (Adverse unless stated)	Level of Effect
28	Lairg Muir North, chambered cairn, Scheduled Monument	Medium	Negligible	Minor
32	Balcharn, chambered cairn, Scheduled Monument	Medium	Negligible	Minor
39	Altbreck, broch, Scheduled Monument	High	Low	Minor
40	Loch Dola, prehistoric settlement & stone circle, Scheduled Monument	Medium	Negligible	Minor
45	Dail Langwell, broch, Scheduled Monument	High	None	None

12.10.4 The setting of the chambered cairn at Lairg Muir North (Asset 28) relates to the topographical bowl within which it sits, and its intervisibility with other funerary monuments in the area. The cairn has open views towards the Proposed Development; however, it may be horned to the south-east (HES 2021c), suggesting that its principal outlook would have been away from the Proposed Development. The operational developments at Achany to the west, and Lairg to the south-south-east, are currently visible. The Proposed Development would increase the proportion of the overall view that would be occupied by relatively large scale wind farm development but would not affect the observer's ability to understand the relationship between the monument and its position in the landscape. The magnitude of cumulative impact is judged to be negligible. The level of cumulative effect would be **minor** and **not significant**.

12.10.5 The setting of Balcharn chambered cairn (Asset 32) relates to its placement below the summit of Meall Dola, which lies to its east, and above Allt a' Choin-duinn to its west, and its relationship to a number of other cairns and tumuli located to the north and south on a relatively flat area to the east of Little Loch Shin. The operational developments of Lairg to the south, and Braemore to the west-south-west, are currently visible. The Proposed Development would increase the proportion of the overall view that would be occupied by relatively largescale wind farm development but would not affect the observer's ability to understand the relationship between the monument and its position in the landscape. The magnitude of cumulative impact is judged to be negligible. The level of cumulative effect would be **minor** and **not significant**.

- 12.10.6 The setting of Altbreck broch (Asset 39) relates to its elevated position in a large, slight topographic bowl with open views in all directions, which makes it a prominent feature in the local landscape. The position would have allowed it to take advantage of the views of the surrounding landscape. The operational developments of Lairg to the south-south-east, and Achany to the south-west, are currently visible. The Proposed Development would increase the proportion of the overall view that would be occupied by relatively largescale wind farm development but would not affect the observer's ability to understand the relationship between the monument and its position in the landscape. The magnitude of cumulative impact is judged to be low. The level of cumulative effect would be **minor** and **not significant**.
- 12.10.7 The Scheduled Monument at Loch Dola (Asset 40) consists of three separate areas containing prehistoric settlement and funerary monuments. The settlement elements of the asset would have been located in the landscape to take advantage of favourable topographical and agricultural factors defined by their position between the two lochs. The funerary monuments, however, would likely have been located for more complex reasons, one of which could have been the intervisibility with other such monuments in the area. The operational development of Achany to the west, is currently visible from two of the areas. The Proposed Development would increase the proportion of the overall view that would be occupied by relatively large scale wind farm development but would not affect the observer's ability to understand the relationship between the monuments, their position in the landscape, and relationship with other funerary monuments in the area. The magnitude of cumulative impact is judged to be negligible. The level of cumulative effect would be **minor** and **not significant**.
- 12.10.8 The setting of Dail Langwell broch (Asset 45) relates to its location commanding open views along the river valley to the north and south. The broch has been positioned to be a prominent feature in the local landscape, with good natural defences and views of the surrounding landscape. The nearest existing wind farms, and most relevant in terms of cumulative impacts, are Achany and Rosehall to the south-east. The cumulative wireline presented in Figure 12.3.2 indicates that the extreme tips of three of the operational Rosehall Wind Farm Turbines are visible from the broch. However, given the very limited proportion of tips visible these were not perceptible during the site visit made in 2020. The cumulative wireline indicates no visibility of the operational Achany Wind Farm turbines from the broch, and they were not visible during site visits in 2011 and 2020. On this basis, it is judged that there is no cumulative impact, and no cumulative effects are predicted.

12.11 Conclusion

- 12.11.1 This Chapter assesses the potential for direct and indirect effects on archaeological features and heritage assets resulting from the construction, operation and decommissioning of the Proposed Development.
- 12.11.2 A total of six known heritage assets are situated within the Site, which likely date to the post-medieval period (Assets 47, 49, 51, 52, 56 & 59). Two of these non-designated assets, both relict fences/boundaries (Assets 51 & 52, could potentially be directly impacted by the construction of the Proposed Development). Both assets are considered to be of Negligible importance and impacts would be at worst of negligible magnitude. This is because any disturbance of these features would be restricted to very small elements of the assets and would lead to a barely measurable loss of information content. As such, no mitigation is required.

- 12.11.3 Given the presence of large zones of (generally shallow) peat moorland within the Site, there is a low probability that currently unknown buried remains might be disturbed by ground-breaking works on the Site during construction. Accordingly, it is recommended that a representative proportion of these works, in areas of relatively greater archaeological potential, is subject to an archaeological watching brief during these works. The extent and location of such works would be agreed with THC Historic Environment Team through a Written Scheme of Investigation.
- 12.11.4 Potential operational effects on settings of designated heritage assets within the 5km and 10km Study Areas have been considered in detail as part of this assessment. **Moderate** and **significant** effects have been predicted upon the setting of Dail Langwell Broch (Asset 45). **Minor** and **not significant** effects have been predicted upon the setting of the chambered cairns at Lairg Muir North (Asset 28) and Balcharn (Asset 32), Altbreck Broch (Asset 39), and the domestic and funerary assets at Loch Dola (Asset 40). **Negligible** and **not significant** effects have been predicted upon the setting of the Shin Railway Viaduct (Asset 1), Rosehall House and walled garden (Asset 3), Rosehall North Lodge (Asset 4), Cassley Bridge (Asset 6), Loch Tigh Na Creige (Assets 15, 25-26 and 43), Meall Meadhonach (Asset 16), Invershin Farm (Assets 20 & 21), Invershin Primary School (Asset 22), Altbreck homestead (Asset 24), Achany Glen (Asset 27), Invershin Station (Asset 30), Creag Innse Chomhraig (Asset 41), Druim Baile Fuir (Asset 42) and Battle of Carbisdale (Asset 46).
- 12.11.5 The design of the Proposed Development has considered the presence and setting of the Scheduled Dail Langwell Broch (Asset 45) and sought to reduce impacts upon this, particularly by limiting the number of turbines that can be seen from within the glen and by moving turbines south towards the existing Achany Wind Farm. When compared with the previous 2012 Glencassley application this has reduced the effect upon the setting of the broch by limiting the views from the broch in which turbines will be seen and by moving the majority of turbines behind the ridgeline which marks the eastern extent of the glen. These changes would mean that the asset's key relationship with the River Cassley and the glen would remain appreciable and the ability to understand its defensive position would not be diminished. On this basis there would not be an adverse effect upon the integrity of the asset's setting. The possibility of cumulative effects has been considered and assessed and **no significant cumulative effects** have been identified.

12.12 References

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