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6. Cultural Heritage

6.1 Introduction

- 6.1.1 This chapter presents the likely significant effects of the proposed Glenouther Wind Farm (the 'Proposed Development') on the historic environment drawing upon the detailed assessment included within **Technical Appendix 6.1: Historic Environment Assessment (HEA)**. It details the findings of the assessment of the likely significant effects of the Proposed Development with respect to the historic environment or, using the terminology of the Environmental Impact Assessment (EIA) Regulations, cultural heritage, associated with the construction, operation and decommissioning of the Proposed Development (including cumulatively with other developments), as well as the Likely Grid Connection Route as defined in **Chapter 4: Development Description**. For the purposes of the assessment, the historic environment is held to be "*the physical evidence for past human activity. It connects people with place, and with the traditions, stories, and memories associated with places and landscapes.*" (Historic Environment Scotland [HES] 2023, p.10). Its constituent parts are known as 'heritage assets' which are synonymous with 'cultural heritage assets', 'historic assets', 'sites' or 'monuments'. These can be tangible features, buildings, or places or intangible stories, traditions and concepts (HES and Scottish Natural Heritage (SNH) 2018, p.173) that provide physical evidence of past human activity and hold sufficient value (i.e. cultural significance) to this and future generations to merit consideration in the planning system (HES and SNH 2018, p.175). This assessment therefore focuses on if, and how, the Proposed Development will change the cultural significance of heritage assets within and around it. The specific objectives of the chapter are to:
- Describe the cultural heritage baseline;
 - Describe the assessment methodology and significance of effect criteria used in completing the assessment;
 - Describe the potential significant effects, including cumulative effects;
 - Describe the mitigation measures proposed to address likely significant effects (if required); and
 - Assess the residual effects remaining following the implementation of mitigation (if required).
- 6.1.2 Relevant heritage assets are also discussed in the Landscape and Visual Impact Assessment (LVIA) presented in **Chapter 5: Landscape and Visual Impact Assessment** of this EIA Report. However, the LVIA focuses on a development's visibility from a location, such as a heritage asset, and the effect that visibility has on visitors to that location; in other words, on visual amenity. In contrast, the cultural heritage assessment focuses on effects to the cultural significance of heritage assets. Each assessment therefore considers different types of receptors (people vs. cultural significance) and effects. As such, they can come to differing conclusions on levels of effect relating to the same receptor.
- 6.1.3 The cultural heritage assessment was undertaken by LUC. Further details are provided in **Technical Appendix 1.1: Statement of Expertise**.
- 6.1.4 This chapter is supported by the following figures and visualisations which are referenced throughout the text:
- **Volume 3a: Figures**
 - **Figure 6.1: Heritage Assets within the Site;**
 - **Figure 6.2: Designated and Non-Designated Heritage Assets within 5 km Inner Study Area;**
 - **Figures 6.3a-e: Designated and Nationally Significant Heritage Assets within 10 km Outer Study Area;** and
 - **Figure 6.4: Zone of Theoretical Visibility and Viewpoint Locations.**
 - **Volume 3c: Landscape and Visual Amenity Visualisations (Part 2) and Cultural Heritage Visualisations.**
 - **Figure 6.5a-d: CHVP1 Moyne Cairn (SM12856) - Wireline Drawing and Photomontage;**
 - **Figure 6.6a-d: CHVP2 Dunwan Hill, fort (SM12882) - Wireline Drawing and Photomontage;**
 - **Figure 6.7a-b: CHVP3 Harelaw (LB13823) - Wireline Drawing;**
 - **Figure 6.8a-b: CHVP4 King's well (LB12508) - Wireline Drawing;**
 - **Figure 6.9a-b: CHVP5 Lockgoyn Monument (LB12509) - Wireline Drawing;**

- **Figure 6.10a-b: CHVP6 Rowallan Castle (LB12523)/ Rowallan GDL (GDL00333) - Wireline Drawing;**
- **Figure 6.11a-c: CHVP7 Rowallan House (LB12524)/ Rowallan GDL (GDL00333) - Wireline Drawing and Baseline Photograph; and**
- **Figure 6.12a-b: CHVP8 Black Law (WoSAS HER PIN: 7572) - Wireline Drawing - Wireline Drawing.**

6.1.5 The following appendices are also referred to throughout the chapter and can be found in **Volume 4: Technical Appendices**:

- **Technical Appendix 6.1: Historic Environment Assessment (HEA).**

6.1.6 The following terminology is referred to throughout this chapter and included in the Glossary at the end:

- Construction Environmental Management Plan (CEMP);
- Chartered Institute for Archaeologists (CIfA);
- East Ayrshire Council (EAC);
- Environmental Impact Assessment (EIA);
- Historic Environment Record (HER);
- Historic Environment Scotland (HES);
- Zone of Theoretical Visibility (ZTV).

6.2 Assessment Methodology

Legislation, Policy and Guidance

Legislation

6.2.1 This assessment is carried out in accordance with the principles contained within the following legislation:

- Ancient Monuments and Archaeological Areas Act (1979);
- Planning (Listed Buildings and Conservation Areas) (Scotland) Act (1997); and
- The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 – the EIA Regulations.

Policy

6.2.2 The following policies of relevance to the assessment have been considered and are detailed in **Appendix A of Technical Appendix 6.1** in EIA Report **Volume 4**:

- Scottish Government (2023) National Planning Framework 4 (NPF4) Policy 7;
- Historic Environment Policy for Scotland;
- HES Historic Environment Circular; and
- East Ayrshire Local Development Plan 2.

Guidance

6.2.3 This assessment is carried out in accordance with the principles contained within the following documents:

- Code of Conduct: professional ethics in archaeology (Chartered Institute for Archaeologists (CIfA, 2025);
- Standard and guidance for historic environment desk-based assessment (CIfA, 2020);
- Managing Change in the Historic Environment Guidance Notes – setting (Historic Environment Scotland (HES, 2020) (hereafter the ‘setting guidance’);
- Managing Change in the Historic Environment Guidance Notes – gardens and designed landscapes (HES, 2020);

- Designation Policy and Selection Guidance (HES, 2026; 2019);
- Environmental Impact Assessment Handbook (particularly the framework for Cultural Heritage Impact Assessment provided in Appendix 1; hereafter this guidance is referred to as the EIA Handbook) (HES and Scottish Natural Heritage (SNH), 2018); and
- Principles of Cultural Heritage Impact Assessment (PCHIA) in the UK (ClfA, Institute of Historic Building Conservation and Institute of Environmental Management and Assessment, 2021).

Consultation

6.2.4 In undertaking the assessment, consideration has been given to the consultation which has been undertaken as detailed in **Table 6.1**.

Table 6.1 Consultation responses

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
Historic Environment Scotland (14/11/2025)	Formal Scoping Opinion	HES agrees that the proposals have potential to affect heritage assets and any EIA should include a full assessment of impacts on the historic environment.	Noted.
		HES stated that a study area based only on distance was not appropriate methodology and requested that a bare earth ZTV be used to 'sieve' assets for any subsequent detailed assessment.	A bare earth Zone of Theoretical Visibility (ZTV) has been utilised to screen in and out assets from detailed assessment, and assets from beyond the 10 kilometre (km) Outer Study Area have been considered during this process – see Technical Appendix 6.1, Annex B
		HES requested that the setting assessment should make reference to the Managing Change in the Historic Environment: Setting guidance document	Noted. The setting assessment has been conducted in line with the setting guidance and the document is referenced within the Assessment Methodology section of this chapter.
		HES requested that the EIA contain consideration of mitigation by design to avoid, reduce and offset setting impacts on cultural heritage assets.	Noted. Mitigation by design is discussed with section 6.6: Embedded Design Mitigation
		HES stated that the Proposed Development could result in significant impacts on the setting of the scheduled monument Moyne Cairn (SM12856) due to existing wind farms being present within close proximity to the monument. HES requested that cumulative impacts be specifically assessed and	A full assessment of impact on this asset (including cumulatively) has been conducted. See also Figures 6.5a-d . The viewpoint location for the visualisation has been reviewed and updated in accordance with this request.

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		that the wireline / photomontage for the asset be angled towards the Proposed Development with the cairn mound in the foreground	
		HES stated that there is potential for additional cumulative impacts on Dunwan Hillfort (SM12882) due to changes within its setting. HES requested that a photomontage be produced to allow for an assessment of impacts on the asset from the Proposed Development.	A photomontage has been produced for this asset to assist in the assessment of effect on the asset. See Figures 6.6a-d . Further updates regarding recommended visualisations for this asset can be found within the consultation with HES in March 2026 (see below)
		HES requested further clarity on the location of the visualisation for Rowallan Castle (LB12523) (CHVP6) due to its location from an internal point within the building.	The viewpoint location for this asset has been reviewed and updated in accordance with this request. See Figures 6.10a-b .
		HES requested further clarity on the location of the visualisation for Rowallan (LB12524) (CHVP7) due to its location from an internal point within the building	The viewpoint location for this asset has been reviewed and updated in accordance with this request. See Figures 6.11a-c .
		HES requested further clarity on the location of the visualisations for Rowallan GDL (GDL00333) (CHVP6 and CHVP7)	The viewpoint locations for this asset have been reviewed and updated in accordance with this request. Two locations have been chosen for this asset, one from Rowallan Castle (CHVP6) and one from Rowallan House (CHVP7). See Figures 6.10a-b and Figures 6.11a-c .
Historic Environment Scotland (31/03/2026)	Post-scoping consultation regarding visualisation locations	HES reviewed the wireline CHVP2 from Dunwan Hill, fort and stated that the Proposed Development would be less prominent than anticipated in comparison with the existing turbines in the baseline setting and photomontage visualisation from this asset is no longer required.	Noted. A wireframe, baseline photography and photomontage is included within the assessment for reference, highlighting the asset being screened from further assessment – see Figures 6.6a-d
		HES noted that the coordinates for CHVP7 have been updated but that the wireline indicates there could potentially be a setting	The Rowallan House properties are under private ownership, and it has not been possible to gain sufficient access to formally

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		impact in views from the main entrance of Rowallan House across the forecourt and along the axial avenue. Therefore, a photomontage from the main entrance is requested.	undertake the required ranges. However, provisional handheld photographs from the drive of the GDL and the front of the old castle have been taken for consideration. These photographs indicate tree screening, buildings and topography will prevent any meaningful interaction with the Proposed Development. This photography is not sufficient to prepare a photomontage or complete wireframe overlays with. As such, visualisations are limited to wirelines only – see Figure 6.11a-c . Further updates regarding this visualisation were provided through additional consultation in April 2026 (see below).
Historic Environment Scotland (23/04/2026)	Post-scoping consultation regarding visualisation locations	HES confirmed that, following receiving provisional site photography for Rowallan House, the approach of providing wireline visualisations for these assets within the report is acceptable.	Noted. As above.

Study Area

6.2.5 Physical effects of the Proposed Development on the cultural significance of heritage assets are assessed within the Site only. The effects of the Proposed Development arising from setting change are assessed for all three study areas, which have been defined in response to the bare earth modelling of the Proposed Development's ZTV and an understanding of the distance over which significant effects arising from setting change are considered likely. The three study areas are the:

- Site: Land within the boundary of the Site. All heritage assets located within the Site have been considered for the potential for physical and setting effects to alter their cultural significance.
- 5 km Inner Study Area: All the land beyond the Site to a distance of 5 km. All heritage assets located within the Inner Study Area have been considered for the potential for effects arising from setting change.
- 5-10 km Outer Study Area: All the land between 5 km (Inner Study Area) and 10 km. Designated heritage assets lying within this area have been considered for the potential for effects due to setting change.

6.2.6 Consideration has also been given to the potential for setting change to designated heritage assets within the ZTV, beyond 10 km.

6.2.7 The study area for the assessment of effects of the Likely Grid Connection Route comprises 15m buffer either side of the proposed Route shown on **Figure 4.8a-b**, to use a uniform corridor along the route and account for any road easement.

Desk Based Research and Data Sources

6.2.8 The following data sources have informed the assessment of the Proposed Development and the Likely Grid Connection Route:

- HES spatial datasets and database for designated heritage assets comprising:
 - scheduled monuments;
 - listed buildings;
 - Inventory-listed historic battlefields; and
 - Inventory-listed Gardens and Designed Landscapes.
- West of Scotland Archaeological Service Historic Environment Record (WoSAS HER) data (received 12/03/2026).
- EAC conservation area information, including conservation area appraisals where available.
- HES National Record of the Historic Environment ('Canmore') database.
- Historic Land-use Assessment (HLA) data.
- The Scottish Archaeological Research Framework (ScARF)¹.
- Historic Ordnance Survey mapping (principally First and Second Edition 25-inch and 6-inch to a mile mapping where available for the Site) and other published historic mapping held in the National Library of Scotland (NLS) and available online.
- Aerial photographs (oblique and vertical) held by the National Collection of Aerial Photography (NCAP) available online.
- Available reports from recent archaeological work undertaken in the area ('grey literature').
- Publicly accessible LiDAR data.
- Findings of other relevant topics identified in **Chapter 5: Landscape and Visual Impact Assessment**, **Chapter 9: Hydrology, Hydrogeology, Geology and Peat** and **Chapter 10: Noise and Vibration** of the EIA Report for the Proposed Development.

Field Survey

- 6.2.9 A walkover survey of the construction footprint of the Proposed Development and selected heritage assets within the Site and site visits to selected heritage assets in the 5 km Inner and 5-10 km Outer Study Areas was undertaken in July 2025. Weather conditions during this survey were good, with clear visibility. Where undertaken the targeted walkover survey focused on the proposed construction locations and likely access tracks during construction and decommissioning. It allowed for the verification of known heritage assets, their extents, location, condition, and likely sensitivity to change, and informed the assessment of potential effects on those assets.
- 6.2.10 The selection of heritage assets with the potential to experience setting change was informed by the ZTV for the Proposed Development. Professional judgement was used to assess the likely sensitivity of assets within the ZTV to setting change. The presence of the Proposed Development within in-combination views that contribute to the cultural significance of assets which are not themselves present within the ZTV, has also been considered.
- 6.2.11 Selected photographs from the walkover survey and site visits are included within **Technical Appendix 6.1**.
- 6.2.12 No field surveys were undertaken to inform the assessment of the Likely Grid Connection Route at this stage. Baseline information for the connection route (as shown in **Figure 4.8a**) assessment has been gathered through desk-based sources only.

¹ ScARF is an evolving research resource for Scottish archaeology which provides a national overview of the subject by period and identifies relevant national research questions. Available online at: <https://scarf.scot/national/> [Accessed March 2026]

Assessing Significance

Description

- 6.2.13 A factual and proportionate description of each heritage asset is provided, focusing on information relevant to understanding its cultural significance, including any contribution made by setting, and any elements that may be affected by the Proposed Development.

Ascribing Cultural Significance

- 6.2.14 The identification of the cultural significance of the heritage assets selected for assessment draws on the heritage values set out in the Historic Environment Policy for Scotland,² which in turn are informed by the principles of the Burra Charter.³ These values are defined in the Australia ICOMOS Understanding and Assessing Cultural Significance Practice Note, and comprise Evidential, Historical, Aesthetic, and Social/Spiritual values. Full descriptions of these values are provided in paragraph 2.21 of **Technical Appendix 6.1**.

The Contribution of Setting to Cultural Significance

- 6.2.15 The use of ICOMOS heritage values and the application of relevant guidance⁴ to determine the contribution of setting to a heritage asset's cultural significance are outlined in paragraphs 2.22–2.23 of **Technical Appendix 6.1**.

Ascribing Importance

- 6.2.16 Heritage assets may derive significance from different heritage values; with heritage values aiding in understanding the cultural significance of a heritage asset but not determining the level of that significance (i.e. 'importance'). Lacking in one value one does not diminish their importance,
- 6.2.17 The level of importance is established separately through professional judgement, relevant research objectives, and designation criteria, and are ascribed as high, medium, low, very low or uncertain as per **Table 2.1** of **Technical Appendix 6.1**.

Sensitivity

- 6.2.18 Sensitivity of receptors has been determined on the basis of the following high-level analysis to identify those that are sensitive to the Proposed Development, and which therefore require detailed assessment. Those heritage assets identified as being likely to experience effects have been subject to a full assessment undertaken in line with the six steps set out in PCHIA:

- Understanding heritage assets:
 - describe the heritage asset;
 - ascribe heritage (cultural) significance; and
 - attribute importance.
- Evaluating the consequences of change:
 - understand change;
 - assess impact; and
 - weigh the effect.

Evaluating the Consequences of Change

- 6.2.19 A heritage asset's sensitivity to change is distinct from its importance and depends on the nature of its cultural significance, the role of setting, and how the Proposed Development interacts with these. Detailed information about

² Historic Environment Scotland (2019) *Historic Environment Policy for Scotland*. Available online at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=1bcfa7b1-28fb-4d4b-b1e6-aa2500f942e7> [Accessed: September 2025]

³ Australia International Council On Monuments and Sites (ICOMOS) (2013). *The Burra Charter*. Available online at: <https://australia.icomos.org/publications/burra-charter-practice-notes/#bc> [Accessed: September 2025]

⁴ Historic Environment Scotland (2020) *Managing Change in the Historic Environment: Setting*, p.5.

the approach to evaluating the consequences of change is provided in **Technical Appendix 6.1: Historic Environment Assessment**.

Assessment Assumptions

6.2.20 The following assumptions have been made when undertaking the assessment of effects:

- The potential for previously unrecorded heritage assets, including buried archaeological remains, has been considered in relation to the pattern and significance of known heritage assets (drawn from WoSAS and NRHE data, previous assessments, land use history and a review of historic mapping and available digital aerial imagery) both within the vicinity of the Site and its environs to understand the archaeological potential.
- No archaeological investigations (non-intrusive or intrusive⁵) were requested by WoSAS or have been undertaken to inform the historic environment baseline. The sources identified above are sufficient to identify the potential for previously unrecorded heritage assets, including buried archaeological remains, within the Site and the assessment of any likely significant effects.
- The assessment has utilised a range of sources on the area's historic environment. Much of this is necessarily secondary information compiled from a variety of sources (e.g. WoSAS and NRHE data). It has been assumed that this information is reasonably accurate unless otherwise stated.
- The results of the Phase 1 and 2 peat surveys reported in **Chapter 9** and **Technical Appendix 9.2: Peat Survey Report** of the EIA Report provide a detailed understanding of the presence of peat within the Site. These results are sufficient to identify the paleoenvironmental potential for the Site and inform the assessment of likelihood of significant effects resulting in the construction of the Proposed Development on the paleoenvironmental record.
- Forestry felling and restocking proposals will be undertaken in accordance with those detailed in **Technical Appendix 4.1: Wind Farm Forestry Plan**.
- The assessment is undertaken on the basis of good practice measures being implemented during construction and decommissioning (see Section 6.7: Good Practice Mitigation Measures).

Assessment Limitations

- 6.2.21 Owing to the extent of commercial forest within the Site, the walkover survey was necessarily limited. This is due to the density of planting, and health and safety concerns, including those relating to ground conditions and the risk of falling branches. This prevented access to all areas of the Site to confirm the existence, extent, or preservation of heritage assets. Reports on the condition and nature of heritage assets produced by surveys of the Site conducted prior to its afforestation have been used to make informed assumptions about the historic environment of the Site.
- 6.2.22 Given their locations, some heritage assets with intervisibility with the Proposed Development were not the subject of a site visit due to limited access or ground conditions. However, desk-based sources and visualisations were sufficient to identify potential effects due to setting change.
- 6.2.23 Whilst some information gaps have been identified, it is considered that there is sufficient information to enable an informed decision to be taken in relation to the identification and assessment of likely significant environmental effects on the historic environment.
- 6.2.24 No field surveys were undertaken to inform the assessment of the Likely Grid Connection Route at this stage. Baseline information for the connection route (as shown in **Figure 4.8a**) assessment has been gathered through desk-based sources only.

6.3 Existing Conditions

- 6.3.1 A summary of the existing conditions within the study areas and for the Likely Grid Connection Route is presented below. Further information on the archaeological and historical context for the assessment and individual heritage assets forming the baseline is presented in **Technical Appendix 6.1**⁶.

⁵ Non-intrusive and intrusive archaeological investigations can include geophysical survey and archaeological trial trenching.

⁶ Note that the Likely Grid Connection Route is discussed and assessed only within this chapter, and Technical Appendix 6.1 is restricted to the Proposed Development.

The Site

- 6.3.2 There are no designated heritage assets within the Site.
- 6.3.3 Two non-designated heritage assets have been identified within the Site. The earlier asset comprises a group of three possible Late Bronze Age/Early Iron Age roundhouses, located c.35 metres (m) east of an unnamed tributary of the Swinzie Burn (WoSAS HER PIN: 7439). These roundhouses were recorded as earthworks during a survey in 1976, however no above ground evidence of the asset was observed during the site walkover conducted as part of this assessment, likely destroyed by commercial forestry activity and is therefore of **no** importance. However, should it be demonstrated that below ground remains of this heritage asset have survived the forestry ploughing, they are likely to be of **medium** importance owing to the potential of these physical remains to better our understanding of later prehistoric settlement distribution, construction and occupation (evidential and historical value) at a regional level.
- 6.3.4 The second asset comprises a medieval/post-medieval dam and water mill located c.13 m west of the Swinzie Burn (WoSAS HER PIN: 7435). Ordnance Survey research conducted in 1982 could not identify any remains of this asset and suggested it had likely been destroyed by forestry ploughing. This asset could not be accessed during the Site walkover which has informed this assessment due to a lack of safe access but based on the previous surveys conducted by Ordnance Survey this asset appears to have been destroyed, and as such is of **no** importance. Should it be proved that buried remains of this heritage asset have survived the forestry ploughing, due to the widespread distribution of such assets within the local landscape and across Scotland more generally any surviving physical remains (evidential and historical value) have limited potential to better our understanding of post-medieval farming practices and the rural economy. Therefore, any surviving remains associated with this asset are assessed to be likely of **low** importance.
- 6.3.5 The location of heritage assets within the Site are shown on **Figure 6.1**.

Potential for Previously Unrecorded Heritage Assets Including Buried Archaeological Remains

- 6.3.6 Following a review of historic mapping and the WoSAS HER database, it appears that past human activity within the Site is concentrated in its south-west, near the Swinzie Burn at around 210 m Above Ordnance Datum (AOD). This is outside the construction footprint of the Proposed Development. As such, there is a low potential for unrecorded buried archaeological remains to be identified during the construction of the Proposed Development.
- 6.3.7 In addition to there being a low likelihood of hitherto unrecorded heritage assets being present within the construction footprint of the Proposed Development, the surviving fabric of any potential unrecorded heritage assets is likely to be poorly preserved. The Site's function as commercial forestry, with the historic operation and movement of forestry plant and machinery, is likely to have removed or significantly truncated such assets, thus reducing the evidential value of any surviving remains.
- 6.3.8 Considering the pattern of distribution of known heritage assets within the Site, and their date, form and function, as well as the receiving environment (i.e. densely commercially forested moorland), the potential for hitherto unrecorded heritage assets has been assessed to be **low**.

Paleoenvironmental Potential

- 6.3.9 Areas of peat have been recorded across the Site. Generally, there is potential for peat to retain paleoenvironmental evidence and provide important information about climatic and environmental change since the early Holocene, which can include evidence of human activity. Within the Site, however, the commercial forestry activity has significantly disturbed such deposits which is likely to have negatively affected the preservation of any potential archaeological remains or palaeoenvironmental evidence. Any areas of undisturbed peat found within the Site would have a higher potential for the preservation of archaeological or palaeoenvironmental remains.
- 6.3.10 Due to the significant disturbance caused by forestry activities across the majority of the Site, the potential for the construction of the Proposed Development to negatively affect the preservation of palaeoenvironmental remains has been assessed to be **low**. Further information on the peat coverage, depths and how areas of peat were identified and avoided through the iterative design process is provided in **Chapter 3: Site Selection and Design Strategy** and **Chapter 9** of the EIA Report.

5 km Inner Study Area

- 6.3.11 The location of heritage assets identified within the 5 km Inner Study Area are shown on **Figure 6.2**.

Designated Heritage Assets

- 6.3.12 35 designated heritage assets of **high** importance have been identified within the 5 km Inner Study Area, these comprise:

- Four Scheduled Monuments:
 - The Moyne prehistoric funerary cairn (HES Ref. SM12856)
 - The Middleton and Bannerbank prehistoric settlements (HES Refs. SM12815; SM12816)
 - The medieval Robertland Castle (HES Ref. SM3380)
- 30 Listed Buildings (two category A, nine category B, and 19 category C); and
- High Fenwick Conservation Area (HES Ref. CA52).

Non-designated Heritage Assets

- 6.3.13 Within the 5 km Inner Study Area there are 714 entries to the WoSAS HER database, excluding those directly related to designated heritage assets. The majority of these assets relate to post-medieval rural settlement and agricultural practices, but a large number also relate to prehistoric occupation of the landscape. The highest concentration of non-designated assets is located within areas that have previously been subject to archaeological investigation. As such, the distribution of known heritage assets within the 5 km Inner Study Area may not be representative of the distribution of past populations, but a bias created by the location of modern development.
- 6.3.14 Within the 5 km Inner Study Area there are seven non-designated heritage assets which WoSAS HER have identified as being of national significance. These assets are assessed to be of **high** importance and have the potential to experience significant effects.
- 6.3.15 The remaining non-designated heritage assets within the 5 km Inner Study Area have been assessed to be of **very low** to **medium** importance. Given their locations, type and form, changes to the setting of these heritage assets are not predicted to result in significant effects.

5-10 km Outer Study Area

- 6.3.16 The location of heritage assets identified within the 5-10 km Outer Study Area are shown on **Figures 6.3a-e**.

- 6.3.17 The following designated heritage assets of **high** importance are located within the Outer Study Area:

- Eight scheduled monuments;
- 268 listed buildings (15 category A, 119 category B, and 134 category C);
- Four gardens and designed landscapes; and
- Six conservation areas.

Likely Grid Connection Route

Designated Heritage Assets

- 6.3.18 No designated heritage assets have been identified along the Likely Grid Connection Route.
- 6.3.19 One designated heritage asset of high importance is located within the 15 m Study Area for the Likely Grid Connection Route:
- Category C Listed Building, Robert Pollock Monument (HES Ref. LB19889).
- 6.3.20 The Robert Pollock monument was placed in c.1898 as a centenary memorial to the poet Robert Pollock (1798-1827). It is free standing tapered granite monument containing a inset bronze portrait of Pollock, located at the junction between the A77 and Mearns Road, located c.7m from the Likely Grid Connection Route line.

Non-designated Heritage Assets

- 6.3.21 There are three non-designated heritage assets recorded by WoSAS HER within the 15 m Study Area for the Likely Grid Connection Route. These are:
- South Hillhead, Milestone (WoSAS HER PIN: 66894);
 - The Redhouse (WoSAS HER PIN: 77517); and
 - Gorbals Water Works, Ryat Linn Falls Basin (WoSAS HER PIN: 87813).
- 6.3.22 The South Hillhead Milestone is recorded from an annotation on the 1st edition Ordnance Survey map. The asset is not visible on the 2nd edition Ordnance Survey map and with the subsequent construction of the M77 immediately to the east of the recorded location it is likely the milestone is no longer in this position. The Redhouse is a tea room located along the northern boundary of A77 road, the asset is not visible on the 1st edition or 2nd edition Ordnance Survey maps, suggesting it is of modern origin. The Ryat Linn Falls Basin is a gauge basin and weir which connects to Balgray reservoir from the south-west edge and Ryat Linn reservoir from the north-east edge. The basin itself is a feature of the natural topography of the area but has been fitted with gauges to control the water flowing out. As post-medieval or modern assets of relatively common type these assets (if both remain extant and in the locations recorded) would be of **low** value.

Heritage Assets Scoped in for Detailed Assessment

- 6.3.23 Information as to why designated and non-designated heritage assets of high importance within the 5 km Inner and 5-10 km Outer Study Areas have been screened in or out of the assessment of effects of the Proposed Development is presented in **Technical Appendix 6.1**.
- 6.3.24 Visualisations (see **Figures 6.5a-d-6.12a-b**) have also been prepared for a selection of assets screened out during the assessment process, providing an evidence base for decision making and in response to stakeholder consultation. These include, but are not limited to, Dunwan Hill Fort (SM12882) and Rowallan Castle (LB12523) / Rowallan GDL (GDL00333).
- 6.3.25 The following four heritage assets of high importance have been identified as having theoretical visibility with the Proposed Development, the presence of which during operation has the potential to change their setting, which could result in effects to their cultural significance. These assets have therefore been included for further assessment.
- 6.3.26 **Moyne cairn (HES Ref. SM12856)** comprises a late Neolithic or Bronze Age cairn situated c.4.1 km north of the nearest turbine near the summit of Lochend Hill at c.260 m AOD. This funerary monument measures c.11.5 m in diameter and stands to a height of c.0.9 m and has been disturbed by either an antiquarian excavation or robbing in the north-eastern portion of the mound. The asset is further obscured by the construction of a small, modern stone cairn on top of its south-west extent. There is no obvious indication of a cist or kerb.
- 6.3.27 Located c.263 m south of the artificial body of water known as Harelaw Dam and c.213 m north-west of the natural Long Loch near the summit of Lochend Hill, the cairn is afforded distant views across the lower lying ground to the south, west, north and north-east. It is possible that this location also facilitated distant views towards the cairn, allowing it to function as a key landmark in the prehistoric landscape. This asset may be contemporary with the hut circles at Bannerbank (HES Ref. SM12815) and Middleton (HES Ref. SM12816) c.720 m east and c.1.6 km north-east of the asset respectively.
- 6.3.28 The cultural significance of this asset is derived primarily from the evidential (scientific) value of its physical remains, including any buried archaeological remains that have the potential to contribute to the understanding of prehistoric burial practices. There is also the potential for environmental evidence preserved in the soils beneath the cairns that may inform the understanding of climate, local conditions and land cover when the cairn was constructed. The asset also has historical (illustrative) value as an example of a prehistoric funerary monument. It illustrates prehistoric burial rites in the area and has the potential, through excavation and analysis, to further our understanding of social and religious practices during the prehistoric period within Scotland.
- 6.3.29 The aspects of this asset's setting which contribute to its cultural significance include its position on top of Lochend Hill, which, while not the highest point in the surrounding landscape, is a prominent point that enables expansive views. This hilltop position was likely intentionally chosen to facilitate these long-distance views both from and towards the cairn which, in turn, would have allowed the monument to function as a notable landmark in the local

landscape. The asset is located slightly to the north of the summit of this hilltop, which allows for more expansive views northwards across the lower lying land in this direction and the asset's positioning suggests it may have been intentionally sited to exploit these views. Views westwards and southwards are also far ranging, although to a lesser extent than the northwards views and it is likely this was also a consideration in the siting of the asset. Views eastwards are more obscured by intervening topography, suggesting views in this direction were not the main focus of the asset's siting at this location. These eastward facing views from the asset also feature the operational Middleton wind farm, with the closest turbines located c.650m from the asset. This operational wind farm within close proximity to the asset, plus a series of windfarms in place in the wider surroundings, provide some disruption to the experience of the relationship between the asset and its surrounding landscape. However, these cumulative developments do not completely remove the ability to understand the importance of views from the cairn.

- 6.3.30 Also of importance is the spatial and visual relationship between the asset and the natural Long Loch, owing to the putative importance of such bodies of water to prehistoric belief systems. With the asset's location on the hilltop to the north-west of the loch, there are views across the majority of the water body and it is possible this was also a consideration in the original siting of the asset.
- 6.3.31 In addition, the spatial relationship with the potentially broadly contemporary hut circles of Bannerbank (HES Ref. SM12815) and Middleton (HES Ref. SM12816) may have been an important consideration in the siting of the asset. While these hut circles are not visible from the cairn due to their low-lying form and the distance between the assets, it is likely they formed part of the same wider prehistoric landscape. The proximity of the cairn to these assets of a domestic / settlement character indicates a possible relationship between the funerary monument and the community it may have served.
- 6.3.32 Another broadly contemporary asset recorded within close proximity to the cairn comprises a former stone circle located c.250 m west of the asset. The stone circle is known locally as "The Covenanter's Stone" due to a local legend linking the asset to the Covenanting movement of the 17th century, although it is likely the asset was of an originally prehistoric date. Stone circles typically are ritual monuments and are often found in association with cairns, and the roughly east to west aligned avenue recorded during 1994 within the WoSAS description for the stone circle further supports this potential relationship between the two ritual and funerary monuments. While the location of the stones has been recorded by WoSAS and the asset is visible on historic satellite imagery, the stones could not be identified during the field survey conducted as part of this assessment and are not visible on recent satellite imagery of the area. It is therefore likely these stones have been relocated and as such the functional and spatial relationship between the stones and the cairn has been severed and is no longer legible within the current landscape.
- 6.3.33 The setting of the cairn therefore exhibits a degree of integrity through the continued ability to understand, appreciate and experience its spatial relationships with topographical and broadly contemporary cultural features. Aspects of its integrity have been somewhat eroded through the introduction of nearby windfarms, including one in close proximity, and the probable removal of the related nearby stone circle. The Site does not intervene between any of these putative relationships.
- 6.3.34 **Harelaw (HES Ref. LB13823)** is a category C listed post-medieval courtyard farm, c.1.4 km south of the nearest turbine, situated between 210 m and 220 m AOD.
- 6.3.35 The farmstead at Harelaw may be attested to as early as the mid-18th century during which time a farmstead labelled as 'Hairlaw' appears in Roy's military mapping of the lowlands. The asset features a south-facing U-shaped courtyard created by a dwelling to its north and, formerly limewashed, byres to its east and west. Based on the absence of the west byre on first edition OS mapping,⁷ it would appear that this byre was the latest addition to the asset and would ultimately create the characteristic courtyard of Harelaw. The byres are one storey in height while the central dwelling features two storeys with dormers and a rounded attic window in its principal elevation, facing south. In addition to the west byre, second edition OS mapping depicts the expansion of the wider agricultural complex to Harelaw's immediate east,⁸ which in modern times has continued to expand to the north-east of the asset.
- 6.3.36 Mid-18th century military mapping depicts the farmstead of 'Hairlaw' within an arable landscape and publicly available LiDAR data of the surrounding area has revealed potential areas of rig and furrow. Within this mapping the farmstead is depicted as two buildings and there is insufficient detail in the mapping to determine which structure relates to the extant building. This demonstrates that the Harelaw farmstead likely engaged in some arable

⁷ 25inch to a mile OS Mapping, Ayrshire XIII.8 (Fenwick) Survey date: 1856, published 1857

⁸ 25inch to a mile OS Mapping, Ayrshire XIII.8 (Fenwick) Revised: 1895, published 1896.

endeavours. However, by the early 20th century, the Rowallan estate exchange documents indicate much of the land associated with the farmstead was used for pasture. This is supported by evidence in modern soil capability data which suggests that the surrounding grassland can only support a limited range of crops, including forage crops.⁹ Agricultural endeavours, of any sort, are likely to have been supported by the fresh water provided by the Kingswell Burn c.230 m to the asset's south-east and its tributary c.65 m to its north.

- 6.3.37 The cultural significance of this asset is derived primarily from its historical (illustrative) and aesthetic (architectural) value as an example of a post-medieval farmstead.
- 6.3.38 The aspects of this asset's setting which contribute most to its cultural significance are its immediate surroundings. This includes the courtyard onto which the asset looks, as this demonstrates the historic development of the agricultural complex of buildings which make up the asset. These areas immediately surrounding the asset have the most direct functional and historic relationship with the farmhouse and therefore contribute most to its cultural significance. It is also from this location that the historic form and fabric of the building that contribute to its historic and architectural value can be best experienced, understood and appreciated, with many views of the asset from its wider surroundings obscured by intervening vegetation.
- 6.3.39 Other important elements of the asset's setting which contribute to its cultural significance include its spatial and visual relationship with the active farmland which surrounds the building, as this reflects the original, agricultural, function of the building. Also of importance is the availability of nearby sources of fresh water which would have supported agricultural endeavours at this site.
- 6.3.40 The A77 and M77 are main roads located within close proximity to the asset, c.190 m and c.340 m from the asset respectively and form part of its current setting. The A77 road is a more historic route and is visible on historic Ordnance Survey mapping from the mid-19th century. This road has therefore formed part of the asset's setting for much of its existence although it does not have any specific historical functional relationship with the farmstead and therefore does not contribute to its significance, especially due to the subsequent modernisation of the road. The M77, where it passes the asset, was constructed much later, between 1996 and 2005 and has provided a further urbanising development to the historically agricultural landscape.
- 6.3.41 **King's Well (HES Ref. LB12508)** is a category B listed example of a post-medieval inn located c.1.8 km south-east of the nearest turbine at c.230 m AOD.
- 6.3.42 This listed building is the former principal inn between Glasgow and Kilmarnock and stands to two storeys with a one storey byre located to its east and features plain gables and a grey cement rendering. As visible on the 2nd edition OS mapping,¹⁰ the inn was originally situated along a north-east / south-west aligned turnpike road. Although this road has since been diverted and split into the B746 and Kingswell Road to the east and north of the asset respectively, the avenue of trees to the immediate south-west of the asset clearly denotes the alignment of the former road. An extension to the inn has been constructed over part of the former road which, in effect, creates a north-east facing U shaped courtyard.
- 6.3.43 The cultural significance of this asset is derived primarily from its historical (illustrative) and aesthetic (architectural) value as an example of a post-medieval principal inn.
- 6.3.44 A key element of the asset's setting which contributes to its significance comprises its immediate surroundings. This includes the grounds of the asset, which are defined by a subcircular boundary that is visible within historic mapping and still perceptible to the east of the B764 road. It is from this location that the asset's historical and aesthetic value can be best understood, appreciated and experienced. Another element of the asset's setting within its immediate surroundings that reflects its historic function are the outbuildings such as a former coach house or stable building that was likely associated with the asset's function as a principal inn. These outbuildings have a historic functional relationship with the asset and therefore contribute to its cultural significance.
- 6.3.45 Other aspects of this asset's setting which contribute to its cultural significance include its spatial and visual relationship with the avenue of trees marking the former toll road along which the inn was positioned. As a principal inn, the asset was intended as a stopping place for travellers, therefore its easily accessible location along a former road has a historical, functional relationship with the asset. In addition, the asset's spatial relationship with post-medieval settlements in the wider landscape also contributes to its significance. Although there may be no visual

⁹ Soil Survey of Scotland Staff (1981). Land Capability for Agriculture maps of Scotland at a scale of 1:250 000. Macaulay Institute for Soil Research, Aberdeen. DOI: 10.5281/zenodo.6322683

¹⁰ 25inch to a mile OS Mapping, Ayrshire XIII.8 (Fenwick) Revised: 1895, published 1896.

relationship, the wider pattern of settlement would have substantially influenced the viability and need for this inn and the road along which it was intentionally located.

- 6.3.46 **Black Law (WoSAS HER PIN: 7572)** is an example of an Iron Age fort, featuring a later galleried structure, c.1.7 km north of the nearest turbine at c.240 m AOD.
- 6.3.47 Although subject to later extensive quarrying, this fortified settlement measures up to 111 m by 64 m and would have been enclosed by at least one rampart and ditch, of which only a low mound survives to its south. The most prominent internal feature within the fort is a circular structure measuring approximately 13.4 m in diameter with walls between 4.3 m and 4.6 m in thickness. This structure was initially interpreted as a cairn but has since been re-evaluated and referred to as a galleried structure that likely falls within the broad category of complex Atlantic roundhouses. Such structures, as the name suggests, are primarily distributed along the west and north coast of Scotland and represent the emphasis on monumental domestic architecture in the Iron Age.
- 6.3.48 Located on Black Law, the elevated position of this fort affords extensive panoramic views of surrounding lower-lying land, including that along Annick Water c.725 m to its south-west which may have been particularly fertile. This location was likely intentionally chosen to facilitate the projection of power and authority across the lower, fertile ground. Given the increased competition for resources encountered throughout the Iron Age, this projection of power would have been necessary if the inhabitants of the fort sought to control the resources of, and movement of people through, the landscape.
- 6.3.49 The cultural significance of this asset is derived primarily from its evidential (scientific) and historical (illustrative) value as an example of a prehistoric fort and galleried structure. It illustrates the Iron Age desire to stake a claim over the resources of a wider landscape and has the potential, through excavation and analysis, to further our understanding of how such sites were constructed and occupied.
- 6.3.50 The aspects of this asset's setting which contribute to its cultural significance include its elevated position on Black Law and the resulting panoramic views of the surrounding lower lying ground. The prominent hilltop position was likely chosen to allow the fort to act as a notable landmark within the landscape, which would have facilitated the projection of power across the local area, establishing the asset's sphere of influence. The areas of increased soil capability for agriculture to its south-east and south-west¹¹ also contribute to its significance owing to the fact that these areas are likely to have been key strategic areas to control. The expansive views across the surrounding landscape are considered key views as they allow for an understanding of the asset's defensive character.
- 6.3.51 There are further Iron Age defensive features within the surrounding landscape, and the asset may have formed part of a wider network of broadly contemporary forts and features, which provide further evidence of late prehistoric occupation and activity within the landscape surrounding Black Law. It is possible that the asset may have had spatial or visual relationships with other broadly contemporary assets within the wider landscape, however the ability to understand or experience such relationships has been significantly limited due to existing forestry and development surrounding the asset.

6.4 Implications of Climate Change for Existing Conditions

- 6.4.1 Climate change projections for Scotland highlight that summer and winter temperatures are likely to be greater than the current baseline, with winter rainfall increasing and summer rainfall decreasing. An increase in rainfall will change groundwater and soil conditions, potentially affecting the preservation of buried archaeological remains and eroding / flooding above-ground historic assets, however such effects would not be direct result of the Proposed Development.

6.5 Future Baseline in the Absence of the Proposed Development and Likely Grid Connection Route

- 6.5.1 In the 'do nothing' scenario, there will likely be little physical change to the cultural significance of the heritage assets within the Site. Known heritage assets within the Site already appear to have been destroyed by the previous forestry activities within the Site and therefore the continuation of these activities would have no further effect on their cultural significance. If buried remains of these heritage assets were to survive within the Site, however, the continued forestry activities at these locations will be likely to continue to truncate or entirely remove these remains

¹¹ Soil Survey of Scotland Staff (1981). Land Capability for Agriculture maps of Scotland at a scale of 1:250 000. Macaulay Institute for Soil Research, Aberdeen. DOI: 10.5281/zenodo.6322683

over time. Additionally, indirect damage through the unintentional growth of trees beyond the defined growth areas are likely to further damage any potential buried archaeological remains through the development of roots.

- 6.5.2 Effects related to change in setting in a 'do nothing' scenario cannot be accurately quantified as they primarily rest on whether new proposals for development are brought forward elsewhere within the surroundings of the Site.

6.6 Embedded Design Mitigation

- 6.6.1 Desk-based surveys and a site walkover have been conducted to identify and record heritage assets within the Site. While no turbines have been relocated due to the potential for direct physical impacts to known archaeological features, the presence and sensitivity of heritage assets have influenced turbine siting decisions to avoid potential impacts arising as a consequence of setting change. **Chapter 3: Site Selection and Design Strategy** sets out the site specific design principles that were adopted and considered throughout the iterative design process, one of which is the principle to "Consider the impacts on the setting of key designated heritage assets where setting forms a key component of their cultural significance".

6.7 Good Practice Mitigation Measures

- 6.7.1 The Construction Environmental Management Plan (CEMP), an outline of which is provided at **Technical Appendix 4.2**, for the Proposed Development will seek to identify construction best practice measures for protecting the historic environment. Measures which may be adopted include the implementation of a working protocol should previously unrecorded archaeological features be discovered. This would include the appointment of an Archaeological Clerk of Works (ACoW) supplemented by toolbox talks as appropriate, to highlight the historic environment sensitivities of areas of the Site to those working on the Proposed Development and Grid Connection Route.
- 6.7.1 Should previously unrecorded archaeological remains be identified within the Site, measures for the protection of heritage assets during construction, the role of the ACoW, the areas to be subject to monitoring during construction, and archaeological monitoring and recording of individual assets should be undertaken in line with a Written Scheme of Investigation (WSI) agreed with WoSAS and other relevant parties following consent.
- 6.7.2 The Likely Grid Connection Route passes close to four heritage assets, with one designated heritage asset and three non-designated heritage assets recorded within the 15 m buffer either side of the Likely Grid Connection Route. Any adjustments to the Route at these locations should avoid these assets to remove the potential for any direct physical effects to heritage assets. This could be achieved through ensuring the construction Route remains within the boundaries of the existing road at these locations as all four assets are located beyond the current road boundaries.
- 6.7.3 For developments of this sort, it is difficult to fully mitigate impacts to heritage assets resulting from setting change during operation beyond those measures which have already been implemented as part of the iterative design process. Therefore, no additional mitigation to reduce the potential effects to heritage assets due to setting change resulting from the operation of the Proposed Development have been identified.
- 6.7.4 Decommissioning of the Proposed Development will require its own assessment to ensure that it is carried out in line with the legislation and guidance current at the time of decommissioning. The Decommissioning Environmental Management Plan (DEMP) for the Proposed Development will identify decommissioning best practice measures for protecting the historic environment.
- 6.7.5 In accordance with the approach outlined in **Chapter 2: Approach to the EIA**, good practice measures are assumed to be in place prior to the assessment of likely effects.

6.8 Micrositing

- 6.8.1 During construction, micrositing may take place to allow adjustment within a defined radius of the proposed turbine locations, and a similar tolerance either side of the access track locations and other infrastructure. The micrositing allowance for turbines and associated infrastructure is up to 50 m, as set out in **Chapter 4** of this EIA Report. A review of these areas has identified no direct physical effects to known heritage assets as a result of micrositing or accidental damage during construction.

6.9 Scope of the Assessment

Effects Assessed in Full

- 6.9.1 The EIA Scoping process, baseline conditions and professional judgement have identified the following effects for detailed assessment:
- Direct, physical effects during construction of the Proposed Development on heritage assets within the Site;
 - Direct, physical effects during construction of the Likely Grid Connection Route on heritage assets along the route;
 - Direct effects during operation of the Proposed Development as a result of setting change to susceptible non-designated heritage assets with theoretical visibility within the 5 km Inner Study Area;
 - Direct effects during operation of the Proposed Development as a result of setting change to susceptible designated heritage assets with theoretical visibility within the 5 km Inner and 10 km Outer study areas (assets of particular sensitivity beyond the Outer Study Area have also been considered);
 - Direct, physical effects during decommissioning of the Proposed Development and Likely Grid Connection Route on heritage assets within the Site and along the Route;
 - Indirect, physical effects on heritage assets, occurring as secondary consequences of the Proposed Development and Likely Grid Connection Route, such as increased risk of exposure, erosion, disturbance, decay, or any other detrimental physical change;
 - Cumulative construction and decommissioning effects of the Proposed Development (including the Likely Grid Connection Route) as a result of physical changes to assets;
 - Cumulative operational effects of the Proposed Development as a result of setting change.

Effects Scoped Out

- 6.9.2 On the basis of the desk based and field survey work undertaken, the professional judgement of the EIA team, experience from other relevant projects and policy guidance or standards, and feedback received from consultees, the following effects have been 'scoped out' of detailed assessment, as proposed in the EIA Scoping Report:
- Direct physical effects during construction and decommissioning of the Proposed Development and Likely Grid Connection Route on heritage assets outside the Site boundary/grid route footprint where no physical interaction with infrastructure will occur;
 - Impacts as a consequence of setting change to non-designated heritage assets beyond the 5 km Inner Study Area. Non-designated assets identified as being of regional or national importance, and highly susceptible to setting change may be scoped in based on the review process noted above; and
 - Impacts on the setting of all heritage assets located outside the ZTV. These assets will not be adversely affected if there is no theoretical intervisibility with the Proposed Development.
 - Due to the underground nature of the Likely Grid Connection Route, there will be no effects to heritage assets as a result of changes to their setting. The Likely Grid Connection Route will have no impact on the ability to understand, appreciate or experience any heritage assets due to there being no potential for theoretical intervisibility, and during its operation will not result in any visual or experiential change to the landscape which it passes through. Therefore, there will be no effects to heritage assets as a result of the operation of the Likely Grid Connection Route, and operational effects are not assessed further.
 - The effects which arise during the construction period are confined to direct physical effects to heritage assets. Ensuring good practice measures are implemented, no physical effects on heritage assets within the Site or along the Likely Grid Connection Route have been identified. It is therefore predicted that there will be no cumulative effects as a result of the construction of the Proposed Development and Likely Grid Connection Route with other development, and effects are not assessed further.
 - As there are no heritage assets within the construction footprint of the Proposed Development or Likely Grid Connection Route, it is likely that there will be no cumulative effects on heritage assets as a result of decommissioning. Decommissioning of the Proposed Development will require its own assessment to ensure

that it is carried out in line with the legislation and guidance current at the time of decommissioning. As no excavation or removal of cables is proposed as part of the decommissioning process it is likely that there would be no cumulative effects on heritage assets as a result of decommissioning, and this is not assessed further.

6.10 Assessment of Effects

- 6.10.1 The assessment of effects identified above is based on the project description as outlined in **Chapter 4** of this EIA Report. Unless otherwise stated, potential effects identified are considered to be adverse. The assessment of effects within this chapter draws upon the detailed assessment included within **Technical Appendix 6.1: Historic Environment Assessment (HEA)**.

Construction Effects

The Proposed Development

Predicted Construction Effects

- 6.10.2 No direct physical effects resulting from the construction (including forestry felling) of the Proposed Development have been identified on either designated or non-designated heritage assets within the Site.
- 6.10.3 There will also be no potential for direct physical effects due to accidental damage resulting from the operation of machinery and plant and micro-siting during the construction of the Proposed Development, with all known locations of non-designated heritage assets within the Site being located outside the 50 m micro-siting allowance buffer.
- 6.10.4 The potential for hitherto unrecorded heritage assets has been assessed to be **low**. In addition, the surviving fabric of any potential unrecorded heritage assets within the Site is likely to be poorly preserved due to the Site's function as commercial forestry and any surviving archaeological remains are likely to have been significantly truncated or entirely removed by such activity. This would reduce the evidential value of any surviving remains and it is likely that any previously unrecorded archaeological remains within the Site would be of **low** importance. Physical effects to such assets would result in a maximum case **minor** level of effect which is **not significant** in EIA terms.
- 6.10.5 The commercial forestry which occupies the majority of the Site has resulted in a significant disturbance to peat deposits within the footprint of the Proposed Development. Therefore, the potential for the construction of the Proposed Development to negatively affect the preservation of palaeoenvironmental remains has been assessed to be **low**, resulting in a maximum case **minor** level of effect which is **not significant** in EIA terms.

Committed Additional Mitigation

- 6.10.6 No additional mitigation has been committed, however should previously unrecorded heritage assets be found within the construction footprint of the Proposed Development, a WSI is to be approved by the local planning authority and will outline the appropriate archaeological works deemed necessary. This could comprise a watching brief or advanced mitigation conducted under the supervision of an Archaeological Clerk of Works.

Residual Construction Effects

- 6.10.7 The aforementioned physical effects will remain a **minor** level of effect which is **not significant** in EIA terms.

The Likely Grid Connection Route

Predicted Construction Effects (including in-combination with the Proposed Development)

- 6.10.8 No designated or non-designated heritage assets have been identified along the Likely Grid Connection Route, as such it is expected that there will be no effects to heritage assets as a result of the construction of the Likely Grid Connection Route (including in-combination with the Proposed Development).
- 6.10.9 However, while no assets have been identified along the proposed line of the Likely Grid Connection Route, one designated heritage asset and three non-designated heritage assets have been recorded within the 15 m buffer either side of proposed line. These assets include the Category C listed Robert Pollock Monument which is of high value. The three non-designated heritage assets are Ryat Linn Falls Basin, The Redhouse and South Hillhead milestone and are of low value.

- 6.10.10 The majority of the Likely Grid Connection Route is proposed to be contained within the limits of existing roads and all four assets are located beyond the current road boundaries. However, there is potential that any adjustments to the route, for example as a result of road easement or avoidance of existing services, could have physical effects on these assets due to their proximity to the road. In the case of any route adjustments during construction, it is assumed good practice measures would be implemented to ensure direct physical effects to these assets are entirely avoided.
- 6.10.11 As such, based on the current design of the Likely Grid Connection Route, it is expected there will be **no significant effects** to heritage assets.
- 6.10.12 The potential for hitherto unrecorded heritage assets has been assessed to be **low**. In addition, the surviving fabric of any potential unrecorded heritage assets along most of the route is likely to be poorly preserved due to the modern road along which much of the proposed route is located. The construction and maintenance of this road and verge has likely already resulted in ground disturbance which may have removed or truncated any potential buried archaeological remains within its footprint. This would reduce the evidential value of any surviving remains and it is likely that any previously unrecorded archaeological remains within the Site would be of **low** importance. Physical effects to such assets would result in a maximum case **minor** level of effect which is **not significant** in EIA terms.

Operational Effects

The Proposed Development

Predicted Operational Effects

- 6.10.13 No significant direct effects due to setting change as a result of the operation of the Proposed Development have been identified. Three heritage assets would experience a **minor** level of effect as a result of the operation of the Proposed Development due to slight changes to the way the setting of the assets contribute to their cultural significance. These assets are the Scheduled Monument Moyne Cairn (SM12856); Category C Listed Building Harelaw (LB13823); and Black Law fort (WoSAS HER PIN: 7572), a non-designated heritage asset identified as being of national importance by WoSAS. This minor level of effect is **not significant** in EIA terms. **No effect** due to setting change is predicted for King's Well (LB12508).
- 6.10.14 Information on non-significant effects to designated historic assets and non-designated heritage assets due to setting change is presented in **Technical Appendix 6.1 Annex B**.

Committed Additional Mitigation

- 6.10.15 For developments of this sort, it is difficult to fully mitigate impacts to heritage assets resulting from setting change Beyond those measures taken into account in the iterative design process. Therefore, no specific additional mitigation to reduce the potential effects to historic assets due to setting change resulting from the presence of the Proposed Development in the landscape have been identified.

Residual Operational Effects

- 6.10.16 As no additional mitigation is proposed to address setting effects, the significance of effects remain as reported above i.e. a **minor** level of effect or **no effect** which is **not significant** in EIA terms.

Decommissioning Effects

The Proposed Development

Predicted Decommissioning Effects

- 6.10.17 At the end of the Proposed Development's operational life (35 years), an application could be submitted to retain or replace the turbines, or they could be decommissioned. It is expected that decommissioning effects would comprise direct physical effects on heritage assets within the Site of a similar character to the effects resulting from the construction of the Proposed Development. As there are no heritage assets within the construction footprint of the Proposed Development, it is likely that there would be no direct physical effects on heritage assets as a result of decommissioning.

Committed Additional Mitigation

- 6.10.1 As no effects have been identified as a result of decommissioning, no additional mitigation has been committed.

Residual Decommissioning Effects

- 6.10.2 As no additional mitigation is proposed to address decommissioning effects, the significance of effects remain as reported above i.e. **no effect**.

The Likely Grid Connection Route

Predicted Decommissioning Effects (including in-combination with the Proposed Development)

- 6.10.3 It is expected that at the end of the Proposed Development's operational life, all cables relating to the Likely Grid Connection Route would be made safe and left in situ. As no excavation or removal of cables is proposed as part of the decommissioning process it is likely that there would be no direct physical effects on heritage assets as a result of decommissioning of the Likely Grid Connection Route (including in-combination of the Proposed Development).

Cumulative Effects During Operation

Predicted Cumulative Effects During Operation

- 6.10.4 The effects of the Proposed Development during the operational period relate to direct effects as a result of changes to the setting of heritage assets. No changes to the setting of heritage assets are predicted as a result of the Likely Grid Connection Route; therefore, cumulative effects considered here are limited to the Proposed Development.
- 6.10.5 While the potential for cumulative effects of the Proposed Development resulting from setting change have been considered, given that the potential for setting change to significantly affect a heritage asset diminishes with distance, significant cumulative effects, including those resulting from in-combination views, beyond the 5-10 km Outer Study Area are not predicted.
- 6.10.6 There are four developments within the 5 km Inner and 5-10 km Outer Study Areas which have the potential for cumulative effects on heritage assets as a result of changes to their setting. These four developments are Blacklaw Hill Wind Farm, Moorshield Wind Farm, Nether Carswell III Wind Farm and Kingswell Whisky Maturation Warehouses – see **Table 5.1 of Technical Appendix 6.1**.
- 6.10.7 The turbines of Moorshield and Nether Carswell III are located within close proximity to existing operational wind farm developments which have formed part of the baseline environment. For Moorshield, this is Whitelee Wind Farm, and for Nether Carswell III this is Neilston Community, Dareduff Hill and Carswell Hill. Therefore, while these developments will introduce further changes within views of the landscape, such views have already been disrupted due to the existing operational wind farms at these locations. Due to the increased number of turbines, there will be further disruption to these views, however due to the small number of turbines within the Moorshield and Nether Carswell III developments, which comprises three turbines of tip height 149.9 m and one turbine of 124.75 m tip height respectively, this further disruption will not result in any further loss to the cultural significance of any heritage assets. As such there will be no cumulative effects as a result of these developments and the Proposed Development.
- 6.10.8 The Blacklaw Hill development will introduce one additional turbine within close proximity to the Black Law hillfort (WoSAS HER PIN: 7572). There is potential for in-combination views of the Blacklaw Hill turbine and the Proposed Development to introduce some visual intrusion looking south and south-east from locations within the surrounding landscape to the north of the asset. However, with the Blacklaw Hill development consisting of only one turbine of 67 m tip height these in-combination views of the developments will not change the way in which the Black Law hillfort is understood or appreciated within the landscape, and as such will not result in any cumulative effects.
- 6.10.9 The consented Kingswell Whisky Maturation Warehouses development also has potential for cumulative effects with the Proposed Development. This 34 hectares (ha) development is located between the A77 and Kingswell Road, with the Category B listed building Kingswell (HES Ref. LB12508) located c.400 m from nearest proposed building. While this development and the Proposed Development will introduce visual intrusion to the north of this asset, it is the asset's immediate surroundings which contribute most to its significance and such views are not considered key views which contribute to the ability to understand, appreciate or experience the heritage asset. As such there will be

no cumulative effects as a result of the Kingswell Whisky Maturation Warehouses development and the Proposed Development.

Committed Additional Mitigation

- 6.10.10 There is currently no committed additional mitigation as no cumulative effects during operation are anticipated.

Residual Cumulative Effects During Operation

- 6.10.11** As no additional mitigation is proposed to address significant setting effects, the significance of effects remain as reported above.

6.11 Further Survey Requirements and Monitoring

- 6.11.1 Due to the low potential for previously unrecorded archaeological remains within the Site and current use of the Site as commercial forestry likely reducing the preservation of any such remains, no further survey requirements are anticipated at this time. However, this approach will be agreed with the WoSAS archaeological advisor.

6.12 Summary of Likely Significant Effects

- 6.12.1 No significant effects on cultural heritage (including cumulative effects) have been identified as a result of the construction, operation or decommissioning of the Proposed Development and Likely Grid Connection Route (assuming good practice measures have been implemented). The full assessment of effects is set out in **Technical Appendix 6.1**.

Glossary/Abbreviations

Table 6.2 Glossary

Term in Full	Abbreviation	Meaning
Archaeological Clerk of Works	ACoW	The person or organisation appointed by the Applicant to oversee archaeological aspects of the Development, acting as a liaison between various parties to ensure compliance with planning conditions and mitigate impacts on the historic environment.
Above Ordnance Datum	AOD	A height above the point used by the Ordnance Survey to derive altitudes from based on the mean sea level at Newlyn, Cornwall.
Construction Environmental Management Plan	CEMP	A document which sets out the principles and procedures for environmental management during construction of the Proposed Development. The CEMP is a fluid document that would evolve during the different phases of the Proposed Development
Chartered Institute for Archaeologists	CIfA	The leading professional body representing archaeologists working in the UK and overseas.
Cultural Significance	-	The aesthetic, historic, scientific or social value for past, present or future generations. Cultural significance can be embodied in a place itself, its fabric, setting, use, associations, meanings, records, related places and related objects.
Decommissioning Environmental Management Plan	DEMP	A document which sets out the principles and procedures for environmental management during decommissioning of the Proposed Development. The DEMP is a fluid document that would evolve during the different phases of the Proposed Development
Designated Heritage Asset	-	A heritage asset of national or international value that has been recognised and protected by law. Includes World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated under the relevant legislation.
East Ayrshire Council	EAC	The local authority within which the Site and Study Areas are located.
Environmental Impact Assessment	EIA	The means by which the potential environmental of a proposed development are assessed.
Garden and Designed Landscape	GDL	A designated a garden or policy associated with a country house or similar, that has been intentionally designed for artistic effect. These are afforded legal protections and form a material consideration in the planning process.
Heritage Asset	-	A physical element of the historic environment –a building, monument, site, place, area or landscape identified as having cultural significance.
Historic Environment Assessment	HEA	A desk-based assessment conducted to determine from existing records the nature, extent, and significance of the historic environment within a specified area.
Historic Environment Record	HER	The database within which local authorities maintain record of all known heritage assets within their defined area.
Historic Environment Scotland	HES	The lead public body in Scotland established to investigate, care for and promote the historic environment.

Term in Full	Abbreviation	Meaning
Light Detection and Ranging	LiDAR	Data and visualisations using lasers to create a 3D representation of the ground surface, can be used to identify archaeological remains otherwise not visible.
Non-designated Heritage Asset	-	A building, monument, site, place, area or landscape identified by as having a degree of heritage/cultural significance meriting consideration in planning decisions but which do not meet the criteria for designated heritage assets.
West of Scotland Archaeology Service	WoSAS	The body which maintains and updates the Historic Environment Record and provides archaeological advice within the region which the Site occupies.
Zone of Theoretical Visibility	ZTV	An area which is modelled to have intervisibility with a given location, structure or development based on the subject's dimensions and surrounding topography.