

9 ARCHAEOLOGY AND CULTURAL HERITAGE

9.1 Introduction

This Chapter of the Environmental Impact Assessment Report ('EIA Report') evaluates the effects of the Ladyfield Renewable Energy Park ('the Development') on the Archaeology and Cultural Heritage resource. This assessment was undertaken by Wessex Archaeology.

This Chapter of the EIA Report is supported by the following Technical Appendix documents provided in Volume 3 Technical Appendices:

- Technical Appendix A9.1: Archaeological Desk-based Assessment; and
- Technical Appendix A9.2: Historic Environment Settings Assessment.

This Chapter of the EIA Report is supported by the following Figures provided in Volume 2a:

- Figure 9.1: Site, with designated heritage assets with the 15 km Study Area;
- Figure 9.2: Designated Heritage Assets and ZTV;
- Figure 9.3: Assets included in assessment;
- Figure 9.4: Site, Development and assets from the WoSAS HER; and
- Figure 9.5; Site, Development and assets identified in the DBA.

This Chapter of the EIA Report is supported by the following visualisations produced specifically for the Archaeology and Cultural Heritage assessment:

- Figure 9.6a-e Cultural Heritage Viewpoint 1: Caisteal Suidhe Cheannaidh, dun 470m NW of Achnacraobh (SM 4120);
- Figure 9.7a-d Cultural Heritage Viewpoint 2: The Society School, Glan Aray (LB 11523);
- Figure 9.8a-g Cultural Heritage Viewpoint 3: Dun na Cuaiche;
- Figure 9.9a-b Cultural Heritage Viewpoint 4: Inveraray Cross (SM 253);
- Figure 9.10a-d Cultural Heritage Viewpoint 5: Carloon Dooocot (LB 11540);
- Figure 9.11a-d Cultural Heritage Viewpoint 6: Inveraray Castle Stables;
- Figure 9.12a-b Cultural Heritage Viewpoint 7: Inveraray Castle (LB 11552);
- Figure 9.13a-d Cultural Heritage Viewpoint 8: St Conan's Kirk; and
- Figure 9.14a-d Cultural Heritage Viewpoint 9: Cruachan Power Station Visitors Centre;

This Chapter of the EIA Report is supported by the following visualisations which have been produced for the Landscape and Visual Impact Assessment, but are also relevant to the Archaeology and Cultural Heritage assessment:

- Figure 6.27c Viewpoint 4: Track above Inveraray;
- Figures 6.29c, 6.29d and 6.29e Viewpoint 6 Forest Track above St Catherine's; and
- Figures 6.30d and 6.30e Viewpoint 7: A815, Ardnagowan.

This chapter includes the following elements:

- Legislation, Policy and Guidance;
- Assessment Methodology and Significance Criteria;
- Baseline Conditions;
- Assessment of Potential Effects;
- Cumulative Effect Assessment;
- Mitigation and Residual Effects;
- Summary of Effects; and
- Statement of Significance.

9.2 Legislation, Policy and Guidance

The following guidance, legislation and information sources have been considered in carrying out this assessment:

9.2.1 Legislation

- Ancient Monuments and Archaeological Areas Act, 1979²⁴¹ as amended by the Historic Environment (Amendment)(Scotland) Act, 2011²⁴²;
- Planning (Listed Buildings and Conservation Areas) (Scotland) Act, 1997²⁴³ as Amended by the Historic Environment (Amendment) (Scotland) Act, 2011
- The Historic Environment Scotland Act 2014²⁴⁴; and
- Protection of Military Remains Act, 1986²⁴⁵.

9.2.2 Policy

- National Planning Framework (NPF) 4²⁴⁶; and
- Argyll and Bute Local Development Plan, (adopted 2015)²⁴⁷.

9.2.3 Guidance

- Scottish Natural Heritage (now known as NatureScot) and Historic Environment Scotland (HES) EIA Handbook²⁴⁸;
- Historic Environment Policy for Scotland (HEPS)²⁴⁹;
- Our Place in Time: The Historic Environment Strategy for Scotland²⁵⁰;
- Cifa Standards and Guidance for Desk-based Assessment²⁵¹; and
- Historic Environment Scotland (2016) Managing Change in the Historic Environment Series, specifically 'Managing Change in the Historic Environment: Setting'²⁵².

9.3 Assessment Methodology and Significance Criteria

9.3.1 Scoping Responses and Consultations

Consultation for this EIA Report topic was undertaken with the organisations shown in Table 9.1.

²⁴¹ UK Government (1979) Ancient Monuments and Archaeological Areas Act. Available at: <https://www.legislation.gov.uk/ukpga/1979/46> (Accessed 05.10.23)

²⁴² UK Government (2011) Historic Environment (Amendment) (Scotland) Act. Available at: <https://www.legislation.gov.uk/asp/2011/3/contents> (Accessed 05.10.23)

²⁴³ UK Government (1997) Planning (Listed Buildings and Conservation Areas) (Scotland) Act. Available at <https://www.legislation.gov.uk/ukpga/1997/9/contents> (Accessed 05.10.23)

²⁴⁴ UK Government (2014) Historic Environment Scotland Act. Available at: <https://www.legislation.gov.uk/asp/2014/19/contents/enacted> (Accessed 05.10.23)

²⁴⁵ UK Government (1986) Protection of Military Remains Act. Available at: <https://www.legislation.gov.uk/ukpga/1986/35/contents> (Accessed 05.10.23)

²⁴⁶ Scottish Government (2023) National Planning Framework 4. Available at: <https://www.gov.scot/publications/national-planning-framework-4/> (Accessed 05.10.23)

²⁴⁷ Argyll and Bute Council (2015) Local Development Plan. Available at: <https://www.argyll-bute.gov.uk/planning-and-building/planning-policy/local-development-plan> (Accessed 05.10.23)

²⁴⁸ Historic Environment Scotland (2018) Environmental Impact Assessment Handbook. Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=6ed33b65-9df1-4a2f-acbb-a8e800a592c0> (Accessed 05.10.23)

²⁴⁹ Historic Environment Scotland (2019) Historic Environment Policy for Scotland. Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=1bcfa7b1-28fb-4d4b-b1e6-aa2500f942e7> (Accessed 05.10.23)

²⁵⁰ Scottish Government (2014) Our Place in Time: The Historic Environment Strategy for Scotland. Available at: <https://www.gov.scot/publications/place-time-historic-environment-strategy-scotland/> (Accessed 05.10.23)

²⁵¹ CIFA (2014) Standard and guidance for historic environment desk-based assessment. Available at: <https://www.archaeologists.net/codes/cifa> (Accessed 05.10.23)

²⁵² Historic Environment Scotland (2016) Managing Change in the Historic Environment: Setting. Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationid=80b7c0a0-584b-4625-b1fd-a60b009c2549> (Accessed 05.10.23)

Table 9.1 Consultation Responses

Consultee	Type and Date	Summary of Consultation Response	Response to Consultee
West of Scotland Archaeology Service (WoSAS)	Scoping Response 02/03/2022	WoSAS generally agree with the proposed methodology for assessment. Noted settings assessment should include non-statutory register (NSR) sites of category C or V to the settings assessment.	Category C and V NSR assets have been included within the settings assessment within Technical Appendix A9.2
Historic Environment Scotland (HES)	Scoping Response 02/03/2022	HES noted there was a potential for significant adverse effects on the cultural significance of Inveraray Castle Garden and Designed Landscape alongside the Listed Inveraray Castle, Watch Tower at Dun Na Cuaiche, Carloon Doocot, Garden Bridge and Aray Bridge. Other assets located within a 5 km Study Area proposed at scoping which included Inveraray Castle Cross, Inveraray Cross, Keppochan, cup and marked stone 600m ESE of, Fraoch Eilean, castle and Caisteal Suidhe Cheannaidh, dun 470m NW of Achnacraobh. In most instances, it was noted that a significant effect from the Development on the cultural significance of these assets was unlikely. HES noted that they did not consider the proposed 5 km buffer for scoping assets particularly effective for identifying likely significant effects due to the scale of the Development	All assets noted as having a potential for a significant adverse effect have been assessed within Technical Appendix A9.2 and within Section 9.2 where appropriate. The Study Area for settings assessments was increased to include assets within the ZTV out to 15 km to adequately encompass assets which could receive a significant effect from the Development.
HES	Email correspondence between HES and ERM 18/04/2022	Following the receipt of the scoping response, email correspondence sent by ERM to HES setting out ten proposed key viewpoints from designated heritage assets to be included within the assessment comprising: Dun Na Cruiaiche Watch Tower, Garden Bridge, Carlood Doocot, Inveraray Castle, Aray Bridge, Inveraray Castle cross, Inveraray Castle Cross, front street, Keppochan, cup marked stone 600m ESE of, Fraoch Eilean Castle, Caisteal Suidhe Cheannaidh, dun 470m NR of.	Further email correspondence between HES and ERM culminating in request for online meeting on 04/05/2022. No meeting was organised due to diary conflicts, meeting was moved to on site on 08/06/2022
HES	On Site meeting between HES and ERM 08/06/2022	Following email correspondence sent between ERM and HES an online meeting was held to discuss the design and potential likely significant effects. The culmination of the correspondence and the online meeting was the agreement for a site visit with representatives from HES.	A site visit was undertaken with the HES team on the 8th June 2022 which focused on the potential effects from the Development in relation to the settings of Inveraray Castle, the Inveraray Castle Garden and Designed

Consultee	Type and Date	Summary of Consultation Response	Response to Consultee
			Landscape, Aray Bridge, Garden Bridge and the Dun na Cuaiche watchtower.
HES	Email correspondence between ERM and HES following site visit 14/06/2022	<p>Following the site visit commentary was provided by HES on the identified sensitive assets which is set out below with a general requirement for robust assessment to be undertaken:</p> <ul style="list-style-type: none"> • Noted that there would be no visibility of turbines from Inveraray Castle - not predicting significant effect on asset; • Agreed no visibility of Development from garden bridge, indicated preference for potential for removal of southern turbines in peripheral views from the Doocot; • No significant effects predicted on Doocot. • HES happy with progress so far and indicated unlikely to object; • Indicated there were unlikely to be significant adverse impacts on any scheduled monuments. 	<p>A number of design revisions were undertaken in light of comments from correspondence and from the onsite meeting which comprised the revision of the layout of the turbines to reduce the potential visibility of the Development from the key assets at Inveraray and Inveraray Castle. These design changes are set out in detail within Chapter 3: Site Selection and Design.</p> <p>Following the June site meeting with HES a further three design iterations followed, reducing the number of turbines from 18 to 13 and the maximum tip height from 200 m to 180 m. In summary, the turbines were moved to cluster in the northern part of the Site removing those on the south facing slope of Stùc Scardan.</p>
HES	Gatecheck Report 14/03/2023	HES confirmed issues raised in earlier responses had been adequately covered in the Gatecheck Report	All information produced for the Gatecheck Report has been included within this assessment

9.3.2 Scope of Assessment

This assessment focuses on the potential effects from the construction and operation of the Development on archaeological or cultural heritage assets.

The potential effects from the Development to cultural heritage assets are:

- Permanent effects due to land take by wind farm infrastructure, these are most typically associated with construction and ground disturbance associated with the Development;
- Temporary effects arising from the construction phase, such as noise and higher vehicular and pedestrian activity, which may cause reduced access to and / or reduced appreciation of the historical environment;
- Effects through changes to the settings of cultural heritage assets, which may affect their cultural significance. These typically occur during the Operational phase of the Development and are largely visual effects and are likely to occur as a consequence of the height and breadth of the Development. They are especially likely to occur on cultural heritage assets located on high ground where their historical significance lies in the wider landscape setting including long- distance views to and from the asset. These effects will occur for up to 40 years for the operational lifetime of the Development which for the purposes of this assessment are considered to be Permanent, but reversible.
- Cumulative effects resulting from multiple environmental changes which can occur in combination with other Developments.

As part of the scoping exercise and post-scoping consultation, several heritage specific viewpoints were selected in consultation with HES to represent heritage assets that were identified as being the most likely to receive a change in setting that affects cultural significance. These include:

- Viewpoint 1 – Calasteal Suidhe Cheannaldh, dun 470m NW of Achnacraobh (SM 4120);
- Viewpoint 2 – The Society School, Glen Aray (LB 11523);
- Viewpoint 3 – Dun na Cuaiche (LB 11543);
- Viewpoint 4 – Inveraray Cross (SM 253);
- Viewpoint 5 – Carloon Doocot (LB 11540);
- Viewpoint 6 – Inveraray Castle Stables (used in this assessment as representative for a group of Category B and C listed buildings);
- Viewpoint 7 – Inveraray Castle (LB 11552);
- Viewpoint 8 – St Conan’s Kirk (LB 4700); and
- Viewpoint 9 – Cruachan Power Station (LB 51688);

Where relevant, reference is also made to visualisations produced for Chapter 6 – Landscape and Visual Impact Assessment.

9.3.3 Elements Scoped Out of Assessment

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 (see Table 9.1), the following topic areas have been scoped-out of detailed assessment:

- Effects on assets outside the Development footprint through direct impacts caused by construction works;
- Effects on non-designated heritage assets over 5 km from the final Wind Turbine layout of the Development through a change in setting;
- Effects on all heritage assets beyond 15 km from the Development through a change in setting;
- Cumulative effects to heritage assets for wind farm sites beyond 15 km from the Development; and
- Effects upon cultural heritage assets from decommissioning (see below).

At the end of the licencing period for the Development, the Wind Turbines and associated infrastructure will be removed to decommission the Development. While the methodology of this is not currently set out in detail, the process of removing the built form of the Development is not expected to require any additional land take, nor is it expected to require any new intrusive excavation compared to construction.

There would therefore be no additional impacts on any buried archaeological remains, either known or unknown, other than those already reported during the construction phase.

The removal of the built form of the Development will return the land within the Site to its original form, i.e. its current character.

Where the Development is reported to have an effect on a heritage asset through a change in setting, that effect will be removed if was derived from the introduction of the built form into that setting.

These effects are reported during operation as permanent as the period of time they span can be many years and therefore cannot constitute a ‘temporary effect’. However, as the effect can be removed at decommissioning, these effects are therefore fully reversible.

9.3.4 Study Area / Survey Area

The Core Study Area (CSA) comprises the Site, with the extents and location shown on Figure 9.4 and 9.5. The CSA is the area in which direct effects to archaeology may occur as this is the area in which the Development infrastructure will be sited.

A 1 km study area, which includes the CSA and land within a 1 km radius of the CSA was used to establish the known heritage resource (both designated and non-designated) in order to inform the archaeological baseline and potential for unidentified archaeology to be present within the CSA.

To provide an appropriate and robust assessment of potential effects to designated and non-designated heritage assets through a change to their setting where that setting contributes to their cultural significance, a Setting Study Area of 15 km from the Site Boundary was used (Figure 9.1). The size of this Study Area is reflective of the height of the Wind Turbines within the Proposed Development and their potential visibility over a wide area. The provision for assessment of heritage assets within a 15 km study area ensures any visual relationships which contribute to the significance of a heritage asset are considered within the assessment.

For the assessment of potential cumulative effects, the Study Area used corresponded with the Setting Study Area of 15 km to ensure all Potential Developments which may have an in-combination effect with the Development were captured.

9.3.5 Baseline Survey Methodology

An Archaeological Desk-Based Assessment (DBA) was undertaken reviewing available documentary, cartographic, and photographic evidence to establish the baseline of the Core Study Area and 1 km Study Area as well as its archaeological potential in lines with best practice and guidance. The DBA is provided in Technical Appendix A9.1 and consulted the following sources:

- Databases of cultural heritage assets maintained by HES including designated heritage assets and Canmore database;
- WoSAS Historic Environment Record (HER);
- Aerial photography and lidar data, where available;
- Cartographic evidence including historic maps;
- Statistical Accounts of Scotland; and
- National Archives of Scotland.

A site visit was undertaken in March 2022 with further site visits undertaken in May 2023 to identify and (where possible) record any previously unrecorded cultural heritage features within the Site as well as to visit nearby heritage assets. A general walkover of the area around the proposed Development infrastructure and known archaeological sites was conducted. Full details of the walkover survey are provided in the DBA within Technical Appendix A9.1.

9.3.6 Methodology for the Assessment of Effects

The significance of the potential effects of the Development has been classified by professional consideration of the sensitivity of the receptor and the magnitude of the potential effect.

9.3.6.1 Sensitivity of Receptors

Cultural significance is defined in national planning policy as:

"...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."

In order to avoid confusion with significance of effect, significance in relation to the value of a heritage asset will be referred to throughout this assessment as 'cultural significance'.

The sensitivity of receptors, for the purposes of this assessment, designation status is used as a proxy for cultural significance as these hold an inherent cultural significance which justified its designations.

This determination is further justified through the level protection afforded to the designations and their meaning in terms of planning policy.

Using the proxy criteria in addition to national planning policy and guidance, and through professional judgement. Table 9.2 below encompasses both designated heritage and non-designated heritage assets.

For heritage assets there is an explicit distinction between their cultural significance and their 'sensitivity to change'. Some assets of the highest designation will not be sensitive to the types of changes proposed whilst others will be more so. This will be assessed on a case-by-case basis in the assessment text for each asset, as appropriate.

Table 9.2 Framework for Determining Sensitivity of Receptors

Sensitivity of Receptor	Definition
High	World Heritage Sites, Scheduled Monuments, Category A and B listed buildings, Category C listed buildings which can be shown to have exceptional qualities in their fabric or historical association. Historic Battlefields, Inventoried Gardens and designed landscapes, and non-designated assets, including archaeological remains, of equivalent cultural significance which are considered to be potentially nationally important.
Medium	Category C listed buildings, other than those listed above, regionally important archaeological features and areas (as defined in the HER) and Conservation Areas, which are considered regionally important.
Low	Sites and features noted as locally important in the HER, other non-designated features of cultural significance.
Negligible	Assets compromised by poor preservation and/or poor contextual association, or very common archaeological features/buildings of little or no value at local or other scale

9.3.6.2 Magnitude of Change

Magnitude of change has been assessed using the nature of a predicted impact, which is broken down in Table 9.3.

Direct impacts are permanent, as the loss of or of damage to archaeological assets cannot be repaired, replaced or recreated.

Indirect impacts can occur through changes in setting (arising from visual intrusion, etc.) which may cause a reduction in the contribution that the setting makes to the cultural significance of an asset, so that there is an impact (reduction) in the overall cultural significance of the asset, or that the cultural significance can no longer be appreciated or experienced.

Table 9.3 Framework for Determining Magnitude of Change

Magnitude of Change	Definition
High	Total loss of or major physical damage to or significant alteration to a site, building or other feature. Extensive change (e.g. loss of dominance, intrusion on key view or sightline) to the setting of a Scheduled Monument, Listed Building or other feature registered as nationally important, which may lead to a major reduction in the contribution of that setting to the cultural significance of the asset so that the asset loses cultural significance, and a major reduction in the ability to experience and/or appreciate that cultural significance.
Medium	Damage or alteration to a site, building or other feature. Encroachment on an area considered to have a high archaeological potential. Change in setting (e.g. intrusion on designed sight-lines and vistas) to monuments / buildings and other features, which may lead to a moderate reduction in the contribution of that setting to the heritage significance of the asset. Change/reduction in the ability to experience/appreciate that heritage significance.
Low	Minor damage or alteration to a site, building or other feature. Encroachment on an area where it is considered that low archaeological potential exists.

Magnitude of Change	Definition
	Minor change in setting (e.g. above historic skylines or in designed vistas) of Monuments, Listed Buildings, sites and other features, which may lead to a small reduction in the contribution the setting makes to the heritage significance of the heritage asset, and limited loss of heritage significance. Minor change in or reduction of the ability to experience or appreciate the heritage significance of an asset.
Limited	Limited damage or alteration to a site, building or other feature. Encroachment on an area where it is considered to have limited archaeological potential Limited change in setting (e.g. above historic skylines or in designed vistas) of Monuments, Listed Buildings, sites and other features, which may lead to a very small reduction in the contribution the setting makes to the heritage significance of the heritage asset, and limited loss of heritage significance. Very small reduction of the ability to experience or appreciate the heritage significance of an asset.
Negligible	No Physical Effect No change in setting with no change in the contribution that setting makes to the heritage significance of the asset. No change in the ability to experience or appreciate the heritage significance of the asset.

9.3.6.3 Significance of Effect

The predicted significance of effect is determined through a standard method of assessment based of professional judgement, considering both sensitivity and magnitude of change as detailed in Table 9.4 below. Major and Moderate effects are considered significant in the context of EIA regulations and are shaded in light grey in the below table.

The significance of effect in EIA is binary, either an effect is significant, or it is not. This is different to the cultural significance of a heritage asset, the criteria for which is set out above in Section 9.3.6.1.

Effects can be beneficial or adverse, and permanent or temporary, where temporary makes reference to effects limited to the construction phase of the Development.

All effects derived from direct impacts are permanent while those derived from indirect impacts are long term, occurring over the lifetime of the Development, but are fully reversible upon decommissioning.

Table 9.4 Framework for Assessment of the Significance of Effects

Magnitude of Effect	Sensitivity of Receptor			
	High	Medium	Low	Negligible
High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Negligible	Negligible
Limited	Minor	Negligible	Negligible	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible

9.3.7 Assessment Limitations

Data used to compile this assessment consists of information derived from a variety of sources.

Where secondary sources have been used, e.g. within the DBA, while the information is assumed to be accurate it does not constitute a complete record of the historic environment and does not preclude the potential for hitherto unidentified archaeological remains or deposits to be encountered within the Site.

Visits for settings assessments were undertaken from publicly accessible areas only, with limited access to private curtilage beyond the Site Boundary.

While there are necessarily limitations, the use of industry standard and guidance combined with professional judgement has ensured all assessments and subsequent conclusions are robust.

9.3.8 Embedded Mitigation

The following design measures are relevant to archaeology and cultural heritage:

- Through consultation with Historic Environment Scotland (see consultation in Table 9.1 above) the layout of the turbines was altered to reduce the potential visibility of the Development from the key assets at Inveraray and Inveraray Castle. In summary, the turbines were moved to cluster in the northern part of the Site removing those on the south facing slope of Stùc Scardan (See Chapter 3: Site Selection and Design); and
- In relation to potential indirect impacts to designated heritage assets through a change in setting, the design process has been collaborative across all the environmental disciplines to ensure a joined up and holistic approach to minimising, and removing entirely where possible, any adverse environmental effects (See Chapter 3: Site Selection and Design);
- The primary design consideration for physical impacts to any potential archaeological remains has been avoidance of any currently known heritage assets. In considering the siting of Wind Turbines and establishment of associated infrastructure, design measures have been put in place to avoid placing them on or near any known heritage assets as far as possible (See Chapter 3: Site Selection and Design);
- The Site boundary has been altered to remove access tracks from running through the Inveraray Castle Garden and Designed Landscape to prevent any physical impacts or indirect impacts through traffic movement during construction and/or operation.

9.4 Baseline Conditions

The purpose of this section is to describe the existing archaeology and cultural heritage conditions within the CSA and associated context as defined in Section 9.3.4 in respect of which the assessment is undertaken.

The information is primarily taken from the Historic Environment Desk-based Assessment (Technical Appendix A9.1) where the specific methodologies, including sources and any specific additional guidance are set out. The DBA has:

- synthesised information from a range of sources, setting out the baseline information of the known heritage resource within the CSA and 1 km Study Area extending from the limits of the CSA,
- established the archaeological potential of the CSA; and
- identified any heritage assets which may be directly impacted by the Development.

9.4.1 Prehistoric to Roman (12,700 BC to AD 400)

The earliest evidence for human activity in Scotland dates to around 8500 BC. The environment in Argyll would have been mostly wooded with environmental evidence suggesting the presence of birch, hazel and later some species of pine. Like much of Great Britain, these early inhabitants were mobile hunter-gatherer populations who made use of the natural resources. As a result, much of the evidence uncovered has been found near river valleys or coastal areas, however, recent investigations have suggested the presence of temporary settlement sites further inland, and in upland areas.

Patterns of settlement in Scotland began changing around 4000 BC when progressive, piecemeal clearance of woodland was undertaken to create areas for cultivation, grazing and plantations. This is a similar pattern repeated across the country during the Neolithic period and there is no definitive pattern for the locations cleared at this time with both river valleys and upland areas taken advantage of.

There is a general lack of evidence for activity and occupation during the earliest prehistoric periods of the 1 km Study Area with no recorded assets dating to either the Mesolithic or Neolithic periods recorded. Beyond the 1 km Study Area, a number of cup and ring marked rocks are recorded (e.g. at Stronshira and at Kepochan) which are generally thought to date from approximately 3500 – 1000 BC and indicate the presence earlier of prehistoric populations in the area.

Between approximately 2500 BC and 800 BC, the Chalcolithic and Bronze Age periods in Scotland, the introduction and use of copper and copper alloys for the manufacture of tools, ornaments and weapons led to the creation of ornate material culture like jewellery, but also a cultural change with a greater focus on monumentality in burial practices. Bronze artefacts were highly prized and the process of their exchange between individuals led to the development of an international trade network.

While there is no evidence for Chalcolithic or Bronze Age activity within the Study Area, several Bronze Age items are held within the Inveraray Castle Collection, including Late Bronze Age jewellery and ornaments that were discovered close to North Tullich, Glen Aray.

By around 800 BC, there was a shift from bronze to iron metal working and a decrease in the visibility of funerary/ritual traditions within the landscape. This decrease was accompanied by an increase in the construction of defensive and communal centres, including Duns, Forts and Crannogs. No such features are recorded within the 1 km Study Area, although examples like the scheduled Caisteal Suidhe Cheannaidh (SM4120) are located in the wider landscape (approximately 10 km to the north-west of the Site). The Iron Age in general in the area is poorly understood as is evidenced by the lack of identified find and features.

The Roman period in Scotland begins in c. 77 AD with the available evidence their activities generally focused on military encampments and fortifications. The Roman Army first established a series of forts and camps initially along the Gask Ridge in around 79 AD after they advance across the Forth, although the fortifications eventually stood further to the south along what became the Antonine Wall. The Site is located some distance from the recorded limits of the Roman Army's expansion into Scotland and as such, no remains from this period are known in the 1 km Study Area or in the wider landscape.

9.4.2 Medieval (AD 400 to 1500)

The first half of the first millennium AD saw a series of kingdoms emerge from what once were the Iron Age tribes of Scotland. The Site is located in an area on the periphery of the Gaelic Kingdoms of Dál Riata and Alt Clut which peaked in the 6th and 7th centuries AD, but was also in an area subject to Norse settlement in the latter centuries of the 1st Millennium AD.

By the end of the 11th century, Anglo-Norman political and cultural influence on Scotland was increasing, initially through familial links like those of King Malcolm III (AD 1058-1093), King Henry I of England and Eustace III of Bologna. With the Anglo-Norman influence came the introduction of the feudal system, the creation of new titles and a religious move towards Catholicism.

The feudal system created powerful noblemen who controlled large areas of land, like the Campbells who controlled large swathes of Argyll. The Campbells, thought to originate from the Kingdom of Strathclyde, likely arrived in Argyll as part of a Royal expedition c. AD 1220 (under Alexander II), settling on Lochaweside where they were placed in charge of the King's lands in the area as the Earl of Argyll from AD 1457 and Duke of Argyll from 1658. The head of the Campbells also used the gaelic title of MacCailein Mor.

The family seat of power was the now ruined castle at Innischonnell on Loch Awe and remained so until AD 1450 when Sir Duncan Campbell moved to Inveraray. The original castle was little more than a defended tower house which was demolished in the 18th century to make way for the existing castle (see below). Associated with the castle was a small village, located approximately 300 m to the south of the tower house which is likely to have been established in approximately AD 1472.

There are no assets from the medieval period within the Site, however, there are a number of assets recorded within the 1 km Study Area which includes the remains of the now deserted medieval village of Inveraray and the demolished old castle. Other assets include a settlement at Carness and a township at Kilmun. Evidence for other medieval activity takes the form of fragmentary field system remains, including earthworks relating to rig and furrow which is indicative of medieval agricultural practice.

9.4.3 Post-medieval (1500 to 1900)

The Post-Medieval period saw rapid changes to the regional and national socio-economic climate, culminating in the Act of Union in AD 1707. These changes brought about a dramatic alteration of the Scottish countryside and urban centres, characterised by a shift from dispersed rural populations to larger villages and townships, as a direct result of the changes to land ownership, and a move from subsistence farming to homogenised agricultural practices.

These changes are most obvious within the 1 km Study Area through the creation of an extensive designed landscape at Inveraray, with a new castle and a new planned town located beyond the 1 km Study Area, all constructed between 1771 and 1792 by the Dukes of Argyll.

The designed landscape draws its inspiration from plans drawn up by architects William and Robert Adam, Robert Mylne and Roger Morris on behalf of the 2nd Duke. Morris was responsible for the castle which is a 'Gothick' style building, with the main entrance south-west centred on a formal walled garden and earlier lime avenue associated with the demolished Medieval castle. The redesigned Inveraray Castle is the focal point of the designed landscape and policy taking in parklands, garden buildings and vast woodland plantations, with the planned town of Inveraray providing a secondary focus.

The designed landscape contains a number of designed processional routes both into the estate grounds and within the estate itself. The original primary approach was along Lime Avenue towards the medieval castle which runs from the rear of the present day Inveraray Castle, through the formal gardens to the south-west across Wintertown Park. This was replaced by a long entry route in the mid-18th century which began at the Garron lodge and meandered for approximately two kilometres around the lower elevation of Dun Na Cuaiche where views of the castle were carefully managed.

The mid-18th century entrance route has itself been replaced by the current approach is from the Wintertown Gate, commencing at the north end of Inveraray town Front Street, westwards across the Wintertown Park.

The designed landscape at Inveraray encompasses several associated structures of note including the Watchtower on Dun na Cuaiche sited on hills 1 km to the north-east of the castle, a Coach House and former Riding School located 900 m north-west of the Castle, as well an Icehouse and Dovecot, located north-west of the castle. Several bridges were constructed to cross the various watercourses that run through the designed landscape. The Inveraray Castle designed landscape also includes several cottages, lodges summer houses and fish houses within the wider policy.

Within the grounds, the Oak Walk avenue is the most prominent route northwards across the policies, extending from the northern frontage of the castle over the garden bridge through the Duchess Louise Wood towards Carloonan and the dovecot. The tree-lined avenue originally extended across the northern parkland to the dovecot, although this was removed at some point between 1750 and 1800 based on cartographic evidence.

The woodland forms a critical part of the designed landscape with a triangle of woodland to the north of the castle known as the Duchess Louise Wood likely to have been first planted in the late 17th or early 18th century. Between 1832 and 1837, the 7th Duke planted over 400,000 trees including 170,000 oak, 10,000 plane and 5,000 laburnum while by 1883 more than two million oak, larch, Scotch fir and spruce had been planted. The felling and management of the woodland became a crucial aspect of the local economy and has remained a substantial industry into the present.

In addition to the woodland, the estate also contains associated parklands located across low-lying land at the foot of Glen Aray and neighbouring Glen Shira and a tract of land to the southwest known as the 'Fisherlands'.

The planned town of Inveraray has been described as Scotland's most ambitious and distinguished early model planned town. Aligned north-east to south-west along the principal Main Street, the town was established in 1750 with the first buildings located on Front Street including the former Town House and the Great Inn, both designed by John Adam.

Beyond the Inveraray Castle landscape, the post-medieval landscape comprises dispersed farmsteads and shieling huts, abandoned settlements like the township and chapel at Kilmun and evidence of the rural economy in the form of charcoal burning platforms, rig and furrow and former field systems. Historic mapping (see Technical Appendix A9.1: Section 4.6.4.1) traces the development of the area from the earliest available cartographic source from 1583 through to the modern period, generally depicting a landscape of small rural settlements which were eventually cleared to make way for sources of income for the estate by the 19th century.

Within the CSA, historic mapping from the mid-19th century depicts the Site in sufficient detail to indicate the presence of a number of settlements within the CSA including Upper Kennachregan with the settlement of Ladyfield just outside the CSA to the west. Historic mapping also indicates the presence of a series of field boundaries (DBA ref: HM4) associated with the settlements along with an earthwork of unknown function, possibly part of historic quarrying activities (DBA ref: HM3).

Part of the changing landscape of the post medieval period included the establishment of upgraded infrastructure in the form of Military Roads, many of which are depicted on Roy's Military Map of Scotland drafted between 1747 and 1755. Before the roads were constructed, Inveraray was only readily accessible by boat. The Military Roads had a separate function beyond the improvement of transport routes, they afforded the British Government ease of traversal for its forces to help control the highlands after the Jacobite rebellion in 1715. The roads therefore were an implement of the British state in the suppression of the Gaelic culture in much the same way as the Society in Scotland for Propagating Christian Knowledge used school curriculum to 'civilise' the highlands. Once such example Society School is located within the Study Area, approximately 250 m west of the Site.

9.4.4 Modern (1900 to present)

The modern period is defined by the continuing use of the 1 km Study Area by the forestry industry and by the relatively unaltered Inveraray Estate which is now a popular tourist destination. In the early 20th century, the Ladyfield plantation was used by the artillery as a practice firing range with the Ministry of Defence maintaining a small presence on the Site as there remains a potential for some Unexploded Ordnance (UXO) to be present in areas now covered by woodland.

9.5 Assessment of Potential Effects

9.5.1 Introduction

Potential effects can occur during the construction, operation and decommissioning of the Development and through direct and indirect impacts which are outlined below.

9.5.2 Construction

The Development would comprise up to 13 three-bladed horizontal axis wind turbines with a maximum tip height of 180 metres (m). The Vestas V136 4.5 MW has been chosen as the candidate turbine for the Development.

Additional infrastructure and site works include:

- Crane hardstandings;
- Access tracks of 5.5 m width, linking the turbine locations and comprising of a combination of new and upgraded tracks including watercourse crossings;
- Network of underground cabling, laid where possible alongside the access tracks;
- A substation and control building located within a compound measuring just under 1 hectare, which will also include any external electrical infrastructure and vehicle parking.
- A Battery Energy Storage System;
- Two Temporary construction compounds;
- A 50m x 40m extension to the existing quarry;
- Upgraded site access from the A819;
- New site access from the A819, and
- Felling of forestry.

There will be no direct impacts outside of the footprint of these construction activities.

As a result of the construction activities noted above, direct impacts will occur on the following heritage assets:

- An unidentified earthwork recorded from historic mapping (HM3); and
- A series of former field boundaries identified from the first Edition Ordnance Survey Map (HM4).

There is also a potential for direct impacts on as yet unknown archaeological remains.

9.5.2.1 Earthwork of unknown provenance (HM3)

An earthwork identified from aerial imagery and historic mapping which is likely to relate to agricultural practices from the post-medieval period. A small section of the earthwork at its south-western end will be removed by the construction of the foundations for Wind Turbine 9. While this is a direct impact, this will remove only a limited portion of the asset with the majority of its cultural significance left unaltered with any archaeological or historic interest still able to be understood and appreciated.

The earthwork is an asset of low cultural significance upon which a limited magnitude of change will result in a negligible effect which is not significant for the purposes of EIA.

9.5.2.2 Former field boundaries (HM4)

A series of field boundaries identified from aerial imagery and historic mapping which likely date to the post-medieval period. A number of small sections of the field boundaries will be removed by the establishment of new access roads throughout the Site. While this is a direct impact, only a very limited section of what is an extensive asset will be removed. The nature and cultural significance of the field boundaries will remain essentially unaltered save for a limited reduction in the ability to appreciate their continuity on the ground or on subsequent satellite imagery, although that continuity will still be appreciable from historic documentation.

The field boundaries are assets of low cultural significance upon which a limited magnitude of change will result in a negligible effect which is not significant for the purposes of EIA.

9.5.2.3 Currently unknown archaeological remains

As set out within Technical Appendix A9.1 (DBA), based on the information gathered from various sources, there is a potential for archaeological remains to be present within the Site. These remains

are likely to be no earlier than post-medieval in date and most likely to be encountered along the southern and western boundaries of the Site.

Within areas covered by 20th century forestry plantation, any potential archaeological remains are likely to have been disturbed through tree planting, rooting and felling, although the level of disturbance is currently unknown.

Using Technical Appendix A9.1, Table 5 the likely cultural significance of any encountered currently unknown archaeological remains could range from negligible to high. The high assumed impact of the Development would result in effects assessed as ranging from minor to major adverse, which at the top of the range is significant for the purposes of EIA, prior to mitigation.

9.5.24 Designated and non-designated heritage assets

Whilst there would necessarily be an increase in noise and visibility of the construction works arising from the presence of cranes, vehicles, flashing lights etc. within the Site and accessing the Site, these effects are temporary and short term, limited to working hours and for the duration of the construction programme.

None of the assets within the study area were identified within the settings assessment (Technical Appendix A9.2) as being sensitive to these types of intrusions and while there may be some change in experience, the limited range and application would not result in a marked alteration in setting and thus will not lead to an effect to their cultural significance.

Specific indirect effects on heritage assets within the study area through a change in setting are considered below in relation to the final built form of the Development.

9.5.3 Operation

The identification and refinement of designated and non-designated heritage assets which have the potential for a likely significant effect through a change in their setting that may affect their cultural significance is set out in detail within Technical Appendix A9.2.

In summary, a long list 263 of heritage assets (246 of which are designated, 17 non-designated; Figure 9.1) which had the potential to be impacted upon by the Development through a change in their setting was collated on the bases of the process set out during scoping and in line with industry standards and guidance. Following a sieving exercise, this long list was reduced to a short list of 82 heritage assets which were then considered in further detail (Figure 9.2).

Of those 82 assets, 26 were assessed in detail within Technical Appendix A9.2 with 13 subject to further detailed assessment to determine whether they are susceptible to a potential likely significant effect (Figure 9.3). The remainder of the assets are not included within the assessment, with justification for their exclusion presented in Technical Appendix A9.2.

This detailed assessment identified Effects on the cultural significance of the following heritage assets through a change in their setting where that setting makes a contribution to their significance:

- A minor adverse effect on the Inveraray Castle Garden and Designed Landscape;
- A minor adverse effect on the Category A Listed Society School; and
- A minor adverse effect on the Ardanaiseig House Garden and Designed Landscape

The assessment of these assets is presented in detail within the tables below.

GDL00223: Inveraray Castle		
Designation	Sensitivity (Value)	Distance and Direction to Nearest Turbine
Garden and Designed Landscape	High	3.4 km north-west
Summary of Asset and Cultural Significance	<p>The asset comprises a substantial designed landscape which evolved over 300 years under the direction of the Earls and Dukes of Argyll. The designs take advantage of the naturally rugged topography and inland sea location through the placement of woodland plantations and buildings in key locations to maximise the natural landscape. The landscape includes the town of Inveraray which is a critical element to the overall aesthetic and experience of the asset as a whole.</p> <p>The landscape was largely established between 1750 and 1800 and is among the earliest examples of town planning using the ideals of the Scottish Enlightenment. The Earls and Dukes of Argyll were assisted in their work by a number of important contemporary designers including Robert Adam and Robert Mylne which led to the creation of a much celebrated landscape.</p> <p>The landscape contains over 100 listed buildings, forming an important part of their setting which includes the Category A Listed Inveraray Castle and the Category A Listed Watchtower on Dun Na Cuaiche which are both assessed elsewhere in this report.</p> <p>The asset derives its cultural significance from its historic importance, through the integrity of the historic landscape elements, through its direct association with the town of Inveraray and through its historic associations with the Earls and Dukes of Argyll and the Scottish Enlightenment.</p>	
Definition of Setting and Contribution to Cultural Significance	<p>The setting of the asset is defined by its location at the mouth of the River Aray and River Shira where it meets Loch Fyne/Loch Shire, and by the mixture of low-lying land towards Glen Aray, Glen Shira and the Fisherlands alongside the upland landscape of Dun Na Cuaiche which offers impressive, wide ranging views across immediate area. While much of this setting makes a contribution to its significance, there are a number of specific viewpoints which have been identified as key including the view of the town from Garron Bridge when moving into the landscape from Glen Shira, views from the summit of Dun Na Cuaiche, long range views towards the hills of Strachur and Cruch-nan-Capill and towards the opposite side of Loch Fyne.</p> <p>There are some elements of modern infrastructure visible within the wider landscape including electricity pylons to the south/south-west on the elevated land above Inveraray, and wind turbines to the north-west (approximately 5 km to the northwest on Clachan Hill; Technical Appendix A9.2 - Plate 5). However, these are generally not prominent when viewed as part of the landscape as a whole.</p> <p>As a designed landscape, external setting is generally of less importance than movement through the landscape taking in the elements as they were intended to be experienced. While not strictly an element of 'setting' this experience of the landscape does make a contribution to the assets cultural significance and as such is considered in conjunction with external views.</p> <p>The main approach to the castle was designed to be from the south-west along Lime Avenue and although no longer in use, still forms a key element of the designed landscape. The other drives and approaches generally run in a similar alignment (south-west/north-east) including the Avenue through Inveraray. By the late 18th century, the establishment of the Grand Approach moved away from the straight, axial roads to a more meandering approach starting some 2 km away at Garron Lodge and allowing arranged glimpses of the town and the castle at various stages.</p> <p>Beyond the approach roads, Oak Walk takes a co-axial route to the north-west from the castle passing over the Garden Bridge and into a large area of woodland, emerging at a clearing where clear views are afforded across a managed agricultural landscape towards a Doocot at its terminus. This vista takes in not only the edge of the designed landscape, but the uplands beyond.</p>	

GDL00223: Inveraray Castle		
Designation	Sensitivity (Value)	Distance and Direction to Nearest Turbine
Garden and Designed Landscape	High	3.4 km north-west
Magnitude of Change to Cultural Significance	<p>The Development will be located to the north/north-west of the asset at its closest point near Ladyfield Farm where the turbines will be visible beyond the extent of the designated area and will be visible from the higher elevations of Dun Na Cuaiche. Where the asset stretches along Glen Shira, the existing topography prevents any invisibility between here and the Development. Likewise, there will be no visibility from Inveraray, Inveraray Castle or any views of important assets in conjunction with the Development from the majority of the area covered by the designation. The Development will not lead to a change in any of the identified key views, aside from the higher elevations of Dun Na Cuaiche, and will not be visible in combination with the watchtower or from any point within the town of Inveraray.</p> <p>The Development will not intrude on any of the identified drives or approaches, nor will it be visible along any of the main access routes into the landscape. There will be some visibility at the northern end of the Oak Walk, however, much of this view is dominated by the strategically placed Doocot and by intervening vegetation at the limits of the estate (Technical Appendix A9.2 - Plate 6).</p> <p>This assessment must therefore consider the magnitude of change to the asset within this context, taking into account there is no visibility across the majority of the designated area but tempering that with the clear visibility in these identified locations.</p> <p>This must also be tempered against the clear prominence of the aesthetic of the landscape and its historic associations which constitute the largest parts of its cultural significance and will remain unaffected.</p> <p>The hub from turbine 11 and blades from turbine 13 from the Development are shown in the wireframes to be visible from within the Designed Landscape (Figure 9.11c), although the accompanying photomontage (Figure 9.11d) indicates that visibility will be entirely screened by the existing vegetation.</p> <p>The hubs of turbines 11 and 13 and the blades of turbines 5, 6, 7, 8, 9, 10 and 12 (Figure 9.8f) from the Development will be visible from the higher elevations of Dun Nah Cuaiche and will be a noticeable modern addition into what remains an overwhelming rural landscape. In that sense, there will be some reduction in the appreciation and experience of the northern edge of the designed landscape and of how that interacts with the unmanaged landscape beyond.</p> <p>The Designed Landscape will also be visible in views from the south and south-east in conjunction with the Development. The understanding of the asset is primarily drawn from the internal aesthetic and relationship with its constituent elements, from the strong relationships between the landscape, the town and Dun na Cuiache watchtower and from the various designed entrances and route through. The presence of turbines in the wider landscape is incidental and understood as part of an evolving area which includes some existing modern infrastructure, including electricity pylons which are of greater intrusion when viewing the asset from the south-east. The Development will not change the understanding of the asset, nor does not alter the ability to appreciate or experience the cultural significance of the asset.</p> <p>Taking these separate elements into consideration, the Development will lead to a reduction in the cultural significance of the designed landscape, albeit in a minor way. Their presence will not fundamentally alter the appreciation of the substantial landscape, nor will they detract from an understanding of its development, its design or of its historical importance.</p>	
Statement of Significance of Effect	<p>The Development will result in a Limited magnitude of change to an asset of High cultural significance which will result in a Minor Adverse effect, which is not significant for the purposes of EIA and reported within the EIAR.</p>	

LB11523: Society School, Glen Aray		
Designation	Sensitivity (Value)	Distance and Direction to Nearest Turbine
Category B Listed Building	High	1.5 km south-west
Summary of Asset and Cultural Significance	<p>The asset comprises the ruins of a late 18th century 'Gothick' style school founded by the Society in Scotland for Propagation of Christian Knowledge (SSPCK). The main building is two storeys in height with some architectural detailing remaining while the associated outhouse is a single storey structure (Technical Appendix A9.2 - Plate 12).</p> <p>The cultural significance of the asset is through its historic association with the SSPCK and the Anglicisation of the Highlands in the 18th century which had over 175 schools across Scotland by the time of the construction of this school. The school is a physical reminder of the substantial effect the drive to purge the Gaelic Language and culture from the Highlands.</p>	
Definition of Setting and Contribution to Cultural Significance	<p>The setting of the asset is defined by its location adjacent to the River Aray and the course of one of George Wade's Military Roads. Beyond these two immediate associations, the general surrounding landscape is characterised by the river valley with hills to the east and west.</p> <p>The immediate setting of the asset makes a positive contribution to the cultural significance of the asset as it allows for an appreciation of the historic importance of the school within its original context as a tool of control and subjugation. The relationship Wade's Road, which was established to assert control in a different way, also enhances the understanding and appreciation of this period of history in the Highlands.</p> <p>While the rural landscape does not add any additional historic context to the understanding of the school's role, it does allow for an appreciation of the context in which the school was constructed i.e. in a relatively remote area to affect the local population situated within the dispersed settlements in the surrounding Glens and uplands. This wider setting then does make a contribution to the understanding of this element of its cultural significance, however, the degree to which that relates to the overall understanding of the asset is limited in comparison to the primary elements discussed above.</p>	
Magnitude of Change to Cultural Significance	<p>The bare earth wireframes (Figure 9.7c) indicate the Development will be visible to the north-west of the asset with all but four of the turbine hubs (1, 2, 5 and 9) discernible over the horizon line. As Technical Appendix A9.2 - Plate 13 and the photomontage from Figure 9.7d shows, this view contains some mature vegetation which will limit, almost entirely, the visual alteration caused by the presence of the Development.</p> <p>The Development will not alter the relationship between the school and the military road, nor will it alter the understanding of how these were used in the 18th century to try and assert control over the Highlands and suppress the local population. These critical elements of cultural significance will be unaffected.</p> <p>The turbines will, however, represent a change in the understanding of the remote upland context in which the asset was established and the appreciation of its use to control the population.</p> <p>In this respect, the Development will not fundamentally affect the cultural significance of the asset, nor of the appreciation of that cultural significance, but will result in a small reduction in some of the understanding of its surrounding context.</p>	
Statement of Significance of Effect	<p>The Development will result in a Limited magnitude of change to an asset of High cultural significance which will result in a Minor Adverse effect, which is not significant for the purposes of EIA.</p>	

GDL00018: Ardanaiseig House Garden and Designated Landscape		
Designation	Sensitivity (Value)	Distance and Direction to Nearest Turbine
Garden and Designed Landscape	High	12.7 km south-east
Summary of Asset and Cultural Significance	<p>The asset comprises a 19th century deigned landscape which forms the estate for the contemporary, Baronial style mansion. The landscape primarily comprises woodland, gardens, parkland and architectural features which are arranged around the house.</p> <p>The landscape was commissioned by William Burn Campbell who primarily had various species of hardwoods planted which was expanded upon in the early 20th century by the new owner John Aisnworth who purchased the estate following Campbells Death in 1879. Ainsworth planted rhododendrons and azaleas while his son, Thomas, created the gardens in the form they are today.</p> <p>The cultural significance of the asset is derived from its high artistic, horticultural and scenic interests which contributes to the overall aesthetic of the shoreline scenery from the A85 along the northern shore of Loch Awe.</p>	
Definition of Setting and Contribution to Cultural Significance	<p>The setting of the asset is defined by its position beside the River Awe where it joins the Loch and is surrounded by the uplands and lowland landscape of the Glens with Ben Cruachan to the north a key aesthetic focus. The house faces towards the Loch with the most easterly section of the gardens seeming left deliberately open to afford the best views of the Loch.</p> <p>This makes a contribution to the cultural significance of the asset as it represents key view identified within the listing text and an important element in the appreciation of the landscape.</p> <p>The wider setting of the asset comprises the uplands and lowlands of the surrounding Glens which provide an aesthetic backdrop, but make no contribution to the asset's cultural significance.</p>	
Magnitude of Change to Cultural Significance	<p>The Development will be visible from the eastern edge of the asset as shown on the viewpoint from Ben Cruchan, beyond the eastern shores of Loch Awe along the ridgeline of the higher elevations near Cladich. This has been identified as a key view which contributes to the cultural significance of the asset through the experience of the surrounding rural landscape it affords.</p> <p>While some of their visual presence may be tempered by intervening vegetation, the Development will be noticeable though the presence of the turbines along the ridgeline. The principal landscape features to be appreciated from this viewpoint are the Loch, its eastern bank and the islands in between with the Development leading to a change in the wider aspect of this view.</p> <p>The change in this view will be small and distant beyond the most important elements, which when considering the complete setting of the asset and that there will be no alteration to the relationship of the asset to Ben Cruchan, will not fundamentally alter the cultural significance of the asset nor of the experience or appreciation of that cultural significance.</p>	
Statement of Significance of Effect	<p>The Development will result in a Limited magnitude of change to an asset of High cultural significance which will result in a Minor Adverse effect, which is not significant for the purposes of EIA.</p>	

9.5.4 Decommissioning

Effects during decommissioning have been scoped out of this assessment as set out in Section 9.3.3.

9.6 Cumulative Effect Assessment

The potential for cumulative effects on the cultural significance of any heritage asset has been undertaken with reference to a list of development proposals within the vicinity of the Site (See Chapter 6: LVIA).

Only those proposals which are in the application or appeal stage are considered.

Consented and constructed developments are included within the baseline assessment, while proposed developments at scoping stage are not included within the cumulative assessment as until an application is submitted, there are too many variables in terms of turbine number, layout, height etc. to make any firm assessment, notwithstanding the possibility that the proposals will not be taken forward.

Table 9.5 List of cumulative developments

Name	Status	Number of turbines	Blade tip height	Included in assessment?
Achanelid	Scoping	5	110 m	No – at scoping
Achnaba	Scoping	13	Unknown	
Ard Ghaoth	Scoping	10	100 m	No – at scoping
Balliemeanoch	Scoping	27	126.5 m	No – at scoping
Barmolloch	Scoping	Unknown	Unknown	No – at scoping
Blarghour Variation	Application	14 (reduction from 17)	180 m	Yes
An Carr Dubh	Application	13	180 m	Yes
Carn Dearg	Scoping	Unknown	Unknown	No – at scoping
Craobh Haven	Scoping	Unknown	Unknown	No – at scoping
Eredine	Scoping	26	180 m	No – at scoping
Garraron	Scoping	7	125 m	No – at scoping
Glasvaar	Application	11	149.9 m	Yes
Musdale	Scoping	26	179.5 m	No – at scoping

Those which have relevance to the Archaeology and Cultural Heritage assessment are noted below and have been selected on their application status and their visibility with the visualisations:

- Blarghour Variation (ECU00004754) – comprising the alteration of the development consented in October 2021 from 17 turbines at 136.5 m blade tip height to 14 turbines at 180 m blade tip height and is located approximately 4.6 km to the west of the Site.
- An Carr Dubh (ECU00004781) - comprising 13 turbines at 180 m blade tip height located approximately 5.0 km to the west of the Site.
- Glasvaar Wind Farm (22/01380/PP) - comprising 11 turbines with a maximum blade tip height of 149.9 m located approximately 22.5 km to the south-west of the Site.

9.6.1 Potential Cumulative Construction Effects

There will be no cumulative construction effects on the cultural significance of any of the heritage assets identified within the Site. None of the three proposed developments will not have an impact on any archaeological remains or any standing earthworks or buildings that lie within the Site.

There will also be no change to the cultural significance of any archaeological remains, or on any standing earthworks or buildings outside of the Site which may be related to those located within the Site.

9.6.2 Potential Cumulative Operational Effects

A cumulative operational effect on the cultural significance of a heritage asset arises as a consequence of changes to the setting of an asset from multiple developments, where that setting contributes to cultural significance.

This can occur on heritage assets which have already been assessed as receiving an effect (either a significant or a not significant effect) from the Proposed Development, and on assets which have been assessed as receiving no effect from the Proposed Development.

The combination of the Proposed Development alongside those developments noted in Section 9.6 above, should they be consented, has the potential to increase the magnitude of change to the cultural significance of an asset in line with the criteria set out in Table 9.3.

Of the assets selected for detailed assessment within Technical Appendix A9.2: Section 6, the three cumulative developments are visible from the following heritage assets:

- Caisteal Suidhe Cheannaidh, dun 470m NW of Achnacraobh (SM4120)
- St Conan's Church of Scotland (LB4700)
- Watch Tower, Dun Na Cuaiche (LB11543) and
- Fort, Dun na Cuaiche (WOSASPIN 1735)

9.6.2.1 Caisteal Suidhe Cheannaidh, dun 470m NW of Achnacraobh (SM4120)

The detailed assessment within Technical Appendix A9.2: Section 6 sets out that the cultural significance of the asset is principally determined through the preserved archaeological remains associated with the prehistoric dun. Its setting is defined by its prominent location overlooking the valley running between Taynult and Kilchrenan affording a strong, strategic position where Loch Awe and the River Awe meet.

The appreciation of this prominent location and the strategic position it offers makes a positive contribution to the cultural significance of the asset.

Beyond, the wider setting of the asset comprises the lowlands and uplands along Loch Awe which includes the existing wind farms at An Suidhe at Carraig Ghea and while it forms an aesthetic surrounding landscape, it makes no contribution to the cultural significance of the asset.

As Figures 9.6b and 9.6c show, all three cumulative developments will be visible from the asset. Their presence within this wider setting will not lead to any change in how the cultural significance of the asset is appreciated or understood. The fundamental elements of its cultural significance, its preserved archaeological remains and its strategic location, will remain unaffected by the presence of the three cumulative developments in combination with the Development. There will be no cumulative effects.

9.6.2.2 St Conan's Church of Scotland (LB4700)

The detailed assessment within Technical Appendix A9.2: Section 6 sets out that the cultural significance of the asset is determined by the unique internal and external architectural detailing., best appreciated in close proximity, through its historic association with its architect William Campbell and through its principal setting. That setting is defined by its Lochside location where views to the north-east and south-east offer a place to enjoy the architecture in conjunction with local landscape, enhancing the application and experience of its distinct architectural character.

Beyond this principal setting, the wider landscape is curtailed by existing vegetation to the south and by topography from the north through to the south-west. As Figure 9.13b shows, only the Blarghour Variation development will be present within the wider setting of the asset, with almost no visibility, which does not contribute to its cultural significance. The presence of the Development

and the Blarghour Variation together will not lead to any change in how the cultural significance of the asset is appreciated or understood. There will be no cumulative effects.

9.6.23 Watch Tower, Dun Na Cuaiche (LB11543)

The detailed assessment within Technical Appendix A9.2: Section 6 sets out that the cultural significance of the asset is determined by its historic association with the Inveraray Estate and from its architectural quality. Its setting is defined by its relationship with the Inveraray Castle Estate and in particular the reciprocal views between the asset to the south and south-west, towards Inveraray and Loch Fyne.

As Figure 9.8e shows, the An Carr Dubh and Blarghour Variation developments will be visible in views from the asset to the west with the Development visible in views to the north as shown in Figure 9.8f. As set out within the detailed assessment, neither the Development nor the An Carr Dubh and Blarghour Variation developments are located within the setting of the asset which contributes to its cultural significance. While there will necessarily be some visibility and noticeability of the Development and the An Carr Dubh and Blarghour Variation developments in the wider landscape, the principal reciprocal views between the asset, Inveraray Castle and Inveraray will remain unaltered and the contribution this makes to the asset's cultural significance will not be affected. There will be no cumulative effects.

9.6.24 Fort, Dun na Cuaiche (WOSASPIN 1735)

The detailed assessment within Technical Appendix A9.2: Section 6 sets out that the cultural significance of the asset is principally determined by the potential for archaeological remains to be present which could yield important information relating to the occupation of the fort and of its occupants. The asset's setting is defined by its prominent position overlooking Glen Shira, Loch Shira and over Loch Fyne to the south.

This setting makes a positive contribution to the cultural significance of the asset as it allows the deliberate siting of the fort to be appreciated and its prominent positioning to be understood.

The wider setting of the asset comprises the uplands and lowlands of the landscape in and around Loch Awe which provides an aesthetic backdrop but makes no contribution to the cultural significance of the asset.

As Figure 9.8e shows, the Anall three cumulative developments will be visible from the asset. Although visible, they are located within the wider landscape which does not make a contribution to the cultural significance of the asset, rather forms an aesthetic backdrop. The fundamental elements of its cultural significance, its preserved archaeological remains and its strategic location, will remain unaffected by the presence of the three cumulative developments in combination with the Proposed Development. There will be no cumulative effects.

9.7 Mitigation and Residual Effects

9.7.1 Construction

9.7.1.1 Construction mitigation

The Development has the potential to affect subsurface archaeological remains through intrusive construction activities.

It is proposed to mitigate any potential effects from construction activities through the implementation of an appropriate programme of archaeological works which will permit any remains to be investigated and recorded (leading to preservation by record) which can be set out as a condition of consent.

As direct impacts are limited to the footprint of the Development, no further disturbance of any potentially buried archaeological remains is anticipated.

The mitigation measures will be set out in a formal Written Scheme of Investigation (WSI) submitted to WoSAS for approval prior to the commencement of any archaeological works, however, it is expected that the following measures will be applied:

- A final walkover prior to construction across the footprint of any proposed groundworks to make a final check for heritage assets:
- Recording of any extant features e.g. any earthwork remains of the Earthwork of Unknown Provenance or post-medieval field boundaries; and
- In areas impacted by the construction process, a watching brief should be undertaken during construction with scope to allow for further, more intensive excavations should any significant archaeology be uncovered.
- In the event that archaeological remains of the highest significance are encountered, mitigation by design through micro-siting infrastructure will be applied in the first instance.
- The need for, scale and scope of any additional archaeological works will be agreed with WoSAS, and the conditions for their implementation will be set out within the WSI.

9.7.1.2 Residual construction effects

Through the implementation of an appropriate mitigation strategy set out as a condition of consent, and agreed in advance with the planning archaeologist at WoSAS, the reported effects during construction on archaeological assets will be reduced as set out below:

- The negligible effect on the cultural significance of the Earthwork of Unknown Provenance will remain as a negligible effect, which is not significant for the purposes of EIA.
- The negligible effect on the cultural significance of the post-medieval field boundaries will remain as a negligible effect, which is not significant for the purposes of EIA.
- Although the likelihood is very low, should any archaeological remains of the highest cultural significance be encountered and impacted by the development, where this would lead to a major adverse effect. The primary mitigation method in this instance is to micro-site infrastructure to remove the impact from the Development entirely. Where this is not possible, the application of the mitigation methods set out above in paragraph 9.7.11 will lead to preservation by record and thus will reduce the significance of effect, although this may be significant for purposes of EIA in exceptional circumstances.
- For assets where a minor to moderate adverse effect on the cultural significance of as yet unknown archaeological remains is reported, the application of the mitigation methods set out above in paragraph 9.7.11 will lead to preservation by record and thus will reduce the significance of effect to minor adverse effect, which is not significant for the purposes of EIA.

9.7.2 Operation

9.7.2.1 Operational Mitigation

Indirect effects on assets within and beyond the Site boundary are difficult to mitigate for the Development type. The scale and size of the Wind Turbines will mean that clear views will be afforded towards them from many areas of the surrounding landscape and general mitigation measures such as screening are neither appropriate nor will they reduce the magnitude of the effect.

Therefore, in this instance, there are no mitigation measures beyond those embedded into the Development which would be likely to prove effective to reduce the effect already reported.

9.7.2.2 Residual operational effects

As there are no effective mitigation measures to reduce the effect the introduction of the Development could have on the heritage assets assessed above (beyond the embedded mitigation set out in Section 9.3.8), the residual effect will remain the same as the reported effects above:

- A minor adverse effect on the cultural significance of the GDL00223 Inveraray Castle Garden and Designed Landscape, which is not significant for the purposes of EIA;

- A minor adverse effect on the cultural significance of the LB11523 Category B Listed Society School, which is not significant for the purposes of EIA; and
- A minor adverse effect on the cultural significance of the GDL00018: Ardanaiseig House Garden and Designated Landscape, which is not significant for the purposes of EIA.

9.7.3 Decommissioning

9.7.3.1 Decommissioning Mitigation

Effects during decommissioning have been scoped out of this assessment as set out in Paragraph 9.3.3.

9.7.3.2 Residual decommissioning effects

Effects during decommissioning have been scoped out of this assessment as set out in Paragraph 9.3.3.

9.8 Summary of Effects

Table 9.6 provides a summary of the effects detailed within this chapter.

Table 9.6 Summary of Effects

Receptor	Potential Effect	Significance of Effect	Mitigation Proposed	Residual Effect
Construction Phase				
Earthwork of Unknown Provenance (HM3)	Removal of a small section from construction activities for the foundation base for Turbine 9	Negligible	Recording of any extant features and an archaeological watching brief during construction in accordance with an approved WSI	Negligible
Post-medieval field boundaries (HM4)	Removal of a small number of sections from construction activities associated with the establishment of new access roads	Negligible	Recording of any extant features and an archaeological watching brief during construction in accordance with an approved WSI	Negligible
As yet unknown archaeological remains	Potential for loss up to and including total loss of any archaeological remains from any intrusive construction activities	Minor to Major Adverse	Recording of any extant features and an archaeological watching brief during construction in accordance with an approved WSI	Minor Adverse (in some exceptional circumstances, which are highly unlikely to occur for the Development, mitigation will reduce the effect on assets of the highest cultural significance while the residual may remain significant for the purposes of EIA)
Operational Phase				
Inveraray Castle Garden and Designed Landscape	Reduction in understanding or appreciation of cultural significance	Moderate Adverse	None applicable / proposed	Minor Adverse

Receptor	Potential Effect	Significance of Effect	Mitigation Proposed	Residual Effect
	through a change in setting			
Category A listed Society School	Reduction in understanding or appreciation of cultural significance through a change in setting	Minor Adverse	None applicable / proposed	Minor Adverse
Ardanaseig House Garden and Designed Landscape	Reduction in understanding or appreciation of cultural significance through a change in setting	Minor Adverse	None applicable / proposed	Minor Adverse

9.9 Statement of Significance

This assessment has considered the potential for likely significant effects on the cultural significance of designated and non-designated heritage assets from the construction and operation of the Development.

The potential for likely significant effects through direct impacts were limited to assets located within the development footprint while likely significant effects through indirect impacts were considered for assets located outside the Site boundary within a Study Area up to and including 15 km away.

The assessment did not identify any assets where the effect on setting was considered to be significant for the purposes of the EIA Regulations where the effect is classified as being 'major' or 'moderate':

The following effects were also identified where the effect is classed as being of 'minor', and is not significant for the purposes of the EIA Regulations:

- A minor adverse effect through a change in setting on the cultural significance of the GDL00023 Inveraray Castle Garden and Designed Landscape;
- A minor adverse effect through a change in setting on the cultural significance of the LB11523 Category B Listed Society School;
- A minor adverse effect through a change in setting on the cultural significance of the GDL00018: Ardanaiseig House Garden and Designated Landscape.
- A minor adverse effect on as yet unknown archaeological remains, following the implementation of an agreed programme of mitigation.

All other heritage assets considered within the assessment were either subject to a negligible or no effect from the Development and as such, none are considered as significant for the purposes of the EIA regulations.