voltalia

CRUACH CLENAMACRIE WIND FARM

CHAPTER 7:

CULTURAL HERITAGE AND ARCHAEOLOGY

November 2024

RESPONSIBILITIES

	DATE	NAME	FUNCTION
Elaboration	06/10/2024	Lisa Bird	Author
Validation	08/11/2024	Victoria Oleksy	Technical Review
Approval	14/11/2024	Alexander Hamilton	Applicant Approval

REVISION HISTORY

VERSION	DATE	AUTHOR	COMMENTS
1.0	12/09/2024	Lisa Bird Victoria Oleksy	First Issue to Client
2.0	06/10/2024	Lisa Bird Victoria Oleksy	Second Issue to Client
3.0	08/11/2024	Victoria Oleksy	Third Issue to Client
4.0	14/11/2024	Victoria Oleksy	Submission

CONTENTS

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
ABC	Argyll and Bute Council
AOD	Above Ordnance Datum
ALGAO	The Association of Local Government Archaeological Officers
BGS	British Geological Survey
CIfA	Chartered Institute for Archaeologists
EIA	Environmental Impact Assessment
FLS	Forestry and Land Scotland
GDL	Inventory Gardens and Designed Landscapes
HER	Historic Environment Record
HEPS	Historic Environment Policy for Scotland
HES	Historic Environment Scotland
HLA	Historic Land-Use Assessment Data for Scotland
HMU	Habitat Management Units
LVIA	Landscape and Visuals Impact Assessment
LDP	Local Development Plan
km	Kilometres
m	Meters
OSA	Old Statistical Account
OS	Ordnance Survey
NCAP	National Collection of Aerial Photography
NRHE	National Record for the Historic Environment
NSA	New Statistical Account
NSR	Non-Statutory Record
RARFA	Regional Archaeological Research Framework for Argyll
SMC	Scheduled Monument Consent
SNH	Scottish Natural Heritage now NatureScot
SPAD	Scottish Palaeoecological Archive Database
WoSAS	West of Scotland Archaeology Service
WSI	Written Scheme of Investigation
ZTV	Zone of Theoretical Visibility

7 CULTURAL HERITAGE AND ARCHAEOLOGY

7.1 Introduction

This chapter considers the archaeological and cultural heritage value of the Site and assesses the likely significant effects on archaeological features and heritage assets resulting from the construction, operation, and decommissioning of the Proposed Development.

The specific objectives of the chapter are to:

- Describe the cultural heritage and archaeology baseline;
- Describe the assessment methodology and significance criteria used in completing the impact assessment;
- Describe the potential effects, including direct, settings and cumulative effects;
- Describe the mitigation measures that will be implemented to address likely significant effects; and
- Assess the residual effects remaining following the implementation of mitigation.

This assessment has been carried out in accordance with the standards of professional conduct outlined in the Chartered Institute for Archaeologists (CIfA) Code of Conduct[1] and Professional Conduct[2], as well as the CIfA Standard and guidance for commissioning work on, or providing consultancy advice on, archaeology and the historic environment[3]; desk- based assessment[4]; and other relevant guidance.

The following assessment should be read in conjunction with:

- **Appendix 7.1:** Gazetteer of Heritage Assets and Events
- **Appendix 7.2:** Settings Assessment
- **Appendix 7.3:** Cultural Heritage Plates
- **Figure 7.1:** Heritage Assets within the Site
- **Figure 7.2:** Heritage Assets within the 1km Study Area
- **Figure 7.3:** Designated Heritage Assets within 10km of the Site
- **Figure 7.4:** Extract from Ordnance Survey Map, 1872-4
- **Figure 7.5:** Loch Nell, crannog 200m NE of Rubha Namoine (SM4219) (Asset 13) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.6:** Gallanach Beg, dun 30m N of (SM5440) (Asset 16) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.7:** Glenamachrie, standing stone 100m E of (SM3886) (Asset 30) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.8:** Glenamachrie, standing stone 100m E of (SM3886) (Asset 30) CULTURAL HERITAGE: PHOTOWIRE
- **Figure 7.9:** Glenamachrie, standing stone 100m E of (SM3886) (Asset 30) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.10:** Glenamachrie, standing stone 100m E of (SM3886) (Asset 30) CULTURAL HERITAGE: EXISTING VIEW

[1] Chartered Institute for Archaeologists (CIfA) (2019). Code of Conduct: Professional Ethics in Archaeology (updated 2022). Available at: https://www.archaeologists.net/sites/default/files/Code%20of%20conduct%20revOct2022.pdf
[2] CIfA. (2019). Regulations for professional conduct- Updated 2021. Available at: https://www.archaeologists.net/codes/cifa
[3] CIfA (2014). Standard and Guidance for Commissioning Work or Providing Consultancy Advice on the Historic Environment (updated 2020). Available at: https://www.archaeologists.net/sites/default/files/CIfAS%26GCommissioning_2.pdf
[4] CIfA (2014). Standard and guidance for historic environment desk-based assessment (updated 2017 & 2020). Available at: https://www.archaeologists.net/sites/default/files/CIfAS%26GDBA_4.pdf

- **Figure 7.11:** Barr Beag, cairn 320m NNW of Strontoiller (SM3954) (Asset 33) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.12:** Tiroran, cairn 130m SE of (SM12912) (Asset 46) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.13:** Clachadow, cairn 320m N of (SM3872) (Asset 55) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.14:** Clachadow, cairn 320m N of (SM3872) (Asset 55) CULTURAL HERITAGE: EXISTING VIEW
- **Figure 7.15:** Clachadow, cairn 320m N of (SM3872) (Asset 55) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.16:** Clachadow, cairn 320m N of (SM3872) (Asset 55) CULTURAL HERITAGE: PHOTOWIRE
- **Figure 7.17:** Clachadow, cairn 320m N of (SM3872) (Asset 55) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.18:** Clachadow, cairn 320m N of (SM3872) (Asset 55) CULTURAL HERITAGE: EXISTING VIEW
- **Figure 7.19:** Barguillean Farm, dun 250m SSW of (SM3930) (Asset 58) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.20:** Barguillean Farm, dun 250m SSW of (SM3930) (Asset 58) CULTURAL HERITAGE: EXISTING VIEW
- **Figure 7.21:** Barguillean Farm, dun 250m SSW of (SM3930) (Asset 58) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.22:** Barguillean Farm, dun 250m SSW of (SM3930) (Asset 58) CULTURAL HERITAGE: PHOTOMONTAGE
- **Figure 7.23:** Cladh na h'Annaid, burial ground 280m SE of Corachie Farm (SM2699) (Asset 61) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.24:** Carn Ban, chambered cairn, Moss of Achnacree (SM2854) (Asset 62) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.25:** Carn Ban, chambered cairn, Moss of Achnacree (SM2854) (Asset 62) CULTURAL HERITAGE: PHOTOMONTAGE
- **Figure 7.26:** Dalineun, chambered cairn 265m S of (SM4155) (Asset 64) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.27:** Dunstaffnage Castle (SM90120) (Asset 74) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.28:** Dunstaffnage Castle (SM90120) (Asset 74) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.29:** Bonawe, Iron Furnace (SM90037) (Asset 84) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.30:** Lochnell Observatory (LB4717) (Asset 89) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.31:** Ardchattan Priory Inventory Garden and Designed Landscape (GDL00019) (Asset 102) CULTURAL HERITAGE: WIRELINE VISUALISATION
- **Figure 7.32:** Ardchattan Priory Inventory Garden and Designed Landscape (GDL00019) (Asset 102) CULTURAL HERITAGE: PHOTOMONTAGE
- **LVIA Viewpoint 13:** Dunstaffnage Castle

7.2 Legislation, Policy and Guidance

7.2.1 Legislation and National Policy

Relevant legislation and national policy documents have been reviewed and taken into account as part of this Cultural Heritage and Archaeology assessment. Of particular relevance are:

- Ancient Monuments and Archaeological Areas Act 1979[5];
- Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 [6];
- Historic Environment (Amendment) (Scotland) Act 2011[7];
- Historic Environment (Scotland) Act 2014[8];
- Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017[9];
- National Policy Framework 4[10]; and
- Historic Environment Policy for Scotland[11], including Designation Policy and Selection Guidance[12].

7.2.2 Local Planning Policy

The following local plan and individual policies are relevant to this assessment.

- Argyll and Bute Local Development Plan (LDP2)[13]:
  - Policy 15 – Supporting the Protection, Conservation and Enhancement of Our Historic Built Environment;
  - Policy 16 – Listed Buildings;
  - Policy 19 – Scheduled Monuments;
  - Policy 20 – Gardens and Designed Landscapes; and
  - Policy 21 – Sites of Archaeological Importance.

7.2.3 Guidance

The following guidance documents have been consulted during the assessment to assist in the determination of potential effects on heritage assets:

- Planning Advice Note 2/2011: Planning and archaeology[14];
- Managing Change in the Historic Environment: Setting[15];

[5] Ancient Monuments and Archaeological Areas Act, 1979 (c46). [Online]. London. The Stationery Office. Available at: http://www.legislation.gov.uk/ukpga/1979/46/pdfs/ukpga_19790046_en.pdf

[6] Planning (Listed Buildings and Conservation Areas (Scotland) Act 1997, (c9). [Online]. London. The Stationery Office. Available at: https://www.legislation.gov.uk/ukpga/1997/9/pdfs/ukpga_19970009_en.pdf

[7] Historic Environment (Amendment) (Scotland) Act, 2011 (Full) [Online]. London. The Stationery Office. Available at: http://www.legislation.gov.uk/asp/2011/3/pdfs/asp_20110003_en.pdf

[8] Historic Environment Scotland Act, 2014 (Full) [Online]. London. The Stationery Office. Available at: https://www.legislation.gov.uk/asp/2014/19/contents/enacted

[9] Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. [Online]. London. The Stationery Office. Available at: https://www.legislation.gov.uk/ssi/2017/101/contents

[10] Scottish Government (2023). National Planning Framework 4. Available at: https://www.gov.scot/publications/national-planning-framework-4/

[11] Historic Environment Scotland (HES) (2019). Historic Environment Policy for Scotland. Available at: https://www.historicenvironment.scot/advice-and-support/planning-and-guidance/historic-environment-policy-for-scotland-heps

[12] HES (2020). Designation Policy and Selection Guidance. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=8d8bbaeb-ce5a-46c1-a558-aa2500ff7d3b

[13] Argyll and Bute Council (ABC). 2024. ARGYLL AND BUTE LOCAL DEVELOPMENT PLAN 2 Adopted February 2024 Written Statement. Available at: https://www.argyll-bute.gov.uk/planning-and-building/planning-policy/local-development-plan-2

[14] Scottish Government 2011 PAN2/2011 Planning and Archaeology. Available at: https://www.gov.scot/publications/pan-2-2011-planning-archaeology/

[15] HES (2020b). Managing Change in the Historic Environment: Setting. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=80b7c0a0-584b-4625-b1fd-a60b009c2549

- NatureScot and HES's published guidance contained within 'Environmental Impact Assessment Handbook v5'[16];
- HES' Our Past, Our Future[17];
- CIfA Code of Conduct: professional ethics in archaeology[18];
- CIfA Regulations for professional conduct[19];
- CIfA Standard and guidance for historic environment desk-based assessment[20]; and
- CIfA Standard and guidance for commissioning work or providing advice on archaeology and the historic environment[21].

7.3 Consultation

A summary of the consultation undertaken is presented in **Table 7.1** below, the Scoping Report is available in **Appendix 1.1** and the Scoping Opinion and subsequent consultee responses to requests for consultation are set out in **Appendix 1.2**.

[16] Scottish Natural Heritage (SNH). (2012). Assessing the Cumulative Impact of Onshore Wind Energy Developments. Available at: https://www.nature.scot/sites/default/files/2017-09/Guidance%20note%20%20-%20Assessing%20the%20cumulative%20impact%20of%20onshore%20wind%20energy%20developments.pdf
[17] HES. (2023). Our Past, Our Future. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=79204155-9eb2-4d29-ab14-aff200ec2801
[18] Chartered Institute for Archaeologists (CIfA) (2019). Code of Conduct: Professional Ethics in Archaeology (updated 2022). Available at: https://www.archaeologists.net/sites/default/files/Code%20of%20conduct%20revOct2022.pdf
[19] CIfA. (2019). Regulations for professional conduct- Updated 2021. Available at: https://www.archaeologists.net/codes/cifa
[20] CIfA (2014). Standard and guidance for historic environment desk-based assessment (updated 2017 & 2020). Available at: https://www.archaeologists.net/sites/default/files/CIfAS%26GDBA_4.pdf
[21] CIfA (2014). Standard and Guidance for Commissioning Work or Providing Consultancy Advice on the Historic Environment (updated 2020). Available at: https://www.archaeologists.net/sites/default/files/CIfAS%26GCommissioning_2.pdf

TABLE 7.1: RECORD OF CONSULTATION UNDERTAKEN

CONSULTEE	RESPONSE	ACTION
HES Scoping Response 23 August 2023	HES were broadly in agreement with the scope of the assessment as set out in the Scoping Report. HES requested that further detail be given as to the selection of the 10km Study Area. HES noted Appendix 6.1 of the Scoping Report was missing on submission. HES also questioned the suitability of the terminology used in the outlined Impact Assessment section of the Scoping Report, in regard to 'integrity of setting'. HES confirmed that there no nationally important designated heritage assets within the Site. it was thus agreed to scope out direct impacts in relation to these assets. HES noted that there were a large number of nationally important designated assets within the vicinity of the Site and as such there was the potential for setting impacts. The following assets were highlighted as requiring particular attention: GDL00019 Ardchattan Priory (Asset 102) GDL00007 Achnacloich (Asset 103); LB4716 Lochnell House, Ardmucknish Bay (Asset 88); LB4717 Lochnell Observatory (St Margaret's Tower) Lochnell Policies (Asset 89)); LB38820 St Columba's Roman Catholic Cathedral (Oban) (Asset 90); LB52505 Shore House, Bonawe (Asset 92); LB52504 1-4 Lochandu Cottages (Bonawe) (Asset 91) ; SM90120 Dunstaffnage Castle (Asset 74);	The scope of this chapter is in line with that outlined in the Scoping Report. Further detail as to the selection of the 10km Study Area was provided to HES during further consultation (see below). Appendix 6.1 of the Scoping Report was subsequently provided to HES. Appendix 6.1 of the Scoping Report is the same as **Appendix 7.1** which supplements this chapter. The terminology of the Impact Assessment in regard to 'integrity of setting' was subsequently rephrased in line with NPF4 and submitted to HES for review during further consultation (see below). Direct impacts on designated heritage assets have been scoped out of this assessment. The assets and groups of assets identified by HES have been subject to detailed settings assessments, informed by site visits, ZTV analysis and where relevant and available, cultural heritage and LVIA visualisations. Setting effects which may occur during the Operational Phase are assessed in **Section 7.6.2** and **Appendix 7.2.** It should be noted that St Columba's Roman Catholic Cathedral (Oban) (Asset 90) is outwith the ZTV, and such assets were scoped out of further assessment during subsequent pre-application consultation with HES (see below). A refined list of visualisations was submitted to HES during a further round of consultation (see below).

CONSULTEE	RESPONSE	ACTION
	Prehistoric ritual and funerary assets and Iron Age defensive and settlement assets within Glen Lonan; Prehistoric cairns and standing stones around Strontoiler; and Prehistoric assets around Loch Nell. HES stated that they expected all nationally designated heritage assets within a Zone of Theoretical Visibility (ZTV) undergo an initial asset to determine the potential for effects to their settings. It was noted that whilst a list of proposed visualisations was included in the Scoping Report, the selection methodology was unclear and further refinement was deemed necessary. HES noted the vulnerability of commercial conifer plantations is Scotland and stated that the existence of such forestry could not be relied upon to be a long-term screening option for the Proposed Development. HES requested that the potential for cumulative impacts be assessed and that this assessment takes into account incremental impacts and the combined impact of the Proposed Development and those already in existence and in the reasonably foreseeable future. Mitigation was highlighted as needing to be considered including mitigation by design to avoid, reduce, or offset setting impacts on nationally important designated heritage assets. .	Settings assessments have taken into account the extant land use in relation to the assessment of the current setting of nationally designated heritage assets; however, conifer plantations have not been considered as long-term screening options. A cumulative assessment of the settings impacts of nationally designated heritage assets has been undertaken to an agreed list of cumulative developments (see **Section 7.9.2**), in line with the agreed methodology and detailed in **Section 7.4.4.5.**
West of Scotland Archaeology Service (WoSAS) Scoping Opinion 20 September 2023	WoSAS were content with the proposed methodology for the assessment of cultural heritage and archaeology impacts as per the Scoping Report, subject to responses on issues outlined by HES.	Issues raised by HES regarding the scope outlined in the Scoping Report were clarified following a further round of consultation (see below). A walkover survey of the Site and the proposed access tracks

CONSULTEE	RESPONSE	ACTION
	WoSAS agreed that the baseline should be informed by a walkover survey. It was agreed that the peat deposits, as an archaeological resource were to be assessed as part of the assessment.	was undertaken on the 11 September 2023 and again between the 8th and 9th of May 2024. This is detailed in **Section 7.5.3.9.** The potential impact of the Proposed Development on peat deposits which may contain paleoenvironmental and archaeological remains has been assessed as part of this assessment and is included in **Section 7.6.1.**
Consultation with HES Issued 2 November 2023	AOC Archaeology Group sent a letter to HES to request further consultation with the statutory consultee regarding comments in their Scoping Opinion. AOC Archaeology Group provided further reasoning for the identified Study Areas, in particular, with regard to the selection of the 10km Study Area. A review of nationally important designated heritage assets beyond 10km was undertaken to support the reasoning. A revised form of wording pertaining to the 'integrity of setting' was provided for consultation. A reconsidered list of visualisations, informed by site visits to designated heritage assets within the vicinity of the Site in August and September 2023 was submitted to HES for agreement.	
HES response to AOC Consultation on 2 November 2023 Received 30 November 2023	HES noted that they were content with the identified Study Areas as per the Scoping Report and AOC Archaeology Group's further consultation letter.	The visualisations as agreed and recommended by HES have been created and have been used to inform the assessment of the impact of the Proposed Development on the setting of nationally important designated heritage assets.

CONSULTEE	RESPONSE	ACTION
	HES stated that they were content with the revised form of wording in relation to 'integrity of setting'. The list of visualisations as set out in the letter from AOC Archaeology Group was agreed. The exception being the location of proposed visualisations for SM90120 Dunstaffnage Castle (Asset 74). HES proposed two visualisations for SM90120 Dunstaffnage Castle (Asset 74): • A photomontage from the upper battlements; and • A wireline from the Oban-Lismore ferry route (eg NM 86984 35364).	These visualisations are presented in **Figures 7.5 to 7.32** and **LVIA Viewpoint 13 and** have informed the assessment of setting effects discussed in **Section 7.6.2**

7.4 Methodology

7.4.1 Study Area

In order to assess the potential for effects on cultural heritage assets resulting from the Proposed Development, the following Study Areas have been identified and agreed with consultees:

- A core Study Area (the Site), which includes all land within the Site, which will be subject to assessment for potential direct effects. This Study Area has been subject to a detailed walkover survey and cultural heritage assets which may be directly impacted by the Proposed Development have been identified.
- A 1km Study Area for the identification of all known heritage assets and known previous archaeological interventions in order to help predict whether any similar hitherto unknown archaeological remains are likely to survive within the Site and thus be impacted by the Proposed Development.
- A 5km Study Area for the assessment of potential effects on the settings of all designated heritage assets including Scheduled Monuments, all Listed Buildings, Inventoried Gardens and Designed Landscapes and Battlefields, Conservation Areas, and assets deemed to be of National Significance in the Historic Environment Record (HER) (Non-Statutory Record (NSR) Codes C and V).
- A 10km Study Area for the assessment of potential effects on the setting of all nationally important heritage assets including Scheduled Monuments, Category A Listed Buildings, Inventoried Gardens and Designed Landscapes and Battlefields and assets deemed to be of National Significance in the HER (NSR Codes C and V).

All heritage assets identified have been given a unique 'Asset No.' and all previous archaeological investigations have been given a unique 'Event No.' number. These are recorded in the Heritage Assets Gazetteer (**Appendix 7.1**). Numbers within **Appendix 7.1** are not concurrent due to the iterative process

of the assessment. These Asset/Event numbers are referred to in the text and accompanying photographs (referred to as “plates”- **Appendix 7.3**) and figures (**Figures 7.1 to 7.3**).

7.4.2 Desk Study

Data on known assets and events on the Site and in the Study Areas have been collated from the following sources:

- The National Record for the Historic Environment (NRHE) as held by HES;
- The HER as supplied by the WoSAS, archaeological advisors to ABC;
- National Library of Scotland for published historic and Ordnance Survey maps;
- National Collection of Aerial Photography (NCAP), as held by HES, for vertical and oblique aerial photographs;
- Published archival sources;
- Scottish Palaeoecological Archive Database (SPAD) for information regarding the palaeoecological and paleoenvironmental potential of the Site and surrounding landscape;
- Historic Land-Use Assessment Data for Scotland (HLAMap);
- Available client supplied data about the Site, including peat survey data; and
- Regional Archaeological Research Framework for Argyll (RARFA).

No LiDAR data or imagery is currently held by the Scottish Remote Sensing Portal for the Site.

7.4.3 Site Visit

A walkover survey of the Site was undertaken on the 11 September 2023 and the 8 and 9 May 2024. The Site was found to be located in hummocky and undulating land, occupied by large areas of mature and dense ferns which were extremely difficult to traverse. Photographs of the general Site terrain and land use were taken, and archaeological remains were also recorded using a GPS enabled tablet and the Field Maps app. These are detailed in the Heritage Assets Gazetteer (**Appendix 7.1**).

Due to the iterative nature of the design process, the potential access tracks as walked by the survey team in September 2023 are no longer proposed for access. Following further study and agreement with landholders, the design process identified the access track shown on **Figure 7.1- Heritage Assets within the Site**. A portion of the proposed access track south of the A85 which currently traverses greenfield land was subject to a detailed, systematic walkover survey whilst the majority of the access track, which would follow the routes of existing forestry tracks, was driven and subject to a windscreen survey. This additional survey work was undertaken between the 8 and 9 May 2024.

Site visits to designated heritage assets within 10km of the Site were undertaken between the 1-4 August 2023; and 4-13 September 2023.

7.4.4 Assessment of Potential Effect Significance

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

7.4.4.1 Criteria for Assessing Sensitivity of Heritage Assets

The definition of cultural significance is readily accepted by heritage professionals both in the UK and internationally and was first fully outlined in the Burra Charter, which states in Article One that 'cultural significance' or 'cultural heritage value' means aesthetic, historic, scientific, social or spiritual value for past, present or future generations[22]. This definition has since been adopted by heritage organisations around the world, including HES. Historic Environment Policy for Scotland (HEPS) notes that to have cultural significance an asset must have a particular "*aesthetic, historic, scientific or social value for past, present and future generations*"[23]. Heritage assets also have value in the sense that they "...*create spaces for recreation, leisure, tourism, and education, or places for nature to thrive"* and *"can be a source of identity, a resource for learning, or a spark for creativity*"[24].

All heritage assets have significance; however, some heritage assets are judged to be more important than others. The level of that importance is, from a cultural resource management perspective, determined by establishing the asset's capacity to contribute to our understanding or appreciation of the past[25]. In the case of many heritage assets, their importance has already been established through the designation (i.e. Scheduling, Listing and Inventory) processes applied by HES.

The rating of the importance of heritage assets is first and foremost made in reference to their designation. For non-designated assets, importance is assigned based on professional judgement and guided by the criteria presented in **Table 7.2**, which itself relates to the criteria for designations as set out in Designation Policy and Selection Guidance[26] and Scotland's Listed Buildings[27] .

TABLE 7.2: CRITERIA FOR ESTABLISHING IMPORTANCE OF HERITAGE ASSETS

IMPORTANCE	RECEPTORS
Very High	World Heritage Sites (as protected by NPF4[28]); Other designated or non-designated heritage assets with demonstrable Outstanding Universal Value.

[22] ICOMOS (2005). Xi'an Declaration. Available at: https://www.icomos.org/images/DOCUMENTS/Charters/xian-declaration.pdf
[23] Historic Environment Scotland (HES) (2019). Historic Environment Policy for Scotland. Available at: https://www.historicenvironment.scot/advice-and-support/planning-and-guidance/historic-environment-policy-for-scotland-heps
[24] HES. (2023). Our Past, Our Future. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=79204155-9eb2-4d29-ab14-aff200ec2801
[25] HES (2020). Designation Policy and Selection Guidance. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=8d8bbaeb-ce5a-46c1-a558-aa2500ff7d3b
[26] HES (2020). Designation Policy and Selection Guidance. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=8d8bbaeb-ce5a-46c1-a558-aa2500ff7d3b
[27] Historic Environment Scotland (2019- Updated 2021). Scotland's Listed Buildings. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=34c90cb9-5ff3-45c3-8bc3-a58400fcbc44
[28] Scottish Government (2023). National Planning Framework 4. Available at: https://www.gov.scot/publications/national-planning-framework-4/

IMPORTANCE	RECEPTORS
High	Scheduled Monuments (as protected by the Ancient Monuments and Archaeological Areas Act 1979[29]); Category A Listed Buildings (as protected by the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997[30]); Inventory Gardens and Designed Landscapes (as protected by the 1979 Act, as amended by the Historic Environment (Amendment) (Scotland) Act 2011[31]); Inventory Battlefields (as protected by the 1979 Act[32], as amended by the 2011 Act[33]); Outstanding examples of some period, style or type; Non-designated assets and/or Locally Listed assets considered to meet the criteria for the designations as set out above (as protected by NPF4[34]).
Medium	Category B and C Listed Buildings (as protected by the 1997 Act[35]); Conservation Areas (as protected by the 1997 Act[36]); Major or representative examples of some period, style or type; or Non-designated assets and/or Locally Listed assets considered to meet the criteria for the designations as set out above (as protected by NPF4[37]).
Low	Locally Listed assets; Examples of any period, style or type which contribute to our understanding of the historic environment at the local level.

[29] Ancient Monuments and Archaeological Areas Act, 1979 (c46). [Online]. London. The Stationery Office. Available at: http://www.legislation.gov.uk/ukpga/1979/46/pdfs/ukpga_19790046_en.pdf
[30] Planning (Listed Buildings and Conservation Areas (Scotland) Act 1997, (c9). [Online]. London. The Stationery Office. Available at: https://www.legislation.gov.uk/ukpga/1997/9/pdfs/ukpga_19970009_en.pdf
[31] Historic Environment (Amendment) (Scotland) Act, 2011 (Full) [Online]. London. The Stationery Office. Available at: http://www.legislation.gov.uk/asp/2011/3/pdfs/asp_20110003_en.pdf
[32] Ancient Monuments and Archaeological Areas Act, 1979 (c46). [Online]. London. The Stationery Office. Available at: http://www.legislation.gov.uk/ukpga/1979/46/pdfs/ukpga_19790046_en.pdf
[33] Historic Environment (Amendment) (Scotland) Act, 2011 (Full) [Online]. London. The Stationery Office. Available at: http://www.legislation.gov.uk/asp/2011/3/pdfs/asp_20110003_en.pdf
[34] Scottish Government (2023). National Planning Framework 4. Available at: https://www.gov.scot/publications/national-planning-framework-4/
[35] Ancient Monuments and Archaeological Areas Act, 1979 (c46). [Online]. London. The Stationery Office. Available at: http://www.legislation.gov.uk/ukpga/1979/46/pdfs/ukpga_19790046_en.pdf
[36] ibid
[37] Scottish Government (2023). National Planning Framework 4. Available at: https://www.gov.scot/publications/national-planning-framework-4/

IMPORTANCE	RECEPTORS
Negligible	Relatively numerous types of features; Findspots of artefacts that have no definite archaeological remains known in their context; The above non-designated features are protected by Policy 7 of NPF4[38].

Determining cultural heritage importance can be made with reference to the intrinsic, contextual and associative characteristics of an asset as set out in HEPS[39] and its accompanying Designation Policy and Selection Guidance[40]. In assessing direct impacts, where there would be removal or damage to an asset itself, importance can be directly correlated with sensitivity. However, in assessing impacts upon the setting of an asset, the Designation Policy and Selection Guidance[41] indicates that the relationship of an asset to its setting or the landscape makes up part of its contextual characteristics. HES's Managing Change Guidance[42], in defining what factors need to be considered in assessing the impact of a change on the setting of a historic asset or place, states that the magnitude of the proposed change should be considered "*relative to the sensitivity of the setting of an asset*"[43] thereby making clear that assets vary in their sensitivity to changes in setting and thus have a relative sensitivity. The EIA Handbook suggests that cultural significance aligns with sensitivity but also states that "*the relationship between value and sensitivity should be clearly articulated in the assessment*"[44]. It is therefore recognised[45] that the importance of an asset is not the same as its sensitivity to changes to its setting. Elements of setting may make a positive, neutral or negative contribution to the significance of an asset. Thus, in determining the nature and level of effects upon assets and their settings by the development, the contribution that setting makes to an asset's significance and thus its sensitivity to changes to setting need to be considered.

This approach recognises the importance of avoiding significant adverse impacts on the integrity of the setting of an asset in the context of the contribution that setting makes to the experience, understanding and appreciation of a given asset. It recognises that setting is a key characteristic in understanding and appreciating some, but by no means all, assets. Indeed, assets of High or Very High importance do not necessarily have high sensitivity to changes to their settings (e.g. do not necessarily have a high relative sensitivity). An asset's relative sensitivity to alterations to its setting refers to its capacity to retain its ability to contribute to an understanding and appreciation of the past in the face of changes to its setting. The ability of an asset's setting to contribute to an understanding, appreciation and experience of it and its significance also has a bearing on the sensitivity of that asset to changes to its setting. While heritage assets of High or Very High importance are likely to be sensitive to direct impacts, not all will have a similar sensitivity to impacts on their setting; this would be true where the setting does not appreciably contribute to their significance. HES's guidance on setting makes clear that the level of effect may relate to "*the ability*

[38] Scottish Government (2023). National Planning Framework 4. Available at: https://www.gov.scot/publications/national-planning-framework-4/
[39] Historic Environment Scotland (HES) (2019). Historic Environment Policy for Scotland. Available at: https://www.historicenvironment.scot/advice-and-support/planning-and-guidance/historic-environment-policy-for-scotland-heps
[40] HES (2020). Designation Policy and Selection Guidance. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=8d8bbaeb-ce5a-46c1-a558-aa2500ff7d3b
[41] ibid
[42] HES (2020). Managing Change in the Historic Environment: Setting. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=80b7c0a0-584b-4625-b1fd-a60b009c2549
[43] Ibid
[44] Scottish Natural Heritage (SNH) & Historic Environment Scotland (HES) (2018). Environmental Impact Assessment Handbook v5. Available at: https://www.nature.scot/sites/default/files/2018-05/Publication%202018%20-%20Environmental%20Impact%20Assessment%20Handbook%20V5.pdf
[45] ibid

of the setting [of an asset] *to absorb new development without eroding its key characteristics*"[46]. Assets with Very High or High relative sensitivity to settings impacts may be vulnerable to any changes that affect their settings, and even slight changes may erode their key characteristics or the ability of their settings to contribute to the understanding, appreciation and experience of them. Assets whose relative sensitivity to changes to their setting is lower may be able to accommodate greater changes to their settings without having key characteristics eroded.

The criteria used for establishing an asset's relative sensitivity to changes to its setting is detailed in **Table 7.3.** This table has been developed based on AOC's professional judgement and experience in assessing setting effects. It has been developed with reference to the policy and guidance noted above including NPF4[47], HEPS[48] and its Designation Policy and Selection Guidance[49], the Xi'an Declaration[50], the EIA Handbook[51] and HES's guidance on the setting of heritage assets[52].

TABLE 7.3: CRITERIA FOR ESTABLISHING RELATIVE SENSITIVITY OF A HERITAGE ASSET TO CHANGES TO ITS SETTING

RELATIVE SENSITIVITY	CRITERIA
Very High	An asset, the setting of which is critical to an understanding, appreciation and experience of it, should be thought of as having Very High Sensitivity to changes to its setting. This is particularly relevant for assets whose settings, or elements thereof, make an essential direct contribution to their cultural significance.
High	An asset, the setting of which makes a major contribution to an understanding, appreciation and experience of it, should be thought of as having High Sensitivity to changes to its setting. This is particularly relevant for assets whose settings, or elements thereof, contribute substantially to their cultural significance.
Medium	An asset, the setting of which makes a moderate contribution to an understanding, appreciation and experience of it, should be thought of as having Medium Sensitivity to changes to its setting. This could be an asset for which setting makes a contribution to significance but whereby its value is derived mainly from its other characteristics (see HES[53] for discussion of intrinsic, contextual and associative characteristics which may contribute to overall cultural significance).

[46] HES (2020). Managing Change in the Historic Environment: Setting. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=80b7c0a0-584b-4625-b1fd-a60b009c2549
[47] Scottish Government (2023). National Planning Framework 4. Available at: https://www.gov.scot/publications/national-planning-framework-4/
[48] Historic Environment Scotland (HES) (2019). Historic Environment Policy for Scotland. Available at: https://www.historicenvironment.scot/advice-and-support/planning-and-guidance/historic-environment-policy-for-scotland-heps
[49] HES (2020). Designation Policy and Selection Guidance. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=8d8bbaeb-ce5a-46c1-a558-aa2500ff7d3b
[50] ICOMOS (2005). Xi'an Declaration. Available at: https://www.icomos.org/images/DOCUMENTS/Charters/xian-declaration.pdf
[51] SNH & HES (2018). Environmental Impact Assessment Handbook v5. Available at: https://www.nature.scot/sites/default/files/2018-05/Publication%202018%20-%20Environmental%20Impact%20Assessment%20Handbook%20V5.pdf
[52] HES (2020). Managing Change in the Historic Environment: Setting. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=80b7c0a0-584b-4625-b1fd-a60b009c2549
[53] HES (2020) Designation Policy and Selection Guidance. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=8d8bbaeb-ce5a-46c1-a558-aa2500ff7d3b

RELATIVE SENSITIVITY	CRITERIA
Low	An asset, the setting of which makes some contribution to an understanding, appreciation and experience of it, should generally be thought of as having Low Sensitivity to changes to its setting. This may be an asset whose value is predominantly derived from its other characteristics (see HES[54] for discussion of intrinsic, contextual and associative characteristics which may contribute to overall cultural significance).
Negligible	An asset whose setting makes minimal contribution to an understanding, appreciation and experience of it should generally be thought of as having Negligible Sensitivity to changes to its setting

The determination of a heritage asset's relative sensitivity to changes to its setting is first and foremost reliant upon the determination of its setting and the key characteristics of setting which contribute to its cultural significance and an understanding and appreciation of that cultural significance. This aligns with Stage 2 of the HES guidance on setting[55]. The criteria set out in **Table 7.3** are intended as a guide. Assessment of individual heritage assets is informed by knowledge of the asset itself; of the asset type if applicable and by site visits to establish the current setting of the assets. This allows for the use of professional judgement and each asset is assessed on an individual basis.

7.4.4.2 Criteria for Assessing Magnitude of Impact

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

The EIA Handbook notes that "*In the context of cultural heritage impact assessment, the receptors are the heritage assets and impacts will be considered in terms of the change in their cultural significance*"[56]. Direct changes to assets during the construction phase will relate to the physical removal or damage (in part or whole) to a heritage asset and will therefore likely be adverse. However, the EIA Handbook states that "*When considering setting impacts, visual change should not be equated directly with adverse impact. Rather the impact should be assessed with reference to the degree that the proposal affects those aspects of setting that contribute to the asset's cultural significance*"[57]. It further indicates that the magnitude of impact should largely be regarded in the context of impacts to "*elements of the fabric or setting of the heritage asset that contribute to its cultural significance*"[58]. It is further of note that the EIA handbook states that '*Change in the setting of an asset may be entirely neutral in terms of the resultant change in the asset's cultural significance, but this will rarely be the case where the actual fabric is affected'*[59].

On this basis, the magnitude of the impacts upon heritage assets caused by the Proposed Development is rated using the classifications and criteria outlined in

[54] ibid
[55] HES (2020). Managing Change in the Historic Environment: Setting. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=80b7c0a0-584b-4625-b1fd-a60b009c2549 .
[56] SNH & HES (2018). Environmental Impact Assessment Handbook v5. Available at: https://www.nature.scot/sites/default/files/2018-05/Publication%202018%20-%20Environmental%20Impact%20Assessment%20Handbook%20V5.pdf
[57] ibid
[58] ibid
[59] ibid

Table 7.4**.** These criteria consider the extent of change which could be anticipated as a result of the Proposed Development in the context of the significance of the asset, including any contribution made by setting.

TABLE 7.4: CRITERIA FOR CLASSIFYING IMPACT MAGNITUDE

IMPACT MAGNITUDE	CRITERIA
High	Substantial loss of information content, which makes up part of the asset's intrinsic characteristics, resulting from total or large-scale removal of deposits from an asset to the extent that it would result in a substantial loss of cultural significance; Major alteration of an asset's baseline setting, which materially compromises the ability to understand, appreciate and experience the contribution that setting makes to the significance of the asset and erodes the 'key characteristics'[60] of the setting to the extent that it would result in substantial loss of cultural significance.
Medium	Loss of information content resulting from material alteration of the baseline conditions by removal of part of an asset that would lead to some loss of cultural significance; Alteration of an asset's baseline setting that affects the ability to understand, appreciate and experience the contribution that setting makes to the significance of the asset to a degree but whereby the cultural significance of the monument in its current setting remains legible. The 'key characteristics' of the setting[61] may be partially eroded; there would, be some loss of cultural significance.
Low	Detectable impacts leading to minor alteration to baseline conditions by removal of a small proportion of the asset, that would lead to slight loss of cultural significance; Alterations to the asset's baseline setting, which do not affect the ability to understand, appreciate and experience the contribution that setting makes to the asset's overall significance and would only lead to slight loss of cultural significance. Key characteristics would not be eroded.
Negligible	Loss of a small percentage of the area of an asset's peripheral deposits/fabric that would leave cultural significance unchanged; A reversible alteration to the fabric of the asset; A marginal alteration to the asset's baseline setting that would leave cultural significance of the asset unchanged.
None	No impact predicted

[60] HES (2016, updated 2020). Managing Change in the Historic Environment: Setting. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationid=80b7c0a0-584b-4625-b1fd-a60b009c2549. See page 11.
[61] ibid

In line with HES guidance on setting[62] factors which will be considered in coming to a judgement regarding magnitude of impact will include, but not be limited to:

- *"whether key views to or from the historic asset or place are interrupted;*
- *whether the proposed change would dominate or detract in a way that affects our ability to understand and appreciate the historic asset;*
- *the visual impact of the proposed change relative to the scale of the historic asset or place and its setting;*
- *the visual impact of the proposed change relative to the current place of the historic asset in the landscape;*
- *the presence, extent, character and scale of the existing built environment within the surroundings of the historic asset or place and how the proposed development compares to this;*
- *the magnitude of the proposed change relative to the sensitivity of the setting of an asset;*
- *sometimes relatively small changes, or a series of small changes, can have a major impact on our ability to appreciate and understand a historic asset or place. Points to consider include:*
    - *the ability of the setting to absorb new development without eroding its key characteristics;*
    - *the effect of the proposed change on qualities of the existing setting such as sense of remoteness, current noise levels, evocation of the historical past, sense of place, cultural identity, associated spiritual responses; and*
    - *cumulative impacts: individual developments may not cause significant impacts on their own, but may do so when they are combined"*[63] .

7.4.4.3 Criteria for Assessing Significance

The effect significance is judged to be the interaction of the asset's importance or relative sensitivity (**Tables 7.2 & 7.3**) and the impact magnitude (**Table 7.4**). In order to provide a level of consistency, the assessment of importance and relative sensitivity, the prediction of impact magnitude and the assessment of level of effect will be guided by pre-defined criteria.

The predicted effect significance on each heritage asset is then determined by considering the asset's importance and/or relative sensitivity in conjunction with the predicted impact magnitude. The method of deriving the effect significance is provided in **Table 7.5.**

TABLE 7.5: EFFECT SIGNIFICANCE BASED ON INTER-RELATIONSHIP BETWEEN THE IMPORTANCE AND/OR SENSITIVITY OF A HERITAGE ASSET AND/OR ITS SETTING AND THE IMPACT MAGNITUDE

IMPACT MAGNITUDE	IMPORTANCE AND/OR RELATIVE SENSITIVITY TO CHANGES TO SETTING				
	Negligible	Low	Medium	High	Very High
High	Minor	**Moderate**	**Moderate**	**Major**	**Major**
Medium	Negligible/ Neutral	Minor	**Moderate**	**Moderate**	**Major**
Low	Negligible/ Neutral	Negligible/ Neutral	Minor	Minor	**Moderate**
Negligible	Negligible/ Neutral	Negligible/ Neutral	Negligible/ Neutral	Minor	Minor

[62] HES (2020). Managing Change in the Historic Environment: Setting. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=80b7c0a0-584b-4625-b1fd-a60b009c2549
[63] ibid

Whilst the tables are used to ensure a consistent approach, it is noted that the EIA Handbook states that where matrices "*are used, care must be taken to ensure that they are not applied in a mechanistic fashion or in a way that obscures the reasoning behind the assessment*"[64]. The EIA Handbook further states that "*Generally, a narrative approach will allow the assessor to set out their reasoning more clearly than a tabulated approach*" [65]. As such, a qualitative descriptive narrative is provided for each asset to summarise and explain each of the professional value judgements that have been made in establishing sensitivity and impact magnitude for each individual asset.

Where a Neutral effect significance is indicated in the table above this primarily relates to potential setting effects where the Proposed Development would be perceptible, and thus result in a change to the baseline setting, but whereby the Proposed Development would not result in an adverse effect on the setting of the asset. This is in line with page 181 of the EIA Handbook[66], quoted above, which indicates that visual changes should not necessarily be considered to have an adverse impact upon setting.

Using professional judgment and with reference to the Guidelines for Environmental Impact Assessment (as updated)[67], and the EIA Handbook[68] the assessment considers Moderate and greater effect significance (bold in **Table 7.5**), while Minor and lesser effects are considered not significant.

7.4.4.4 Integrity of Setting

NPF4 indicates that development proposals affecting Scheduled Monuments will only be supported where *'significant adverse impacts on the integrity of setting of a scheduled monument are avoided'*[69]. Significant adverse impacts on integrity of setting are judged here to relate to whether a change would adversely affect the asset's key attributes or elements of setting which contribute to an asset's significance. It is considered that a significant impact upon the integrity of the setting of an asset will only occur where the degree of change that will be represented by the Proposed Development would adversely alter those factors of the monument's setting that contribute to cultural significance, such that the understanding, appreciation and experience of an asset are not adequately retained. In terms of effects upon the setting of heritage assets, it is considered that only those effects identified as 'significant' in EIA terms will have the potential to significantly adversely impact upon integrity of setting. Where no EIA significant effect is found it is considered that there would be no significant impact upon the integrity of an asset's setting. This is because for many assets, setting may make a limited contribution to their significance and as such changes would not significantly impact the integrity of their settings.

Where EIA significant effects are found, a detailed assessment of adverse impacts upon integrity of setting is made. Whilst non-significant effects will not significantly impact integrity of setting, the reverse is not always true. That is, the assessment of an effect as being 'significant' in EIA terms does not necessarily mean that the adverse effect to the asset's setting will significantly impact its integrity. The assessment of adverse impact upon the integrity of an asset's setting, where required, is a qualitative one, and largely depends upon whether the impact predicted would result in a major impediment to the ability to understand or appreciate the heritage asset.

7.4.4.5 Assessment of Cumulative Effect Significance

[64] SNH & HES (2018). Environmental Impact Assessment Handbook v5. Available at: https://www.nature.scot/sites/default/files/2018-05/Publication%202018%20-%20Environmental%20Impact%20Assessment%20Handbook%20V5.pdf
[65] ibid
[66] ibid
[67] IEMA (2017) Environmental Impact Assessment Guide. Available at: https://www.iema.net/assets/newbuild/documents
[68] SNH & HES (2018). Environmental Impact Assessment Handbook v5. Available at: https://www.nature.scot/sites/default/files/2018-05/Publication%202018%20-%20Environmental%20Impact%20Assessment%20Handbook%20V5.pdf
[69] Scottish Government (2023). National Planning Framework 4. Available at: https://www.gov.scot/publications/national-planning-framework-4/

It is necessary to consider the effects arising from the addition of the Proposed Development to other cumulative developments. Consideration has been given to whether this would result in an additional cumulative change upon heritage assets, beyond the levels predicted for the Proposed Development alone.

The cumulative assessment has been undertaken with regard to the guidance on cumulative effects upon heritage assets as set out in Environmental Impact Assessment Handbook V5[70] and utilises the criteria used in determining effects from the Proposed Development as outlined in **Tables 7.2 to 7.5** above. The assessment of cumulative effects considers whether there would be an increased impact, either additive or synergistic, upon the setting of heritage assets as a result of adding the Proposed Development to a baseline, which may include operational, under construction, consented or proposed developments. It is necessary to consider whether the effects of other schemes in conjunction with the Proposed Development will result in an additional cumulative change upon heritage assets, beyond the levels predicted for the Proposed Development alone.

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

- The distance between cumulative developments;
- The interrelationship between their ZTVs (i.e. theoretical visibility);
- The overall character of the asset and its sensitivity;
- The siting, scale and design of the cumulative developments themselves;
- The way in which the asset is experienced;
- The placing of the cumulative development(s) in relation to both the Proposed Development being assessed and the heritage asset under consideration; and
- The contribution of the cumulative baseline schemes to the significance of the effect, excluding the individual proposal being assessed, upon the setting of the heritage asset under consideration.

The cumulative assessment is based upon a list of operational, under construction or consented developments, along with developments where planning permission or Section 36 consent has been applied for. Cumulative developments are listed in **EIA Report Chapter 3: EIA Methodology**. While all have been considered, only those which contribute to, or have the possibility to contribute to, cumulative effects on specific heritage assets are discussed in detail in the text. Additionally, given the emphasis NatureScot places on significant effects, and the requirements of the EIA Regulations, cumulative effects have been considered in detail for those assets where the Proposed Development has been judged to have a Minor effect or greater on their setting. Where No Impact has been predicted or effects are deemed Neutral for the Proposed Development, there will be no cumulative effect.

7.5 Baseline

7.5.1 Geology, Topography and Paleoenvironmental Potential

7.5.1.1 Geology

The BGS[71] identifies one main bedrock underlying the Site: Lorn Plateau Volcanic Formation composed of andesite and basalt, an igneous bedrock formed between 423.6 and 393.3 million years ago during the Silurian and Devonian periods. There are bands of two other igneous bedrocks formed in the same periods recorded as underlying the Site. These are:

[70] SNH & HES (2018). Environmental Impact Assessment Handbook v5. Available at: https://www.nature.scot/sites/default/files/2018-05/Publication%202018%20-%20Environmental%20Impact%20Assessment%20Handbook%20V5.pdf
[71] British Geological Survey (BGS). 2023. Geology of Britain Viewer. Available at: https://geologyviewer.bgs.ac.uk/

- North Britain Siluro-devonian Calc-alkaline Dyke Suite composed of microdiorite and appinitic dioritic-rock; and
- Lorn Plateau Volcanic Formation composed of tuff and agglomerate.

Mapping of the extent of superficial geological deposits by the BGS is not always accurate due to the discontinuity in distribution of these deposits and difficulties in accessing below ground data. The BGS does not record the superficial deposits on the Site for the majority of the Site. A small area of peat is recorded at the north-eastern corner of the Site. Peat is a sedimentary, organic deposit formed in the Quaternary period.

7.5.1.2 Topography

The Site occupies an area of upland between two valleys; the one to the north is relatively wider and is dominated by Loch Etive and the one to the south, is based on the river Lonan and is relatively thinner. The Site slopes upwards from north to south from c. 170m above ordnance datum (AOD) to 272m AOD. The land within the western area of the Site also slopes steeply up in the north-western corner to 273m AOD and in general slopes downwards to the south-west. In general, the land within the Site undulates between sub-circular summits and burn valleys.

The proposed access track occupies land which in general slopes upwards from north (25m AOD) to south (c.190m AOD).

7.5.1.3 Paleoenvironmental Potential

The BGS have identified peat deposits within the Site. Peat deposits in Scotland have been known to contain paleoenvironmental and archaeological remains. Historic and modern research in the west of Scotland[72], suggests that paleoenvironmental remains can survive beneath accumulations of peat and that this can help to better our understanding of vegetational and landscape development and thus anthropogenic activity in the region.

A Phase 1 peat survey was undertaken on the Site in 2022, and a Phase 2 peat survey was undertaken in 2023 (**EIA Report Chapter 9: Geology, Hydrogeology, Hydrology and Soils**). The survey indicated that peat is not present across the majority of the Site, though deep areas of peat (>3m deep) were identified in discrete locations across the Site (**Figure 9.5**). The surveys indicated that where peat has been identified, the peat appears to be undisturbed[73].

The location of historic and modern settlement indicates that the higher ground, in which the Site is located has not been intensively settled or used, likely barring seasonal grazing practices, in the past with anthropogenic activity centred along the valley systems and fertile land to the north and south. As such, they are judged to be a Low potential for archaeological remains and a High potential for paleoenvironmental remains to survive within the identified peat deposits on the Site.

7.5.2 Historic Landscape Character

The Historic Land-use Assessment project (HLA) characterises the land within the Site as, Rough Grazing defined as "*Hill ground or lower-lying land that shows no evidence of recent agricultural improvement can be used for rough grazing. Such areas are largely heather moorland or rough grassland.".* The HLA also

[72] Examples include Ritchie, et al. (1974). A PREHISTORIC FIELD-BOUNDARY FROM THE BLACK CROFTS, NORTH CONNEL, ARGYLL. Glasgow Archaeological Journal Volume. 3, pp. 66-70; Soulsby, J.A. (1976). Palaeoenvironmental Interpretation of a Buried Soil at Achnacree, Argyll. Transactions of the Institute of British Geographers Volume. 1, No. 3, Man's Impact on Past Environments, pp. 279-283; Macklin et al. (2000). Human-environment interactions during the Holocene: New data and interpretations from the Oban area, Argyll, Scotland. DOI:10.1191/095968300671508292

[73] Wrc & RSC. 2022. Cruach Clenamacrie: Phase 1 Peat Depth & Condition Survey. Unpublished report.

states that "*Rough grazing lands have evolved to their present extent as a result of woodland clearance, grazing and episodes of farming over some 6,000 years. These marginal areas bear witness to pre-19th century agriculture and settlement and contain other remains that can date back to the prehistoric period*.".

The majority of the access track has been identified within land characterised as modern conifer plantation. This area is known by Forestry and Land Scotland as Fearnoch Forest. Woodland management in Argyll and Bute is recorded since at least the 18th century, with semi-natural oak woodlands documented in Fearnoch, likely the land to the east and south of the Site at least. Major forestry plantation in this area of Scotland began in 1919 and it is noted that major woodland expansion was undertaken between the 1960s and 1980s. It was in this period that Fearnoch Forest, as it is currently, was established[74].

The planting and removal of woodland can have an adverse impact on buried archaeological remains. Although archaeological remains have been known to survive under planted woodland and it is often considered that root damage is less damaging to buried archaeological remains than cultivation activities[75].

7.5.3 Prehistoric[76]

7.5.3.1 Early Prehistoric c. 10, 050 BC- 4050BC

The Early Prehistoric period within Argyll has been defined as the Palaeolithic to the early Neolithic period. No Early Prehistoric remains have been identified within the Site or within the 1km Study Area.

The Scheduled Raschoille, cave 40m ENE of, Oban (Asset 79) c. 7.41km west of the Site is a natural cave where excavations have revealed evidence of two phases of activity between the Mesolithic and Neolithic periods. Between 6500BC and 6000BC activity is evidenced by the presence of animal bone and charred hazelnut shells. The second phase, identified by the radiocarbon dates of human remains, has been dated between 4000BC and 3000BC. Activity at a number of other caves and rock shelters in the Oban area have been radiocarbon dated to the Mesolithic and Neolithic periods[77].

The NRHE and HER record another cave in the Oban area (Asset 120) designated as NSR: Code V, to the north-west of the Site. The records indicate anthropogenic remains have been found although there is limited explanation of what was identified.

There is a paucity of remains of this date within close proximity to the Site. RARFA identified a concentration of remains of the Mesolithic to Neolithic along the Argyll coastline to the west of the Site and it is likely that activity in this period was centred on the coastal areas. As such there is considered to be a Low potential for remains of this date to be present on the Site.

7.5.3.2 Neolithic, Chalcolithic and Bronze Age c 4000BC – 800BC

Prehistoric cairns tend to date to this period and locate funerary, burial or/and ritual sites and are often located on high ground, thus being assets, which can be seen in a landscape or be viewed from some distance. It must be considered that intervisibility between archaeological monuments and their visibility in

[74] LUC. 2010. Argyll and Bute Woodland and Forestry Strategy- DRAFT. Available at: https://www.argyll-bute.gov.uk/moderngov/mgConvert2PDF.aspx?ID=45892

[75] Forest Research. 2023. WOODLAND AND ARCHAEOLOGY – OVERVIEW OF POTENTIAL ISSUES. Available at: https://www.forestresearch.gov.uk/tools-and-resources/fthr/historic-environment-resources/woodland-and-archaeology/woodland-and-archaeology-overview-of-potential-issues/

[76] The following sub-sections follow the periods as defined in RARFA (2016).

[77] RARFA. N.d. The Early Prehistory of Argyll: The archaeological record, research themes and future priorities for the Palaeolithic, Mesolithic and Earliest Neolithic periods (12000BP - 6000BP) (10,050BC - 4050BC). Available at: https://scarf.scot/regional/rarfa/5-the-early-prehistory-of-argyll-the-archaeological-record-research-themes-and-future-priorities-for-the-palaeolithic-mesolithic-and-earliest-neolithic-periods-12000bp-6000bp-10050bc-4050b/5-2-introduction/

the landscape, without detailed historic landscape analysis, is a largely untested assumption[78]. It is also well documented that cairns can be associated with waterways, often interpreted as a liminal space between the living and the dead and of being of some importance to the belief system in the prehistoric period[79]. Some cairns within the Study Areas have been more precisely dated to the sub-periods, mainly between the Neolithic and Bronze Age, although burial cairns have been dated to other periods.

There is one Scheduled standing stone (Asset 30), located within metres of a cairn (Asset 86), located within the landscape c. 1km south of the Site.

A number of cairns within the Study Areas are not as precisely dated. These include the Scheduled Asset 22 within the 5km Study Area to the north-west of the Site.

Between 5km and 10km to the north of the Site, are another two Scheduled cairns dated between 4000BC and 1000BC, Ledaig House, cairn 20m SE of (Asset 67) and Achnaba House, cairns 30m, 175m & 305m SW of, & 340m & 530m WSW of (Asset 69). To the east, a number of cairns (Asset 127) are identified by the HER as NSR Code V. Additionally, there are a number of Scheduled cairns (Assets 2, 12, 14 & 59); and standing stones (Assets 1, 19, 43 & 56), which likely date from the Neolithic to Bronze Age but are recorded with an unspecified prehistoric date.

A Scheduled Bronze Age Barrow (Asset 70) is located c. 5.11km NNW of the Site. The barrow which survives as a high mound, dates to the 2nd millennium BC.

7.5.3.2.1 Glen Lonan

Glen Lonan is a valley landscape, on either side of the River Lonan located to the south of the Site, it extends within 1km of the Site. The southern boundary of the Glen Lonan is relatively consistent, formed by a steep upward, north facing slope which terminates in a ridge line. The landscape of the Glen changes from west to east, and is composed of roughly three sections, the first is a narrow river valley at its western extent, which opens into a u-shaped valley in the central section. The eastern most section is more open, due to the decrease in height of the northern boundary of the valley.

Within Glen Lonan there are two Scheduled cup marked stones (Assets 4 & 87) located 1.22km south-west and 2.10km south of the Site and on the north facing slope of Glen Lonan respectively. Six Scheduled cairns (Assets 5, 31, 36, 55, 86 & 105), likely originating between the Neolithic and Bronze Age have been identified within Glen Lonan, four of which (Assets 5, 31, 86 & 105) are located within 1km to the south of the Site.

7.5.3.2.2 Strontoiler

The area around Strontoiler is located c. 2.22km west of the Site, to the west of Glen Lonan and to the north of Loch Nell. Within this area two Scheduled cairns (Asset 33 & 34), a Scheduled standing stone and associated cairn (Asset 85), and a Scheduled stone circle (Asset 32) have been identified. All four assets likely originated in this period, although neither HES, the NRHE or the HER indicate any more precise dates for the assets.

7.5.3.2.3 Loch Nell, River Nell and Glen Feuchan

There are seven Scheduled Monuments (Assets 10, 40, 64, 66, 75, 77 & 78) described as cairns and chambered cairns with associated features located at the south-western end of Loch Nell, on the western

[78] Regional Archaeological Research Framework for Argyll (RARFA). N.d. RARFA 4. Towards an Environmental History of Argyll and Bute: A Review of Current Data, Their Strengths and Weaknesses and Suggestions for Future Work. Available at: https://scarf.scot/regional/rarfa/4-towards-an-environmental-history-of-argyll-and-bute-a-review-of-current-data-their-strengths-and-weaknesses-and-suggestions-for-future-work/4-7vegetation-change-and-land-uses-in-later-prehistory-and-the-historic-period/

[79] Cummings, V. Fowler, C. (2015) The Neolithic of the Irish Sea. Oxbow Books

side of the River Nell and along Glen Feuchan. Some of the cairns have attributed dates between the Neolithic and Bronze Age period based on associated finds and radiocarbon dates, whilst others are tentatively dated to this period based on morphology and proximity. It is possible that the cairns may be contemporary to one another.

7.5.3.2.4 Moss of Achnacree

The Moss of Achnacree is located c. 4.7km north-west of the Site, to the east of North Connell in land c. 65m AOD and is occupied by glacio-fluvial deposits derived from granites associated with Ben Cruachan and schists associated with Loch Lorn and is thought to mark the retreat of a valley glacier which once occupied Loch Etive. Previous analysis of the Moss indicates that the area was dominated by open heathland, with a small number of trees[80][81] and that early colonisation and use of the deposits decreased soil productivity, so the area was used in the prehistoric period and relatively less so in later periods. Since the later 18th century, the moss or peat deposits have been cut into for fuel and the land has been drained in order to increase the available arable land[82]. Based on previous investigations within the Moss, archaeological remains have been buried by peat development. A number of cairns are documented as having been overwhelmed by peat development. The Moss is well known for a large number and concentration of burial cairns located on the peripheral edges of the area, as well as a number of buried features which have been identified within the Moss[83][84], including a Scheduled enclosure (Asset 68) and earthen bank and ditch (Asset 28). The area is considered by HES to be important, not just as an area of prehistoric funerary and burial activity, but as an area which has the potential to provide further information about the structure of early prehistoric society and economy[85].

The Scheduled Achnacreebeag (Asset 27) and Carn Ban (Asset 62) chambered cairns, located within the northern area of the Moss have been securely dated to the Neolithic period likely between 4500BC and 2500BC[86].

Whilst the exact date of the majority of the cairns within the Moss are not known, HES and the HER consider that the Scheduled (Assets 25, 26, 29, 44-46, 49-52 & 70) and the NSR (Assets 130 & 131) cairns recorded in the area likely date to the between 3000BC and 1000BC, between the Neolithic, Chalcolithic and Bronze Age.

There are a large number of Neolithic to Bronze Age funerary and burial remains recorded within 10km of the Site. These remains appear to be concentrated around probable settlement locations (Moss of Achnacree) or along water channels to the north (Loch Etive) and south (Glen Lonan and Loch Nell) of the Site. There is a paucity of prehistoric remains recorded within close proximity to the Site or within the higher ground in the wider landscape. Activity in this period appears to have been focused on the relatively lower lying fertile land around communication and transport routes. As such there is judged to be a Low potential for remains of this date to survive on the Site.

---

[80] RARFA. N.d. The Early Prehistory of Argyll: The archaeological record, research themes and future priorities for the Palaeolithic, Mesolithic and Earliest Neolithic periods (12000BP - 6000BP) (10,050BC - 4050BC). Available at: https://scarf.scot/regional/rarfa/5-the-early-prehistory-of-argyll-the-archaeological-record-research-themes-and-future-priorities-for-the-palaeolithic-mesolithic-and-earliest-neolithic-periods-12000bp-6000bp-10050bc-4050b/5-2-introduction/

[81] Soulsby, J.A. (1976). Palaeoenvironmental Interpretation of a Buried Soil at Achnacree, Argyll. Transactions of the Institute of British Geographers Volume. 1, No. 3, Man's Impact on Past Environments, pp. 279-283

[82] ibid

[83] Ritchie, A., Ritchie, G., Whittington, G. & Soulsby, J. (1974). A PREHISTORIC FIELD-BOUNDARY FROM THE BLACK CROFTS, NORTH CONNEL, ARGYLL. Glasgow Archaeological Journal Volume. 3, pp. 66-70

[84] Soulsby, J.A. (1976). Palaeoenvironmental Interpretation of a Buried Soil at Achnacree, Argyll. Transactions of the Institute of British Geographers Volume. 1, No. 3, Man's Impact on Past Environments, pp. 279-283

[85] HES. (2023). Loch-na-beithe Cottage, cairn 35m SE of. Available at: https://portal.historicenvironment.scot/designation/SM3768

[86] Sheridan, A. (2024) 6. Neolithic, Chalcolithic and Bronze Age c 4000BC – 800BC. Available at: https://scarf.scot/regional/rarfa/6-neolithic-chalcolithic-and-bronze-age-c-4000bc-800bc/

7.5.3.3 Iron Age c. 800BC- AD500

Duns, forts, and crannogs are often attributed to construction and use in the Iron Age. Although examples of such assets have been found to pre-date and continue in use after the end of this sub-period. For example, a non-designated crannog (NRHE NM93NW 14) within the north-western extent of the Moss of Achnacree over 5km from the Site is thought to have been occupied during the medieval period.

Within 5km to the north of the Site, on the southern side of Loch Etive, there are three Scheduled duns and/or forts; Dun Creagach, fort SW of Connel (Asset 23); Dun Creagach,dun 145m NW of Auchnacloich (Asset 24); and Dun Chathach, dun 630m E of Auchnacloich Railway Station (Asset 54).

Between 5km and 10km from the Site there are a number of duns and forts (Assets 16, 72, 73, 76 & 81) attributed to the Iron Age period, located to the north, west and east of the Site, largely located along waterways and transport routes. Further, defensive or settlement assets (Assets 3, 9, 15, 20, 21, 37-39) have been identified in this area. These assets likely date to the Iron Age, based on their location and form; however, they may have originated at slightly different times or have been in use for longer than currently attributed.

7.5.3.3.1 Glen Lonan

Glen Lonan is located to the south of the Site and has been described above. Within the Glen, four Scheduled duns or forts (Assets 35, 57, 58 & 60) are recorded. An Dun, dun 500m ESE of Glenamadrie (Asset 57), the exact form of which, either a dun or a fort, has been debated following excavation in the 1960s, is located on an isolated knoll c. 670m south of the Site. The others are similarly situated on the summits of isolated knolls further east along the Glen, up to c. 3km from the Site. It is possible that the duns or forts, represent a contemporaneous network of defensive or administrative structures along the valley system, overlooking the fertile ground, although the assets may not be contemporary.

7.5.3.3.2 Strontoiler

A Scheduled dun, Dun Neil, dun 100m NE of Dun-neil (Asset 6) is located at the northern end of Loch Nell on a low but prominent rocky ridge c. 2.54km west of the Site. The NRHE notes that quarrying activities along the north-eastern extent of the dun have adversely impacted the way in which the dun can be understood as well as any archaeological remains which may have survived.

7.5.3.3.3 Loch Nell, River Nell and Glen Feuchan

Within Loch Nell, two Crannogs have been identified, one Loch Nell, crannog 200m NE of Rubha Namoine (Asset 13) has been designated a Scheduled Monument and is described as an island in the northern end of Loch Nell of probable partial or wholly artificial origin. The island is documented in the 14th century as the dwelling place of the Campbells of Lochnell, who in the 17th century moved to the now Category A Listed Lochnell House (Asset 88).

The second crannog, Barnacarry, Loch Nell (Asset 115) is recorded by the HER as a NSR Code V. Excavations in the late 19th and early 20th century found ashes, bone, charcoal and nuts on an artificial island and structural timbers were identified in 2003.

A possible third crannog or artificial island (Asset 116), also recorded as a NSR Code V has been theorised to have existed in the eastern portion of the loch, although there is very limited evidence for this third crannog.

Two Scheduled forts (Assets 3 & 17) are located to the south of Loch Nell, one at Kilmore (Asset 17) and one at Dun Iadain (Asset 3). Both occupy the summits of steep knolls with rocky slopes suggesting that these may have had a defensive function.

Iron Age defensive and settlement remains have been identified along fertile valleys, for example along Glen Lonan and on the edge of the coast along Loch Etive and Ardmucknish Bay. This indicates that these assets were controlling the fertile areas as well as the transport and communications routeways. There are fewer examples in the higher uplands. As such there is judged to be a Low potential for Iron Age remains to survive on the Site as activity in the period appears to have been focused elsewhere.

7.5.3.4 Early Medieval AD400-1100

The Site is located in Argyll which was largely encompassed within the Kingdom of Dál Riata between AD400-1100. Crannogs, duns and forts continued to be built and utilised in this period, and those noted above as being of potential Iron Age date may indeed be more accurately dated to this subsequent period.

There are no Early Medieval remains recorded on the Site or within 1km of the Site.

Between 1km and 5km from the Site two burial grounds of Early Medieval date have been recorded. One of which is the Scheduled Cladh na h'Annaid, burial ground 280m SE of Corachie Farm (Asset 61) to the east of the Site on north-westward sloping land at the eastern extent of Glen Lonan. The burial ground survives as a banked enclosure.

To the north of the Site, another possible Early Medieval burial ground is recorded, Cladh na h'Anaid, burial ground, 760m SE of Stonefield (Asset 80). The burial ground which is a Scheduled Monument comprises the remains of early Christian burials. Christianity spread into this region of Scotland during this period and as such the burial ground may date from this period, although it may be of later medieval date.

Within the 10km Study Area, another Early Medieval burial ground survives as a Scheduled Monument; Craobh Bial na Buaidh, burial ground and well 440m NW of Dalvuie (Asset 65), c. 7.07km north of the Site. Activity at Asset 65 appears to have continued into the pre-Reformation period when it was reportedly used for the burial of unbaptised infants.

The Scheduled extent of Dunollie Castle (Asset 41) c. 7.90km west of the Site includes earthwork remains of features thought to date from the “Dark Ages” or Early Medieval period. Documentary evidence suggests that the castle’s location was the chief stronghold of the Lorn Kings which was burnt in AD698. The upstanding castle remains are of later medieval date.

Approximately 6.2km north-east of the Site, Dun Mor motte (Asset 63) is located north of Taynauit, on the southern side of Loch Etive. The motte is thought to date from sometime between AD1050 and 1300 at the later end of the Early Medieval period. The motte may be contemporary with Dun Leigh, dun 200m ENE of Balure (Asset 20) located on the upper slopes c. 550m south-east of the motte, however, the motte may be a later replacement feature on the southern side of Loch Etive.

The NSR Code V asset Mount Pleasant, Kerrera (Asset 121), at the northern end of Kerrera c. 8.65km to the west of the Site marks the location of a possible Viking grave. Two swords were reportedly found in association with the grave although the exact location of the finds now or when found are not known.

There is a paucity of Early Medieval remains within close proximity to the Site. Early Medieval assets within 10km of the Site largely consist of burial and funerary monuments and defensive structures. All of these assets appear to be located within the lower lying land or on relatively higher slopes along waterways and trade and communication routes, indicative of the foci of activity and settlement in this period. As such there is considered to be a Low potential for remains of this period to be found on the Site.

7.5.3.5 Medieval AD1100-1600

Argyll is thought to have been inhabited by a hybrid culture of Gaelic and Norse speaking peoples in the medieval period. Castle building was adopted in this area during the medieval period, with castles constructed in locations where they would interact with outsiders and project symbols of power and dominance such as at harbours and along trade and communication routeways. It is noted that whilst new

defensive structures were constructed in the period, older defensive and residential structures such as crannogs, duns, and forts were reoccupied by the local lords in order to demonstrate their links to local communities and the land[87]. One example would be the Scheduled Loch Nell, crannog (Asset 13) which was the seat of the Campbells of Lochnell, in the 14th century.

An old burial ground (Asset 104) has been documented at Glenamachrie within 1km to the south of the Site. The burial ground is recorded as a non-designated heritage asset. Historic records indicate that the burial ground was associated with the burial of infant children from Dunstaffnage Castle. A non-designated cross decorated stone (Asset 106), historically reported at Glenamachrie is associated with the placenames Glenamachrie, deriving from "Cladh na MacRigh" and "Tom na Croise" which when translated may mean something similar to "*the burial place of the youths/kings' sons*". As such the two non-designated assets are thought to be related to one another. The exact form of the burial ground has been largely lost by the construction, use and abandonment of a township (Asset 109) and the Early Modern and modern farm of Glenamachrie.

The burial ground within 1km of the Site is thought to be associated with the Scheduled Dunstaffnage Castle (Asset 74), c. 6.35km north-west of the Site. The Castle occupies a promontory of land which extends into the Forth of Lorn, Dunstaffnage Bay, and Ardmuchnish Bay and is believed to have originated in the 13th century AD. However, the location may have earlier importance, with tradition stating that the stone of destiny may have been held at the location of Dunstaffnage Castle until it was transferred to Scone by Kenneth MacAlpin in the Early Medieval period. The upstanding remains of the Castle date from the 15th to 18th century and largely include the structure built by the MacDougall's, and held by a hereditary Captain of the Earls of Argyll from the late 15th century. The Castle, through association and ownership with Duke of Argyll's is also associated with the Campbell family.

Approximately 120m south-west of the Castle is an associated Scheduled medieval chapel (Asset 18). The chapel originated in the 13th century and a burial aisle was added in the 1740s for the Campbells of Dunstaffnage.

Ardchattan Priory (Asset 82) c. 4.63km north of the Site, on the northern side of Loch Etive was founded in 1230-31 as a Valliscaulian priory, one of three in Scotland. The remains of the priory, which largely date from the 13th and 15th century, are designated as a Scheduled Monument. The surviving main block (Asset 96) is designated as a Category B Listed Building and includes the main block and refectory both altered c. 1600 to create a conventional building for the last prior Alexander Campbell. The priory is located within an area designated as an Inventory Garden and Designed Landscape (GDL), (centred Asset 102) of the same name. The GDL encompasses the extent of the medieval monastic garden as well as the later designed landscape, improved from the 17th century.

To the north of the GDL, is the Scheduled Baile Mhaodain church (Asset 48), a church and associated burial ground which is thought to have been dedicated to St Moden or St Baedan in the 15th or 16th century. Associated burials do not appear to pre-date the 18th century, although the burial ground may have continued in use after the abandonment of the nearby Priory (Asset 82).

The NSR Code C An Coinneachan (Asset 113) burial ground, c. 2.26km south-west of the Site is not recorded with a secure date by the NRHE or by the HER, although it is stated that the chapel is likely of an "early date". Associated rig and furrow cultivation remains, often associated with medieval agricultural practises, have been identified in the vicinity of Asset 113. As such Asset 133 may be of medieval date.

Between 5km and 10km from the Site, there are six medieval Scheduled Monuments, which can be characterised as ecclesiastical structures (Asset 8, 42, 47, 71 & 83) or burial and/or funeral sites (Asset 65).

[87] Raven, J.A. (N.d.) RARFA 9. The Archaeology of Medieval Argyll (AD 1100 – AD 1600). Available at: https://scarf.scot/regional/rarfa/9-the-archaeology-of-medieval-argyll-ad-1100-ad-1600/

Medieval remains within the vicinity of the Site relate to ecclesiastical and funerary/burial sites, located in relatively low lying ground, along fertile valleys or by coastlines. Dunstaffnage Castle (Asset 74), to the west of the Site, on the western coastline was likely the centre of activity in the period. Indeed, the west coast of Scotland is thought to have been closely associated with the Western Isle, Isle of Man and Ireland in the medieval period, in the administration of the MacDonalds and the Lords of the Isles[88]. There is a paucity of information about the hinterland, including the Site although it is likely later post-medieval farms had earlier antecedents and that activity continued in the area from earlier periods. As such there is judged to be a Low potential for medieval remains to survive on the Site.

7.5.3.6 Early Modern AD1600-1900

The Early Modern period in Argyll is often associated with the change of land ownership from joint tenancy farms, associated with multiple families who practised subsistence farming, to single ownership farms and state-owned forests, and the shift in population from the rural, agricultural landscape to urban centres[89].

Pre-Ordnance Survey maps of the Site tend to be schematic and lack detail. These maps do not record the Site in detail.

A map of the Dukedom of Argyll dated 1734[90] (not illustrated) depicts a roughly east-west aligned road, running parallel to the south side of Loch Etive, which is likely the precursor to the A85, to the north of the Site. A location on the coast to the west of the Site is noted as “Campbell’s” and the Scheduled Dunstaffnage Castle (Asset 74) is annotated. The annotation likely references the historic connection between the family and the castle. Similarly, Loch Nell, to the south-west of the Site is labelled and is also associated with a label which reads “Campbells”, likely noting their association with the Scheduled crannog (Asset 13). No further information about the Site or surrounding area is recorded.

Roy’s Military Map of Scotland-Highlands[91] (1747-52) (not illustrated) depicts the Site within an upland area to the south of Connel. Settlement in the period is depicted to the south around the River Lonan and to the west by “Loch Kilrigh”, now The Black Lochs, and Loch Nell suggesting that this is where the fertile land was located.

The Site is located within the parish of Kilmore and Kilbride. The Old Statistical Account (OSA[92]) noted that the hills within the parish were covered with heath and that the land within valleys was generally in arable use in the late 18th century. It was stated that few hills in the parish were occupied by grazing sheep, however the OSA also suggests that sheep husbandry was a new addition to the agricultural pursuits of parish in the late 18th century. The New Statistical Account (NSA[93]) published in 1845 suggests that whilst there was some improvement within the arable environment, there was little change in the upland landscape in the early 19th century.

A map dated 1801[94] (not illustrated) illustrates the Site within uplands, with the high point annotated as “Dib Hoid” or Deadh Choimhead. A building depicted on the southern side of this location may be associated

[88] RARFA (N.d.) 9. The Archaeology of Medieval Argyll (AD 1100 – AD 1600) 9.5 Administration. Available at: https://scarf.scot/regional/rarfa/9-the-archaeology-of-medieval-argyll-ad-1100-ad-1600/9-5-administration/

[89] James, H. & Horning, A. (N.d.) RARFA 10. Early Modern Period (AD 1600 – AD 1900) and Modern in Argyll (AD 1900 – Present). Available at: https://scarf.scot/regional/rarfa/10-early-modern-period-ad-1600-ad-1900-and-modern-in-argyll-ad-1900-present/

[90] Cowley, J. 1734.A map of such part of his Grace the Duke of Argyle's heritable dukedom, and justiciary territories, islands, superiorities & jurisdictions as lye contiguous upon the western Coast of North Britain, within the now united shyres of Inverary and Tarbat

[91] Roy, W. 1747-52. Military Map of Scotland- Highlands.

[92] McDonald, P. Rev. 1794. Kilmore and Kilbride, County of Argyle, Old Statistical Account (OSA), Volume XI. Available at: https://stataccscot.edina.ac.uk/static/statacc/dist/viewer/osa-vol11-Parish_record_for_Kilmore_and_Kilbride_in_the_county_of_Argyle_in_volume_11_of_account_1/

[93] Campbell, D.N. Rev. 1845. Kilmore and Kilbride, County of Argyle, New Statistical Account (NSA), Volume VII. Available at: https://stataccscot.edina.ac.uk/static/statacc/dist/viewer/nsa-vol7-Parish_record_for_Kilmore_and_Kilbride_in_the_county_of_Argyle_in_volume_7_of_account_2/

[94] Langlands, G. 1801. This map of Argyllshire

with an enclosure (Asset 108) recorded in the 1960s to the south of the Site. The map also documents a number of farmsteads along the precursor to the A85 to the north of the Site. Thomson's later 1824 map[95] (not illustrated) records no great change to the landscape in the early 19th century.

The Ordnance Survey (OS) map published in 1874[96] (**Figure 7.4-Extract from Ordnance Survey Map, 1872-4**) depicts the Site in an upland landscape, with rock outcrops depicted around localised summits. A lochan is depicted within the north-eastern area of the Site. Linear features (centred Asset 139) are depicted as extending into the north-western corner of the Site and the central area of the Site. These features are likely stone walls, associated with historic land divisions. The boundary aligned roughly north to south and depicted as extending into the central area of the Site may also be associated with the land management and drainage, as it appears to be connected to a natural burn connected to the lochan within the Site and to Lochan na Craige Deirge to the north. A roofless building (Asset 107) is documented within metres of the northern Application Boundary on the OS map published in 1874 (**Figure 7.4**). Extensive areas of woodland are depicted to the north-east and north-west of the Site. Several buildings are annotated as "Dailnamac" (Asset 133) to the east of the proposed access track on the southern extent of an area of agricultural land, immediately south of the road on the OS map of 1872[97]. The OS Reference Book documents the land to the north as arable in 1872[98], and the OS Name Book describes Dailnamac as a "*two small dwellings situated on the east bank of the Luachragan*"[99]. In general, the proposed access track is depicted within woodland or forestry on the 1870s maps. Settlement is as depicted on earlier maps to the north and south of the Site along Glen Lonan.

The woodland with Fearnoch Forest, to the north-east of the Site, and in which the proposed access track is located, is documented as being semi-natural oak woodlands in the 19th century. It is also recorded that the woodland was exploited by the nearby Bonawe Ironworks[100], now a Scheduled monument (Asset 84) to the north-east.

There are no Early Modern assets recorded on the Site. Within 1km to the south of the Site, Glenamacrie or Clenamacrie (Asset 109) is recorded as a township composed of a collection of buildings on the northern side of the River Lonan. The township may be a successor to the earlier burial ground and any associated activity. A sheepfold and drystone wall (Asset 112) have also been recorded in this area associated with the township and later farmstead.

There is judged to be a Medium potential for Early Modern remains to survive on the Site. Any remains would likely be composed of the upstanding and buried remains of boundary walls or features associated with land drainage. Such assets are considered to have Negligible importance, being common features of the Early Modern and modern rural and agricultural landscape.

7.5.3.7 Modern AD1900-Present

Subsequent OS maps published between 1900 (not illustrated) and 1975-6 (not illustrated) do not record any changes to the Site. Commercial plantation forestry, to the east and south, likely replaced the earlier woodland depicted on the OS map published in 1874 (**Figure 7.4**) in the modern period. Forestry tracks are depicted within Fearnoch Forest in the vicinity of the proposed access track on the OS maps published in 1975-6. The HER and NRHE do not record any modern heritage assets within the Study Areas. As such,

---

[95] Thomson, J. & Johnson, W. 1824. Northern Part of Argyll Shire. Southern Part. Top section
[96] Ordnance Survey. 1874. Argyllshire, Sheet XCIX Survey date: 1871, Publication date: 1874
[97] Ordnance Survey. 1872. Argyllshire and Buteshire LXXXVII.16 (Muckairn) Survey date: 1871, Publication date: 1872
[98] Ordnance Survey. 1872. Parish of Mackairn in the County fo Argyll Ordnance Survey Books of Reference 1855-1882. Available at: https://digital.nls.uk/ordnance-survey-books-of-reference-1855-1882/archive/99333867#?c=0&m=0&s=0&cv=654&xywh=-565%2C-1%2C3629%2C4216
[99] Ordnance Survey. 1868-78. Argyll OS Name Books, 1868-1878 Argyll volume 23 OS1/2/23/21. Available at: https://scotlandsplaces.gov.uk/digital-volumes/ordnance-survey-name-books/argyll-os-name-books-1868-1878/argyll-volume-23/21
[100] LUC. 2010. Argyll and Bute Woodland and Forestry Strategy- DRAFT. Available at: https://www.argyll-bute.gov.uk/moderngov/mgConvert2PDF.aspx?ID=45892

there is considered to be a Low potential for archaeological remains of the modern period to survive on the Site.

7.5.3.8 Aerial Photography

Aerial photographs held online by the National Collection of Aerial Photography (NCAP) were consulted online via AOC Archaeology Group's NCAP subscription or ordered from NCAP directly. Photographs were either viewed as pdf research copies ordered from NCAP or were digitised via the online webmap portal.

Photography taken in July 1947[101] locates the Site in an upland environment dominated by undulating land crossed by burns and burn valleys. Sparse vegetation is visible in the vicinity of the Site and this vegetation likely includes individual trees as well as lower lying vegetation. An area of woodland is visible along the A85. This area appears to be a deliberate plantation of trees.

Imagery dated 1957[102] and 1965[103] shows conifer plantation forestry to the south-west and areas of mixed woodland to the north of the Site. In general, the Site is visible as occupying an upland landscape.

The conifer plantation known as Fearnoch Forest to the east and north-east of the Site appears to have been planted by 1988[104]; however, the current extent of that forestry to the south is not visible and must post-date 1988. The Site appears in an upland landscape similar to how it is depicted on historic cartography and earlier aerial photography.

A review of aerial photography did not identify any hitherto unrecorded heritage assets.

7.5.3.9 Walkover Survey

A walkover survey of the Site and associated infrastructure based on a previous iteration of the Proposed Development design (**EIA Report Chapter 4: Assessment of Alternatives**) was attempted on the 11 September 2023 in variable conditions. Ground visibility was severely limited by mature fern and heather growth as well as knee to thigh high grasses. The ground beneath the vegetation was found to be extremely uneven (**Plates 7.1 & 7.2**). Overall, the Site occupies land which slopes upwards from north to south from c. 170m AOD to 272m AOD. The land within the western Application Boundary also slopes steeply up in the north-western corner to 273m AOD and in general slopes downwards to the south-west. In general, the land within the Site undulates between sub-circular summits and burn valleys. Two sections of a stone-built wall (Asset 139-**Plate 7.3**) were identified within the north-western Site. No other evidence of modern or historic land use was identified. The stone wall (Asset 139) is recorded on modern and OS mapping published in 1874 (**Figure 7.4- Extract from Ordnance Survey Map, 1872-4**).

Due to difficulty with the ground surface and the mature vegetation, as well as the lack of ground visibility across the Site, a full walkover of the Site was not undertaken in 2023.

Following changes to the Proposed Development resulting in the final design for application, the Site and access track were subject to another survey between the 8 and 9 May 2024 in overcast but dry conditions.

The northern portion of the access track, which would cross improved and semi-improved grassland (**Plate 7.4**) south of the A85 was subject to a walkover survey on the 8 September 2024. The survey identified a low stony mound (Asset 140- **Plate 7.5**) which appears to be composed of a clearance cairn atop bedrock stone and a north-east to south-west aligned tree lined bank (centred Asset 141-**Plate 7.6**) composed of earth and stone which corresponds to the alignment of a field boundary depicted on the OS map published in 1874 (**Figure 7.4- Extract from Ordnance Survey Map, 1872-4**). The rest of the access track was subject to a windscreen survey as it largely follows existing forestry tracks (**Plates 7.7 & 7.8**). No

[101] Sortie CPE/Scot/UK/0247 Frame 4120 & 4123
[102] Sortie 58/RAF/2244 Frame F21 0043 & F22 0004
[103] Sortie 58/RAF/6809 Frame F22 100
[104] Sotie ASS/50988 Frame 0111

archaeological remains were identified during the windscreen survey, and it is likely that the creation of the existing forestry tracks would have had an adverse direct impact on any archaeological remains within their footprint.

The infrastructure within the Site was subject to a targeted walkover survey on the 8 and 9 September 2024. This survey identified three possible shooting butts (Assets 142-144- **Plates 7.9-7.11**), a section of upstanding dry-stone wall identified in 2023 (Asset 139), and two additional sections of upstanding dry-stone wall (Asset 145 (**Plate 7.12**) & Asset 146 (**Plate 7.13**)). All the dry-stone walls identified on the Site are historically recorded on the OS map published in 1874 (**Figure 7.4-Extract from Ordnance Survey Map, 1872-4**).

The Site is located within an upland area between two fertile valleys. Anthropogenic activity is well documented within these adjacent valleys where it has been centred on the adjacent, and relatively more low-lying fertile land, along communication and transport routes, with the uplands being subject to land division and being infrequently used for grazing activities in the past and more recently for recreational shooting activities. On balance, there is judged to be a Low potential for archaeological remains to survive within the Site.

7.6 Likely Significant Effects

7.6.1 Construction

Construction impacts associated with the Proposed Development include construction works for the turbines, laydown areas, access tracks and other infrastructure. Other construction activities, such as vehicle movements, soil and overburden storage and landscaping also have the potential to cause direct, permanent, and irreversible impacts to cultural heritage assets. As such the construction of the Proposed Development has the potential to disturb, damage or destroy features or buried remains of cultural heritage interest.

The Proposed Development has been designed, where possible, to avoid all direct impacts on known archaeological remains.

Construction effects on cultural heritage receptors, as discussed here, have been limited to direct impacts on heritage features and deposits. Whilst there is some limited potential for impacts upon the setting of designated heritage assets to occur during the construction phase, any such effects would be temporary, and it is considered that setting effects resulting from construction would not exceed the predicted operational effects upon the setting of heritage assets. As such, with aim of achieving proportionality, the potential for setting effects is considered under operational effects.

This assessment has identified eight non-designated heritage assets (Assets 139-146) within the Site (**Figure 7.1- Heritage Assets within the Site**). The importance, and thus sensitivity, of these heritage assets are detailed in **Table 7.6** below. **Table 7.6** also notes the predicted magnitude of impact and effect significance.

TABLE 7.6: HERITAGE ASSETS WITHIN THE SITE

ASSET NUMBER	ASSET NAME	DESIGNATION	IMPORTANCE	IMPACT MAGNITUDE	EFFECT SIGNIFICANCE
139	Stone Wall	Non-designated Heritage Asset	Negligible	Low	Negligible
140	Mound	Non-designated Heritage Asset	Negligible	Negligible	Negligible

ASSET NUMBER	ASSET NAME	DESIGNATION	IMPORTANCE	IMPACT MAGNITUDE	EFFECT SIGNIFICANCE
141	Field Boundary Bank	Non-designated Heritage Asset	Negligible	Low	Negligible
142	Possible Shooting Butt	Non-designated Heritage Asset	Negligible	High	Minor
143	Possible Shooting Butt	Non-designated Heritage Asset	Negligible	None	None
144	Possible Shooting Butt	Non-designated Heritage Asset	Negligible	None	None
145	Stone Wall	Non-designated Heritage Asset	Negligible	None	None
146	Stone Wall	Non-designated Heritage Asset	Negligible	Low	Negligible

A field boundary bank (centred Asset 141), which also corresponds to the OS map published in 1874 was recorded within the vicinity of the northern portion of the proposed access track. As a relatively common feature of the Early Modern landscape, recorded on historic cartography the asset is judged to be of Negligible importance. The Proposed Development will cross the boundary bank and thus have a direct impact on a small portion of the overall asset, which would result in a Low impact magnitude. The resulting effect significance is judged to be **Negligible**. This effect significance is not considered to be significant in EIA terms.

Also, within the vicinity of the northern portion of the access track a mound, likely evidence of a clearance cairn atop an outcrop of natural stone (Asset 140) has been recorded. As a clearance cairn within an improved field, the asset is considered to be of Negligible importance being a common feature of the improved agricultural landscape. The trees around the asset are being removed as part of the Proposed Development and this work may cause a small loss of peripheral deposits or fabric associated with Asset 140. This is considered to be a Negligible impact magnitude. The resulting effect significance is **Negligible**. This level of effect is not considered to be significant in EIA terms.

Three portions of stone walls (Assets 139, 145 & 146) were identified within the Site during the walkover surveys in September 2023 and May 2024. The surviving extent of the walls were recorded where access allowed, there being dense vegetation around the walls which precluded access. The location of the walls corresponds to linear features depicted OS maps from 1874 which are likely boundary walls and evidence of Early Modern land division. The walls are judged to be of Negligible importance, being relatively common features of the Early Modern landscape, recorded on historic cartography. No infrastructure of the Proposed Development is located in the vicinity of Asset 145 and thus no direct impact is anticipated. The access track to T3 would cross a portion of the stone wall identified as Asset 139. Similarly, the infrastructure around T4 extends to the wall identified as Asset 146. In both cases there is likely to be a loss of a small proportion of the asset and as such the impact magnitude is considered to be Low. The resulting effect significance is judged to be **Negligible**. This level of effect is not considered to be significant in EIA terms.

Three sub-oval mounds with central hollows, recorded along a slight north-west to south-east aligned ridge have been interpreted as possible shooting butts (Assets 142-144). Shooting butts tend to be evidence of modern recreational shooting activities and as such would be considered to be of Negligible importance. Based on the location of the Proposed Development infrastructure there is anticipated to be no direct impact on remains associated with Assets 143 and 144. An access track is proposed in the vicinity of Asset 142 and thus the construction of the Proposed Development is likely to remove the asset. This constitutes a

High impact magnitude. The resulting effect significance is judged to be **Minor** adverse and not significant in EIA terms.

This assessment has judged there to be a High potential for paleoenvironmental remains to survive on the Site. The importance of such remains is considered to be Low as they would most likely contribute to our understanding of the development of the local landscape. The design of the Proposed Development has taken into account the locations of deep peat and has avoided this by design, where possible. As such paleoenvironmental remains likely to survive within relatively deeper deposits are not anticipated to be adversely impacted. However, the depth of survival of paleoenvironmental remains is not known and may vary considerably across the Site. Peat deposits would be impacted by the Proposed Development, and there is the potential for impacts on paleoenvironmental remains. The impact magnitude is judged to be Low. The resulting effect significance would be **Negligible**. This effect significance is not considered to be significant in EIA terms.

This assessment has judged there to be a Low potential for hitherto unknown archaeological remains to survive on the Site. This is due to the paucity of heritage assets recorded within the Site and surrounding area as well as the apparent historic preference for activities in the adjacent lower lying land. The importance of hitherto unknown archaeological remains cannot be predicted and thus the effect significance cannot be determined at this time. However, the evidence suggests that hitherto unknown remains would likely comprise of agricultural and land management features likely to be considered to be of Low or Negligible importance, based on their prevalence within the archaeological record. Impacts upon any such remains could range from Negligible to High in terms of magnitude of impact, depending upon the extent of damage/removal of the asset. This has the potential to result in effects of up to Minor significance which is not significant in EIA terms. It should, however, be noted that the potential for archaeological remains of greater importance being encountered cannot be wholly disregarded and impacts upon any such remains could result in greater levels of effect.

In addition to the potential for impacts within the Site, there is a potential for direct impacts resulting from offsite habitat management proposals which are illustrated on **Figure 10.5.5** and outlined in **Appendix 10.5**. It is understood that no groundbreaking is required for the proposed grazing management area (HMU E) or within an area proposed for bog myrtle and bracken control (HMU D) as such no direct impacts upon known or unknown heritage assets are expected.

Dun Chathach, dun 630m E of Auchnacloich Railway Station (SM3783-Asset 54) is located within an area proposed for Rhdedendron removal. As such there is potential for direct impacts upon the Scheduled Monument as a result of ground disturbance from root extraction. Any works within the Scheduled Monument extent would require Scheduled Monument Consent (SMC) in advance of works. The exact level of effect would be dependent upon the methodology employed, and thus the extent of disturbance; however, any magnitude of impact to a Scheduled Monument is likely to be considered significant.

7.6.2 Operation

Operational effects include potential effects upon the settings or character of designated assets such as Listed Buildings, Scheduled Monuments, and Inventory Gardens and Designed Landscapes (GDL), (note there are no Conservation Areas, Inventory Battlefields or World Heritage Sites located within the Study Areas). No other direct effects upon designated or non-designated assets are anticipated during the operational phase.

A bare earth ZTV has been produced for the Proposed Development. The ZTV is based on a turbine tip height of up to 200 m and the OS Terrain 50 data (**Figure 7.3- Designated Heritage Assets within 10km of the Site**). A screened ZTV has also been produced based on the OS Terrain 50 data surface model which takes into account vegetation and buildings; however, this has not been reproduced on Figures for this Chapter (see **EIA Report Chapter 6: Landscape and Visual Impact Assessment**).

In addition to the ZTV, all the designated heritage assets within the 10km Study Area were subject to an assessment of their key characteristics and key views. As in the Scoping Report no designated heritage assets outwith the ZTV were identified as having key views or relationships in which the Proposed Development would be located and assets outwith the ZTV were subsequently scoped out with the agreement of HES (see **Table 7.1**).

This assessment of operational effects is informed by cultural heritage wirelines and photowire visualisations as well as photomontages (**Figures 7.5-7.32**) created for this assessment. **Figures 7.9, 7.10, 7.13, 7.14, 7.17-20** do not show the intervisibility of heritage assets with the Proposed Development but illustrate the valley landscape in which the assets are located and highlight potentially contemporary assets in that landscape which have direct intervisibility (dark red line) and potential views towards, indicated by the lighter red lines. The Landscape and Visuals assessment (LVIA) photomontage from Dunstaffnage Castle (Asset 74) (**Viewpoint 13; 13a**) has also informed this assessment.

A detailed assessment of the impact of the Proposed Development on the setting of heritage assets, and associated heritage asset therein, and groups of heritage assets as defined by HES during scoping (**Table 7.1**) can be found below. A detailed setting assessment of the other 39 designated heritage assets within the 10 km Study Area, and within the ZTV, has been undertaken for the Proposed Development. These assessments are presented in Technical **Appendix 7.2: Settings Assessment**. The results of these assessments have identified levels of effect ranging from Neutral to Minor, which are not considered to be significant in EIA terms. No significant adverse impacts upon the integrity of any Scheduled Monuments' settings are anticipated.

7.6.2.1 Ardchattan Priory (Asset 102) including Ardchattan House (Asset 96) and Priory, Burial Ground and Carved Stones (Asset 82)

The GDL of Ardchattan Priory (centred Asset 102) encompasses the Scheduled extent of Ardchattan Priory, the priory, burial ground and carved stones (Asset 82) and the Category B Listed Ardchattan House (Asset 96). These assets, whilst individually designated, also form a group of assets (see **Plate 7.14**) with a shared history and as such they will be assessed together. The GDL is situated on gently southward sloping land on the northern side of Loch Etive.

Ardchattan Priory (Asset 82) was founded in the 13th century, with surviving upstanding remains dating to 13th, 15th and 16th centuries and including an important collection of carved stones. The surrounding grounds (centred Asset 102) are thought to have originated as a monastic garden in the 13th century and as such the immediate land around the Priory was developed to provide for the Priory, likely in terms of food provision as well as a spiritual retreat. As such the surrounding land, likely within the GDL and potentially beyond formed the near setting of the medieval Priory.

The location for the Priory's construction is associated with the establishment, development and patronage of religious houses in Argyll. Similar to other medieval remains, the majority of religious establishments of this period appear to be located on communication and transport routes such as those of Kerrera (Asset 7), often riverine, loch based or coastal transport routes which echo earlier ritual and burial practices. The location of the Priory on the north shore of Loch Etive was probably chosen as it is located to the east of the coast, and as such is partially protected, and for easy boat landing.

The Category B Listed Ardchattan House (Asset 96) was constructed in the 17th century, following the dissolution of the Priory and the surrounding land (centred Asset 102) is noted as being designed as a landscape from that century onwards. Whilst the GDL encompasses the extent of the post-medieval landscaping it does enclose the earlier Priory gardens. The House's setting is associated with the historic land ownership, as well as to its lochside location which would have provided a communication and transport route as well as an aesthetic viewscape including long views to the east towards a mountainous area dominated by Ben Cruachan, to the east towards the hills of Mull and to the south towards the edge of the loch valley dominated by Fearnoch Forest.

This group of assets is considered to have a Medium relative sensitivity to change, as the immediate surrounding landscape, the GDL extent and the loch location contributes to the understanding, appreciation and experience of the assets and how they relate to one another. However, there are other elements, such as architectural and historical interest which contribute to their significance and the wider landscape, whilst aesthetically pleasing does not majorly contribute to the asset's cultural significance.

The Proposed Development would be, at its nearest, located c. 4.92 km south-west (Turbine 5) of the assets. The ZTV indicates that all six turbines of the Proposed Development would be visible from everywhere within the GDL, however in reality the extant buildings and vegetation make any visibility of the Proposed Development discontinuous and partially screened. A wireline (**Figure 7.31**) from the southern extent of the GDL shows the same intervisibility as the ZTV. A photomontage (**Figure 7.32**) created for this assessment from the southern extent of the GDL illustrates that whilst six turbines are theoretically visible (**Figure 7.31**), only the hubs of two and the blades of a further two turbines would be seen from that location. This exemplifies how the views towards the Proposed Development would change throughout the GDL, and change depending on the vegetation on the southern shores of Loch Etive, as well as around Fearnoch Forest. The Proposed Development would be visible as a new and modern development beyond mature woodland and commercial forestry (**Plate 7.15**) and would constitute a marginal alteration to the wider setting of the assets which would not alter how the assets are understood, appreciated or experienced and thus there would no impact to their cultural significance. The impact magnitude is considered to be negligible and the resulting effect significance, **Neutral** and not significant in EIA terms.

The integrity of the setting of the Scheduled Ardchattan Priory (Asset 82) would not be significantly adversely impacted.

7.6.2.2 Achnacloich (Asset 103) including Achnacloich House (Asset 95)

The GDL of Achnacloich (centred Asset 103) encompasses the Category B Listed Achnacloich House (Asset 95). These assets will be assessed together. The GDL occupies pasture and woodland on relatively flat land on the southern shore of Loch Etive.

Achnacloich House (Asset 95) is a mid-19th century building. The Listing description for the House indicates that its significance relates more to its architectural interest than to its historical or setting interest. The House appears on historic mapping to have been constructed within a designed woodland area bound by agricultural land to the east, south and west and the foreshore of Loch Etive to the north. This was a common design choice for large houses built in the Early Modern period in Scotland. As such the House was likely constructed within a landscaped setting. Thus, the GDL forms the key setting element of the House.

The GDL (centred Asset 103) itself developed initially around the House and is noted as later being designed as a woodland garden for extensive collection of plants. It is noted that views to the north towards the northern shore of Loch Etive (see **Plate 7.16**), to the west towards the hills of Mull and to the east towards the mountainous area dominated by Ben Cruachan can be obtained from the GDL. However, these views are extremely limited within wooded central area and are more readily appreciable from the edges of the GDL.

The setting of both the House and gardens relate to their relationship and development as well as to the vegetation and plants grown within. The wider setting of the assets is considered to be of lesser importance and thus the relative sensitivity of the assets to change is judged to be Medium.

The Proposed Development would be located, at its closest point (Turbine 7), c. 3.02km to the south. Whilst ZTV indicates that the Proposed Development would be largely visible from the majority of the GDL, in reality visibility of the Proposed Development would be limited to the edges of the GDL (**Plate 7.16**), and any views from within the central area of the GDL and House would be extremely limited due to the angle of the rising land to the south as well as mature vegetation. The Proposed Development would be a modern, visible addition to the landscape but would not impede in any way how the assets are understood,

appreciated or experienced and as such the impact magnitude is considered to be negligible. The resulting effect significance would be **Neutral** and not significant in EIA terms.

7.6.2.3 Lochnell House, Ardmucknish Bay (Asset 88) and Lochnell Observatory (St Margaret's Tower) Lochnell Policies (Asset 89)

Lochnell House, Ardmucknish Bay (Asset 88- Plate **7.17**) and Lochnell Observatory (St Margaret's Tower) Lochnell Policies (Asset 89) are two Category A Listed Buildings of the Lochnell Estate located on a promontory of land which forms the western side of Ardmucknish Bay.

Lochnell House survives as it was reconstructed following a fire in 1885, although it was originally constructed in the 16th century as a country house, replacing an earlier castle. The House was built for the Campbell's of Lochnell who had and have familial ties to the Dukes of Argyll[105][106]. The principal elevation of the House faces north-east, towards its landward approach and a manicured lawn. The south-western elevation of the House faces a landscaped and terraced garden and Ardmucknish Bay, whilst the other elevations are encircled by mature woodlands, depicted as surrounding the House on historic mapping. As such the House's immediate setting relates to the planned gardens, landscape around it and views over the bay.

Lochnell Observatory (Asset 89) occupies a ridge of high ground on the promontory of land to the south-west of the House and was built in the 19th century. The Listing description indicates that the interest of the Observatory relates to architectural and historic elements, although the Observatory is a common feature of post-medieval landscapes around large mansion houses in Scotland and thus its setting is of some importance as it relates to the development of the Estate and its landscaping.

The wider association of these Listed Buildings relates to their association with the Campbell's and Dukes of Argyll as well as to their coastal setting which would have enabled transport and communication as well as now more recreational pursuits. Views to the south-east include the coast and rising landform around Loch Etive and Oban. Potentially when constructed there may have been clear intervisibility with Dunstaffnage Castle (Asset 74), held by the Campbell family contemporaneously to the construction of Lochnell House, although this is now less well identified due to the woodland around Dunstaffnage Castle (Asset 74). As the setting makes a moderate contribution of the cultural significance of the Listed Buildings, the relative sensitivity of the assets is considered to be Medium.

The Proposed Development would be located to the south-east of the Site, in the high land beyond the western coast of Scotland to the south of Loch Etive (**Plate 7.18**; **Figure 7.30**). Whilst the Proposed Development may be visible as a new addition to the upland landscape in views to the south-east, it would not impede how the Listed Buildings are appreciated, understood or experienced within the Lochnell Estate, how they are historically associated with one another or how they are viewed from approach by land or sea. It could be argued that the Proposed Development may draw the eye upwards to the rising land onto the southern side of Loch Evie, beyond Dunstaffnage Castle (Asset 74) however the Castle's coastal dominance is much reduced from what it once was, and that association is best understood via modern and historic mapping and archival materials. The impact magnitude is considered to be Negligible being a marginal alteration to the widest setting of the Listed Buildings which would not change their cultural significance. The resulting effect significance is judged to be **Neutral** and not significant in EIA terms.

7.6.2.4 Lochandu Cottages (Bonawe) (Asset 91) and Shore House, Bonawe (Asset 92)

[105] Lochnell Estate. 2023. About- History. Available at: https://www.lochnell.co.uk/about

[106] Castles of Scotland. N.d. Lochnell House. Available at: https://www.thecastlesofscotland.co.uk/the-best-castles/other-articles/lochnell-house/

These Category A Listed Buildings are located within the extent of the post-medieval Bonawe Ironworks, sections of which are Scheduled (Asset 84). The setting of the Scheduled Monument is considered separately in **Appendix 7.2**. The Listed Buildings were constructed in the late 18th and early 19th century for the workers of the Ironworks and thus their historical interest and setting related original to their proximity to the Ironworks and relates in the modern landscape to their proximity to the remains of the industrial complex. Beyond this complex the relative sensitivity of the Listed Buildings is considered to be Negligible as that setting makes minimal contribution to the understanding, appreciation and experience of the Listed Buildings.

The Proposed Development would be located to the west of the Listed Buildings in rising land beyond the Bonawe Ironworks complex. As a modern addition to the wider landscape which may be visible the Proposed Development constitutes a marginal alteration which would not change the cultural significance of the Listed Buildings, considered to be a negligible impact magnitude. The resulting effect significance is judged to be **Neutral** and not significant in EIA terms.

7.6.2.5 Dunstaffnage Castle (Asset 74)

Dunstaffnage Castle (Asset 74) is a 13th century Castle built on a local summit of high ground, occupying a promontory of land which extends into the Forth of Lorn, Dunstaffnage Bay and Ardmuchnish Bay (see **Plate 7.19**). The Scheduled extent encompasses a number of other structures however the chapel to the west is separately Scheduled (Asset 18). The setting of Dunstaffnage Castle Chapel (Asset 18) is considered separately in **Appendix 7.2.** Tradition indicates that the stone of destiny, the location of the crowning of Scottish kings, may have been held at the location. The majority of the Castle dates from the 15th century. Whilst the Castle was built by the MacDougal family, it is also associated with the Dukes of Argyll and the Campbell family.

The Castle when originally constructed appears to have been built on a promontory for defensive purposes, being surrounded by water barring one land access and to project power and control. The Castle would have overlooked the Firth of Lorn northwards to Loch Linnhe, the western entrance to Loch Etive from Loch Lorn and the harbour within Dunstaffnage Bay. The coastal location can be better understood historically as the Castle was utilised as a base of operations by the Earl of Argyll during campaigns in the Western Isles. The functional defensive element of the Castle was utilised by the Earl of Argyll as well as the Crown during the Jacobite risings. The Castle's location on the promontory would have set it out from the west coast of Scotland and thus when originally constructed on approach from the sea, the Castle is likely to have been seen as a singular, defensive structure.

The land to the south of the Castle rises to the south-east and to the south-west is occupied by coastal terraces, parallel to the coast. This land was likely utilised for agriculture as it is today and may have been left undeveloped when the Castle was constructed to allow for good views from the Castle towards the land and to see any persons on approach. Historic mapping indicates that the Castle was located within woodland, which appears to have been developed around the Castle by at least the mid-19th century. The Castle by that time had been gutted by fire, and is likely to have had a more residential than defensive use by the Campbell family prior to this. It is likely that the woodland was developed around the Castle as an Early Modern landscape feature for a high-status domestic dwelling. This woodland survives into the modern day. The Marine Science Centre as well as other industrial and educational units have been constructed to the south of the Castle in the modern era (**Plate 7.19**). This development of the land to the south partially inhibits the ability to truly appreciate the promontory location of the Castle whilst on approach or within the Castle grounds or to understand and experience the open land around the Castle, which likely surrounded it in the medieval period. When viewed on approach from the sea the Castle is now partially obscured by post-medieval and modern woodland and is backdropped and seen in an arc of view along with modern research and recreational structures.

Documentary records indicate that the Castle and its owners are related to burial ground (Asset 104) c. 7.04 km south-east and inland of the Castle. Historic records indicate that the burial ground was associated

with the burial of infant children from Dunstaffnage Castle. Due to the intervening landscape there is not intervisibility between the two assets and it is likely that the burials were meant to be hidden away from the Castle and its population.

As the Castle's surrounding have changed since its construction, in relation to the Castle's function over time, and there are other elements such as historical associations, architectural importance and potential for archaeological remains from which the Castle derives cultural significance the relatively sensitivity to change is considered to be High.

The Proposed Development would be located, at its closest point (Turbine 1) c. 6.72 km, to the south-east. The Proposed Development would be located within the uplands, inland of the Castle. Whilst the ZTV and wireline (**Figure 7.27**) indicate that all six turbines would be visible from the Scheduled Monument and its surroundings, due to the woodland and buildings in the near vicinity of the Castle, direct intervisibility with the Proposed Development from within the Scheduled extent of the Castle is likely to be discontinuous at best. **Plate 7.20** illustrates how the Proposed Development is likely to be visible from the portions of the upper battlements above the tree dominated ridgeline to the south-east. **LVIA Viewpoint 13a** illustrates how from the shoreline at the entrance to the Castle, the views to Ben Cruachan would be uninterrupted. **LVIA Viewpoint 13f** indicates that four of the turbines would be visible to the south-east in rising land. The direction and location of the Proposed Development is unlikely to be considered as part of the appreciated experience of the Castle, where the eye is drawn to the coastal setting and the historic defensive and control purposes of that coastal location, still highlighted by the modern marina (Viewpoint 13f). On approach from the sea, cultural heritage visualisation (**Figure 7.28**) illustrates that the Proposed Development would be visible as a new addition to the wider upland landscape to the south-east of the Castle. **Figures 7.27-28** illustrate how the landform and high ridgeline along the northern side of Loch Etive would still be readily appreciable and shows how the Proposed Development has been designed to enable a view of the high ground, Deadh Chiomhead **(LVIA Viewpoint 13f)** and Ben Cruchan being identifiable. Whilst the Proposed Development would be visible, it would be an obviously new structure and the coastal prominence of the Castle has been much reduced by woodland and modern buildings. The Proposed Development, being constructed inland and away from the coast would not challenge the Castle for coastal dominance. The Proposed Development is judged to be an alteration to the baseline setting of the Castle which does not impede how the Castle is understood, appreciated or experienced in the modern landscape. The historical setting of the Castle is best preserved and understood and experienced via historic mapping and archival references due to the modern built environment. Thus, the impact magnitude is Low. The resulting effect significance would be **Minor** and not significant in EIA terms.

The integrity of the setting of the Castle would not be significantly adversely impacted.

7.6.2.6 Prehistoric ritual and funerary assets within Glen Lonan

Glen Lonan is a valley landscape, either side of the River Lonan located to the south of the Site and extends within 1km of the Site. The southern boundary of the Glen Lonan is relatively consistent, formed by a steep upward, north facing slope which terminates in a ridge line. The landscape of the Glen changes from west to east, from a narrow valley to a more open u-shaped valley (see **Section 7.5.3.2.1**) (**Plates 7.21 & 7.22**; and **Figures 7.7-10; 7.13-22**).

Within Glen Lonan and within the ZTV there are nine prehistoric ritual and funerary Scheduled Monuments, characterised as burial cairns and standing stones (Assets 4, 5, 30, 31, 36, 55, 86, 87 & 105). The setting of these assets will be assessed together as a group as defined by HES.

The spatial relationship of these assets as well as their location within the lower slopes of Glen Lonan and their proximity to the river are key elements of the individual and group setting of the funerary and ritual assets within Glen Lonan. The cairns (Assets 5, 31, 36, 55, 86, 105) were found to be located on relatively flat terraces on the lower slopes of the valley, above the River Lonan (see **Figure 7.9-10;7.13-14;7.17-20**). Cairns are often associated with waterways, with water being thought to have been considered a liminal

space between the living and the dead in the period. The standing stones, some of which are cup marked (Assets 4, 30 & 87) are located on relatively flat plateaus of land either side of the River Lonan, with Assets 4 and 87 occupying relatively higher topographic positions on the southern side of the valley. The stones would have been seen from within the valley landscape, and may have been markers of some sort, but would not have been visible beyond the valley. The prehistoric ritual and funerary monuments within Glen Lonan have been judged to be of High relative sensitivity to change, being assets where their setting makes a major contribution to their cultural significance.

The Proposed Development, whilst at its closest would be located within 1km of these assets, would be located in the upland landscape, beyond the northern extent of Glen Lonan (**Figures 7.7-8;7.15-16; 7.21-22**). The ZTV indicates that between one and four turbines would be visible from the Scheduled Monuments within Glen Lonan. A photowire (**Figure 7.8**) from Glenamachrie, standing stone 100m E of (Asset 30) illustrates that at present there would be no visibility of the Proposed Development due to the extant commercial forestry, however **Figure 7.8** also shows that in the case the forestry was not in existence, two turbines' blades would be visible, beyond the ridgeline from the standing stone. Another photowire (**Figure 7.16)** from Clachadow, cairn 320m N of (Asset 55) illustrates how only the blade tip of Turbine 3 may be visible from that asset, although due to the existing conifer plantations the Proposed Development is currently screened. An example photomontage from the eastern end of Glen Lonan, from Barguillean Farm, dun 250m SSW of (Asset 58) (**Figure 7.22**) does show how from that area that turbine hubs and blades may be visible, however the image also indicates how the Proposed Development would be visible beyond the Glen, with the northern ridgeline clearly visible. Whilst the Proposed Development may be visible along the Glen it would not impede how these assets are understood, appreciated and experienced in relation to their individual settings within the valley or in relation to the river, nor to how the assets relate to one another or are intervisible with one another within Glen Lonan. It might be argued that the Proposed Development may draw the eye, however the upland landscape, dominated by commercial conifer plantation, is dissimilar in appearance to the valley aesthetic and as such would be appreciated as a different environment beyond the valley setting of the assets within the glen. The impact magnitude is judged to be Low. The resulting effect significance is judged to be **Minor** and not significant in EIA terms.

The integrity of the setting of the Scheduled Monuments would not be significantly adversely impacted.

7.6.2.7 Iron Age defensive and settlement assets within Glen Lonan

Within Glen Lonan and within the ZTV there are four Iron Age defensive and settlement Scheduled Monuments (Assets 35, 57, 58 & 60). These defensive monuments, classified as duns, are located throughout Glen Lonan on the lower slopes of the river (see **Figure 7.9-10;7.13-14;7.17-20**) and on maps appear relatively regularly spaced, which may indicate, if the duns were contemporaneous, some form of control through the landscape. Whilst this cannot be said for certain, at the least these assets infer that the valley was managed and controlled to some degree in the period. As defensive assets of this period associated with control and management as well as domestic activities the duns are judged to have a High sensitivity to change.

The Proposed Development would be located to the north of the duns, in an upland landscape dominated by commercial forestry, beyond the northern extent of the valley, as shown in a photomontage from Barguillean Farm, dun 250m SSW of (Asset 58) (**Figure 7.22**). **Figures 7.17** and **7.19** also highlights how if indeed these assets were designed with intervisibility or cognisance of one another, the Proposed Development would not impede nor backdrop the views between the assets. As the Proposed Development would be located beyond the valley, which provides the context for the duns, the Proposed Development is not considered to impact how the duns are understood within the valley, nor how they relate to one another. The Proposed Development would not affect any historic intervisibility. The way in which the duns can be appreciated, understood and experienced within the valley would be largely unaltered, although it is acknowledged that the Proposed Development would be a modern addition to the wider landscape and

as such the impact magnitude is judged to be Low. The resulting effect significance would be **Minor** and not significant in EIA terms.

The integrity of the setting of the Scheduled Monuments would not be significantly adversely impacted.

7.6.2.8 Prehistoric cairns and standing stones around Strontoiler

The area around Strontoiler is located c. 2.22 km west of the Site, to the west of Glen Lonan and to the north of Loch Nell (**Plates 7.23 & 7.24**). Two Scheduled cairns (Asset 33 & 34), a Scheduled standing stone and associated cairn (Asset 85) and a Scheduled stone circle (Asset 32) of prehistoric date have been identified. The setting of these assets relates to each other and the low lying, fertile land at the northern end of Loch Nell. The ZTV produced for this assessment indicates that there would be no intervisibility of the Proposed Development with the majority of these assets. A wireline visualisation from Bar Beag cairn (Asset 33) (**Figure 7.11**) illustrates that the turbine blades of Turbine 2 may be visible to the east beyond the ridgeline, although the extant commercial forest would screen the blade during the lifetime of the forestry. Notwithstanding the very limited intervisibility with the Proposed Development, the Proposed Development would in no way impact how the setting of the cairn and its inter-relationships with adjacent assets and the landscape are understood, appreciated and experienced. No impact on the setting of the assets around Strontoiler is anticipated.

7.6.2.9 Prehistoric assets around Loch Nell

There are a number of prehistoric assets around Loch Nell, the River Nell,Glen Feuchan and Strontoiler. The majority of assets located within Glen Feuchan are located outwith the ZTV. There are three potential prehistoric assets around Loch Nell (**Plates 7.23- 7.25**) which may have some intervisibility with the Proposed Development.

Loch Nell, crannog 200m NE of Rubha Namoine (Asset 13) is located within the loch. The date of the crannog is unconfirmed but is documented in the 14th century, as such the crannog may be an example of a later crannog dwelling. Crannogs in Scotland tend to date from the Iron Age onwards and it is possible that the example in Loch Nell may have had multiple phases of use and may have originally been constructed in the prehistoric period. In any case the setting of the crannog relates to its position in the loch, which is defined to the west by steeply sloping land which terminates at a ridgeline, and to the north, east and south by rising land.

There are two chambered cairns and associated cairns (Assets 64 & 66) of Neolithic to potentially Iron Age date at the south-western end of Loch Nell. The cairns are located on an upper terrace to the south-west of the loch. The land to the north is occupied by Loch Nell, to the east by Glen Feuchan, to the south and west by gently upward sloping land. From the cairns, the eye is drawn along Loch Nell, due to the relatively lower topography and along Glen Feuchan to the east. There are other potentially contemporaneous prehistoric ritual and funerary cairns and other associated assets along Glen Feuchan. The setting of the cairns is considered to make a major contribution to the understanding, appreciation and experience of their significance and as such the relative sensitivity to change is judged to be High.

The Proposed Development would be located in the high upland ground to the north-east of the assets around Loch Nell and the ZTV indicates that all six of the turbines would be visible from these assets. A wireline created for this assessment (**Figure 7.5**) indicates that from the crannog (Asset 13), five turbines (two turbines at hub height and three sets of turbine blades) would be visible beyond the ridgeline which forms the northern end of landform of around Strontoiler. Another wireline (**Figure 7.26**) created from Asset 64 illustrates the Proposed Development in the high land at the northern end of Loch Nell and Strontoiler. The addition of the Proposed Development to the wider landscape and upland environment would not affect the ability to understand, appreciate or experience the assets or their relationship to one another, the loch and surrounding fertile ground and thus the key characteristics would be unaffected. The impact magnitude

is judged to be Low and the resulting effect significance to be **Minor** adverse and not significant in EIA terms.

The integrity of the setting of the cairns and crannog would not be significantly adversely impacted.

7.6.3 Decommissioning

The Proposed Development would be decommissioned at the end of the operational phase. At this time, the wind turbines and associated infrastructure will would be removed from the Site.

Any decommissioning works would be subject to prevailing legislation, guidance and permitting regimes at the time of decommissioning. The decommissioning would allow for the baseline land uses to be restored.

A well-designed decommissioning process would not cause any ground disturbance beyond the already disturbed footprint of the Proposed Development. It is not, therefore, anticipated that decommissioning works would cause direct impacts upon any buried archaeological remains, deposits or features beyond the existing footprint of the Proposed Development.

It is considered that there is a potential for temporary effects upon the settings of heritage assets during the decommissioning phase, but it is not anticipated that these would cause a level of effect higher than those reported in this Chapter for Construction and Operation of the Proposed Development. Any decommissioning effects would be temporary and likely of a shorter duration than the assessed Construction effects.

Upon the completion of the decommissioning, the long-term effects of the Operational Phase on the setting of assets would be removed, with the setting of those assets restored to the current baseline condition.

7.7 Mitigation

National and local planning policies and planning guidance outlined in **Section 7.2** of this report require a mitigation response that is designed to take cognisance of the possible impacts upon heritage assets by a Proposed Development and avoid, minimise, or offset any such impacts as appropriate. The planning policies and guidance express a general presumption in favour of preserving heritage remains in situ wherever possible. Their 'preservation by record' (i.e. through excavation and recording, followed by analysis and publication by qualified archaeologists) is a less desirable alternative, NPF4 notes that the policy intent is for the protection and enhancement of historic environment assets[107]. Policies related to designated assets (Policies 7a to 7j and 7l) prefer avoidance of impact and where this is not possible require that any impacts are minimised. Policy 7o, relating to non-designated assets, states that these assets and their settings *'should be protected and preserved in situ wherever feasible* [. . .] *Where impacts cannot be avoided they should be minimised. Where it has been demonstrated that avoidance or retention is not possible, excavation, recording, analysis, archiving, publication and activities to provide public benefit may be required through the use of conditions or legal/planning obligations'*[108].

7.7.1 Development Design

Eight non-designated heritage assets (Assets 139-146) have been identified on the Site. Due to the nature of these assets, they have been judged to be of negligible importance being historically recorded or common features of an upland landscape. Four of these heritage assets have been avoided by the design. Three linear assets (Assets 139, 145 & 146) and a mound (Asset 140), likely the remains of a clearance cairn, would be impacted by the Proposed Development.

[107] Scottish Government (2023). National Planning Framework 4. Available at: https://www.gov.scot/publications/national-planning-framework-4/
[108] ibid

There is the potential for archaeological and paleoenvironmental remains to survive within the peat identified on the Site. Areas of deep peat, the likely locations where archaeological and paleoenvironmental remains would survive undisturbed, have largely been avoided by design.

The location of turbines have been designed to avoid any known key views of designated heritage assets within the 10km Study Area insofar as possible.

7.7.2 Protection of Archaeological Sites

The Proposed Development is anticipated to directly impact small areas of three linear assets (Assets 139, 141 & 146). The linear assets are recorded on historic mapping. A toolbox talk will be given to the construction team prior to construction to ensure that any unexpected archaeological remains associated with the linear assets encountered are reported and recorded correctly.

With regard to Rhodedendron removal within HMU E as illustrated in **Figure 10.5.5** and outlined in **Appendix 10.5**, Dun Chathach, dun 630m E of Auchnacloich Railway Station (SM3783-Asset 54) would be fenced off with a 20m buffer around the Scheduled area with no root removal being undertaken within this area to avoid any direct impacts upon the Scheduled Monument. The fencing would be maintained throughout the duration of the works to ensure no accidental incursion into this area. A toolbox talk will also be given to the works team prior to the removal commencing to ensure they are appraised of the location of the Scheduled Monument and acknowledge that no groundbreaking works or works which could cause damage to any upstanding fabric of the Scheduled Monument are to be undertaken without SMC.

7.7.3 Archaeological Works

The Proposed Development is also anticipated to impact a mound (Asset 140) which may be the remains of the clearance cairn. A watching brief may be required during the construction of the northern most section of the proposed access track.

Archaeological investigations of existing peat cores, or a programme of archaeological peat coring across the Site, may enable a better understanding of the paleoenvironmental potential of the Site.

The exact details of any programme of mitigation will be agreed upon with the WoSAS as archaeological advisors to ABC through a Written Scheme of Investigation (WSI). This can be secured via an appropriately worded planning condition.

Any archaeological fieldwork commissioned in order to mitigate direct effects will result in the production and dissemination of a professional archive, which will add to our understanding of the cultural heritage of the Site.

7.7.4 Enhancement

NPF4 Policy 7o states that where impacts to heritage assets cannot be avoided it is stated that "*excavation, recording, analysis, archiving, publication and activities to provide public benefit may be required through the use of conditions or legal/planning obligations.*" [109]

HEPS policies 1-5[110] also indicate how the historic environment can make a positive economic, social and/or environmental impact, through information dissemination, the promotion of information, the exchange of ideas, programmes of enhancement and enabling communities to engage with the heritage environment.

[109] Scottish Government (2023). National Planning Framework 4. Available at: https://www.gov.scot/publications/national-planning-framework-4/

[110] Historic Environment Scotland (HES) (2019). Historic Environment Policy for Scotland. Available at: https://www.historicenvironment.scot/advice-and-support/planning-and-guidance/historic-environment-policy-for-scotland-heps

HES's Our Past, Our Future[111] states that '*the historic environment creates real benefits for people'*, and two of the three priorities of the publication relate to public engagement and public benefit.

CIfA[112][113] and ALGAO[114] have also recently noted the need for public or community engagement in archaeology.

A programme of enhancement on the Site may result from archaeological and paleoenvironmental discoveries made during construction, with the results disseminated through a variety of media to different audiences.

There is existing public access within Fearnoch Forest, through which the proposed access track extends. There will be public access into the Site following completion of construction. A programme of enhancement including the dissemination of information about the history of the local area and including, where possible, any results from any archaeological works during the construction of the Proposed Development could be added to areas of public access in addition to existing forestry notices and information boards or provided as online accessible interactive information. Any such dissemination material may also make note of designated heritage assets in the wider landscape, identifying known assets or areas of archaeological remains, as identified by HES (**Table 7.1**) through interpretation boards, other signage or digital models.

7.8 Residual Effects

7.8.1 Construction

The residual effect is what remains following the application of mitigation and management measures. The level of residual effect is defined using criteria outlined in **Tables 7.2** to **7.5**.

The implementation of the mitigation measures outlined above will prevent damage, including inadvertent damage, to known heritage assets, both within the Site and in the proposed Habitat Management areas, allow for the recording of any paleoenvironmental and/or archaeological deposits associated with known remains, and investigate the potential for previously unknown assets, as well as plan for the potential for hitherto unknown remains to be identified by the construction team. Potential effects on unknown and previously unrecorded buried remains cannot be predicted at this stage, although any such impacts are addressed by the committed mitigation measures. It is judged to be unlikely that they will exceed the EIA significance threshold. Therefore, the residual construction effects would be the same as the potential (pre-mitigation) effects.

7.8.2 Operation

The predicted residual effects on the settings of designated heritage assets will be the same as assessed for the operational effects. However, no significant operational effects are anticipated.

No direct mitigation is possible for setting effects (beyond embedded mitigation by design) and therefore, residual operational phase effects on the setting of heritage assets would be the same as potential (pre-mitigation) effects.

---

[111] HES. (2023). Our Past, Our Future. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=79204155-9eb2-4d29-ab14-aff200ec2801

[112] CIfA . (2021). Public Benefit Information Sheet. Available at: https://www.archaeologists.net/sites/default/files/Public%20benefit%20leaflet.pdf

[113] CIfA (2021). Professional Practice Paper :Delivery Public Benefit. Available at: https://www.archaeologists.net/sites/default/files/Delivering_public_benefit.pdf

[114] Mann, B. (2023). Delivery of Public Benefit and Social Value Guidance for Archaeology in the Planning Process. Available at: https://www.algao.org.uk/sites/default/files/documents/ALGAO_Delivery_of_Public_Benefit_and_SocialValueGuidance.pdf

7.9 Cumulative Assessment

7.9.1 Construction

Archaeological remains are, by their very nature, an irreplaceable resource and are subject to threats both within and outwith the planning system. The range of non-development threats is broad and includes deterioration of upstanding structural remains and damage to remains buried beneath peat due to peat erosion. Any archaeological remains which may be present on the Site need to be understood within this context of gradual loss which can occur in peatland areas on a regional and national scale. Archaeological investigations allow any loss to be controlled through programmes of recording, sampling and analysis. The consequence of this is that where direct impacts occur through either development or academic research, then our understanding of these assets is enhanced, and the results of these investigations inform our knowledge of Argyll and Bute's past. Indeed, our understanding of Argyll and Bute's archaeological heritage is itself the cumulative product of the results of numerous investigations undertaken over many generations. Any direct impacts which may result from the Proposed Development would be addressed through the programme of mitigation that has been set out in **Section 7.7** which will include comprehensive investigations should this be required, the results of which will contribute to our overall understanding of Argyll and Bute's past and therefore create a beneficial cumulative legacy. The significance of the cumulative effect on archaeology during construction, combined with other developments or causes of loss, will thus be **Negligible** and **not significant**. As such this assessment will focus on the likely significant cumulative effects upon the setting of heritage assets which have the potential to occur during the operational phase.

7.9.2 Operation

This assessment considers the potential for cumulative effects arising from the addition of the Proposed Development to other cumulative developments upon the setting of heritage assets which have the potential to occur during the operational phase. The cumulative effect assessment takes regard of the guidance on cumulative effects upon heritage assets as set out in Environmental Impact Assessment Handbook V5[115] and NatureScot guidance on cumulative impact[116] and utilises the criteria for assessing setting effects as set out above.

With regard to the likely significant cumulative effects on cultural heritage assets, the assessment considers operational, consented and within-planning wind farm developments at distances up to 35km from the Proposed Development. The location of operational, consented and in planning cumulative developments are shown on **Figure 6.8** and only operational, consented and in planning cumulative developments within 35km are shown on visualisations produced for this assessment. The reason for this includes the iterative nature of In Scoping wind farms and is further explained in **EIA Report Chapter 6: Landscape and Visual Impact Assessment**. The 10 cumulative sites which include the:

- Operational wind farms at:
    - Barran Catlum ;
    - Carraig Gheal;
    - An Suidhe
    - Beinn Ghlas
    - A'Cruach; and
    - Clachan Flats.

[115] SNH & HES (2018). Environmental Impact Assessment Handbook v5. Available at: https://www.nature.scot/sites/default/files/2018-05/Publication%202018%20-%20Environmental%20Impact%20Assessment%20Handbook%20V5.pdf

[116] NatureScot (2021). Guidance - Assessing the cumulative landscape and visual impact of onshore wind energy developments. Available at: https://www.nature.scot/doc/guidance-assessing-cumulative-landscape-and-visual-impact-onshore-wind-energy-developments.

- Consented wind farms at:
  - Blarghour Variation; and
  - Creag Dhubh.
- In Planning wind farms at:
  - Ladyfield; and
  - An Carr Dubh.

In Scoping cumulative developments have not been included within visualisations as there is a lack of information about the location, scale and design of these potential developments. As cumulative developments that are not in the "reasonably foreseeable" future, especially in their current form, they have not been assessed as part of the cumulative assessment.

As indicated in the methodology section, only heritage assets where impacts on their setting have been predicted for the Proposed Development alone are considered in the detailed assessment. As undertaken for the assessment above and in **Appendix 7.2**, certain assets have been grouped together as outlined by HES (see **Table 7.1**). Plates referred to in the following paragraphs can be found in **Appendix 7.3**.

7.9.2.1 Dunstaffnage Castle (Asset 74)

The relative sensitivity of the Dunstaffnage Castle (Asset 74) is judged to be High. The impact magnitude of the Proposed Development was considered to be Low and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The setting of the Castle relates to its strategic defensive location on the edge of the coastal realm and the active medieval landscape. Two cumulative developments (Beinn Ghlas and Carraig Gheal) identified for this assessment are theoretically visible in the same arc of view as the Proposed Development (**Figures 7.27-28**), however in reality due to the dominance of commercial forestry, the distance to the cumulative developments and the fact that only extreme blade tips would be visible, they are unlikely to be appreciable and as such would not increase the number of turbines visible from the Castle. Given that in practice the operational turbines at Beinn Ghlas and Carriag Gheal are not visible from Dunstaffanage Castle, there would be no cumulative effect; any effect on setting would arise from the Proposed Development alone and be as set out above in **Section 7.6.2**.

7.9.2.2 Prehistoric ritual and funerary assets within Glen Lonan

The relative sensitivity of the prehistoric ritual and funerary assets (Assets 4, 5, 30, 31, 36, 55, 86, 87 & 105) within Glen Lonan is judged to be High. The impact magnitude of the Proposed Development was considered to be Low and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The setting of these assets relates to their location with Glen Lonan and their inter-relationship with each other. The cumulative developments in planning, consented and/or operational identified for this assessment are not located with Glen Lonan and would therefore only be visible beyond the setting which enables an appreciation, understanding and experience of the ritual and funerary assets within the Glen setting. The visualisations (**Figures 7.7-10; 7.13-7.22**) prepared for this assessment do not indicate any visibility of the cumulative developments and thus **no cumulative impact** is anticipated.

7.9.2.3 Iron Age defensive and settlement assets within Glen Lonan

The relative sensitivity of the prehistoric ritual and funerary assets (Assets 35, 57, 58 & 60) within Glen Lonan is judged to be High. The impact magnitude of the Proposed Development was considered to be Low and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The setting of these defensive and settlement assets relate to their location with Glen Lonan and their inter-relationship with each other. The cumulative developments in planning, consented and/or operational

identified for this assessment are not located within Glen Lonan and would therefore only be visible beyond the setting which enables an appreciation, understanding and experience of the ritual and funerary assets within the Glen setting. The visualisations (**Figures 7.7-10; 7.13-7.22**) prepared for this assessment do not indicate any visibility of the cumulative developments and thus **no cumulative impact** is anticipated.

7.9.2.4 Prehistoric assets around Loch Nell

The relative sensitivity of the prehistoric assets (Assets 13, 64 & 66) around Loch Nell is judged to be High. The impact magnitude of the Proposed Development was considered to be Low and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The setting of these assets relate to Loch Nell and its valley, and their inter-relationship with each other. The cumulative developments in planning, consented and/or operational identified for this assessment are not located within this landscape and would therefore only be visible beyond the setting which enables an appreciation, understanding and experience of the ritual and funerary assets within the Glen setting. The visualisations (**Figures 7.5 & 7.26**) prepared for this assessment do not indicate any visibility of the cumulative developments and thus **no cumulative impact** is anticipated.

7.9.2.5 Moss of Achnacree

The relative sensitivity of the prehistoric ritual and funerary assets (Assets 25-29, 44-46, 49-52, 60 &, 62) within the Moss of Achnacree is judged to be High. The impact magnitude of the Proposed Development was considered to be Low and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

Beinn Ghlas is theoretically visible from the north (**Figure 7.24**) and south (**Figure 7.12**) of the Moss behind the Proposed Development. Whilst the cumulative development may be theoretically visible, due to the distance and Fearnoch Forest it is unlikely to be perceptible and as the cumulative development would be located beyond the setting of the Moss **no cumulative effects** are anticipated.

7.9.2.6 Dun Neil, dun 100m NE of Dun-neil (Asset 6)

The relative sensitivity of Dun Neil, dun (Asset 6) is judged to be High. The impact magnitude of the Proposed Development was considered to be Negligible and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The setting of the dun relates to the valley setting around Strontrollier and Loch Nell and the prehistoric activity evidenced therein. The cumulative developments identified for this assessment are not located within this landscape and thus would only be visible beyond the setting which enables an understanding, appreciation and experience of the dun and its setting. It is not considered that the theoretical cumulative scenario would result in a greater effect than that already assessed for the Proposed Development on its own.

7.9.2.7 Cologin, fort 650m NE of (Asset 11)

The relative sensitivity of Cologin, fort 650m NE of (Asset 11) is judged to be High. The impact magnitude of the Proposed Development was considered to be Negligible and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The setting of the fort relates to its immediate burn valley. The cumulative developments identified for this assessment are not located within this landscape and thus would only be visible beyond the setting which enables an understanding, appreciation and experience of the fort and its setting.

It is not considered that the theoretical cumulative scenario would result in a greater effect than that already assessed for the Proposed Development on its own.

7.9.2.8 Ariogan, cairn 400m NNE of (Asset 12) and Ariogan, cairn 950m W of (Asset 14)

The relative sensitivity of Ariogan, cairn 400m NNE of (Asset 12) and Ariogan, cairn 950m W of (Asset 14)) are judged to be High. The impact magnitude of the Proposed Development was considered to be Negligible and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The setting of the cairns relates to their topographical prominence and relationship to one another. The cumulative developments identified for this assessment are not anticipated to change how the setting of the cairns is understood, appreciated and experienced.

It is not considered that the theoretical cumulative scenario would result in a greater effect than that already assessed for the Proposed Development on its own.

7.9.2.9 Gallanach Beg, dun 30m N of (Asset 16)

The relative sensitivity of Gallanach Beg, dun 30m N of (Asset 16) is judged to be High. The impact magnitude of the Proposed Development was considered to be Low and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The setting of the dun relates to its topographic position and views towards the coast. The cumulative developments identified for this assessment are not located within this landscape and thus would only be visible beyond the setting which enables an understanding, appreciation and experience of the dun and its setting.

It is not considered that the theoretical cumulative scenario would result in a greater effect than that already assessed for the Proposed Development on its own.

7.9.2.10 Taynuilt, standing stone 800m E of (Asset 19)

The relative sensitivity of Taynuilt, standing stone 800m E of (Asset 19) is judged to be High. The impact magnitude of the Proposed Development was considered to be Negligible and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The setting of the standing stone relates to its relative topographical position on a raised plateau of ground and historically likely to its visibility to the coast. In the case that cumulative developments (Carraig Gheal; Ladyfield; and Blarghour) would be visible from the standing stone, they would be very distantly visible, beyond rising land to the south, and beyond the setting which contributes to the stone's cultural significance.

It is not considered that the theoretical cumulative scenario would result in a greater effect than that already assessed for the Proposed Development on its own.

7.9.2.11 Dun Leigh, dun 200m ENE of Balure (Asset 20)

The relative sensitivity of Dun Leigh, dun 200m ENE of Balure (Asset 20) is judged to be High. The impact magnitude of the Proposed Development was considered to be Negligible and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The dun's setting relates to Loch Etive. The cumulative developments identified for this assessment are not located around Loch Etive and thus would be visible beyond the setting which enables an understanding, appreciation and experience of the dun and its setting.

It is not considered that the theoretical cumulative scenario would result in a greater effect than that already assessed for the Proposed Development on its own.

7.9.2.12 Dun Mhuirageul, dun SE of Taynuilt (Asset 21)

The relative sensitivity of Dun Mhuirageul, dun SE of Taynuilt (Asset 21) is judged to be High. The impact magnitude of the Proposed Development was considered to be Negligible and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The dun's setting relates to the narrow burn valley in which it was constructed. The cumulative developments identified for this assessment are not located within this valley setting, and thus if visible, any cumulative development would be beyond the setting which enables an understanding, appreciation and experience of the dun and its setting.

It is not considered that the theoretical cumulative scenario would result in a greater effect than that already assessed for the Proposed Development on its own.

7.9.2.13 Dun Creagach, fort SW of Connel (Asset 23)

The relative sensitivity of Dun Creagach, fort SW of Connel (Asset 23) is judged to be High. The impact magnitude of the Proposed Development was considered to be Negligible and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The fort's setting relates to its topographic prominence and Loch Etive. The cumulative developments identified for this assessment are not located around Loch Etive and thus would only be visible beyond the setting which enables an understanding, appreciation and experience of the dun and its setting.

It is not considered that the theoretical cumulative scenario would result in a greater effect than that already assessed for the Proposed Development on its own.

7.9.2.14 Dun Creagach, dun 145m NW of Auchnacloich (Asset 24)

The relative sensitivity of Dun Creagach, dun 145m NW of Auchnacloich (Asset 24) is judged to be High. The impact magnitude of the Proposed Development was considered to be Negligible and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The dun's setting relates to its location on Loch Etive. The cumulative developments identified for this assessment are not located around Loch Etive and thus would only be visible beyond the setting which enables an understanding, appreciation and experience of the dun and its setting.

It is not considered that the theoretical cumulative scenario would result in a greater effect than that already assessed for the Proposed Development on its own.

7.9.2.15 Eilean Mor, fort, Dunstaffnage (Asset 37)

The relative sensitivity of Eilean Mor, fort, Dunstaffnage (Asset 37) is judged to be High. The impact magnitude of the Proposed Development was considered to be Negligible and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The dun's setting relates to its location at the mouth of Loch Etive. The cumulative developments identified for this assessment are not located around Loch Etive or within the Firth of Lorn and thus would only be visible beyond the setting which enables an understanding, appreciation and experience of the dun and its setting.

It is not considered that the theoretical cumulative scenario would result in a greater effect than that already assessed for the Proposed Development on its own.

7.9.2.16 Dunach, dun 600m ENE of (Asset 39)

The relative sensitivity of Dunach, dun 600m ENE of (Asset 39) is judged to be High. The impact magnitude of the Proposed Development was considered to be Negligible and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The dun's setting relates to Loch Feochan, which is partially obscured by woodland at present. The cumulative developments identified for this assessment are not located around Loch Feochan and thus would only be visible beyond the setting which enables an understanding, appreciation and experience of the dun and its setting.

It is not considered that the theoretical cumulative scenario would result in a greater effect than that already assessed for the Proposed Development on its own.

7.9.2.17 Dun Chathach, dun 630m E of Auchnacloich Railway Station (Asset 54)

The relative sensitivity of Dun Chathach, dun 630m E of Auchnacloich Railway Station (Asset 54) is judged to be High. The impact magnitude of the Proposed Development was considered to be Negligible and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The dun's setting relates to Loch Etive and its topographic location. The cumulative developments identified for this assessment are not located around Loch Etive and thus would be visible beyond the setting which enables an understanding, appreciation and experience of the dun and its setting.

It is not considered that the theoretical cumulative scenario would result in a greater effect than that already assessed for the Proposed Development on its own.

7.9.2.18 Cladh na h'Annaid, burial ground 280m SE of Corachie Farm (Asset 61)

The relative sensitivity of Cladh na h'Annaid, burial ground 280m SE of Corachie Farm (Asset 61) is judged to be Medium. The impact magnitude of the Proposed Development was considered to be Low and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The burial ground's setting relates to its topographic location and the downward sloping land to the north-west. The cumulative developments identified for this assessment are not anticipated to be visible from the burial ground. As no intervisibility is anticipated **no cumulative impact** is expected.

7.9.2.19 Dun Mor, motte 380m WNW of Balure Cottage (Asset 63)

The relative sensitivity of Dun Mor, motte 380m WNW of Balure Cottage (Asset 63) is judged to be High. The impact magnitude of the Proposed Development was considered to be Negligible and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The motte's setting relates to its strategic and topographic location on the edge of Loch Etive. The cumulative developments identified for this assessment are not located around Loch Etive and thus would be visible beyond the setting which enables an understanding, appreciation and experience of the motte and its setting.

It is not considered that the theoretical cumulative scenario would result in a greater effect than that already assessed for the Proposed Development on its own.

7.9.2.20 Ledaig House, cairn 20m SE of (Asset 67)

The relative sensitivity of Ledaig House, cairn 20m SE of (Asset 67) is judged to be High. The impact magnitude of the Proposed Development was considered to be Negligible and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The cairn's setting historically relates to its location on a coastal terrace. The cumulative developments identified for this assessment are not anticipated to be intervisible with the cairn due to their locations. As such there is judged to be **no cumulative effect**.

7.9.2.21 Dun Mac Sniachan, forts and dun, Benderloch (Asset 72)

The relative sensitivity of Dun Mac Sniachan, forts and dun, Benderloch (Asset 72) is judged to be High. The impact magnitude of the Proposed Development was considered to be Negligible and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The forts' and dun's settings relate to their strategic and topographic location on the western coast. The cumulative developments identified for this assessment are unlikely to the be visible due to the presence of Beinn Lora, and if indeed they were visible they would be beyond the setting which enables an understanding, appreciation and experience of the forts and dun and their setting.

It is not considered that the theoretical cumulative scenario would result in a greater effect than that already assessed for the Proposed Development on its own.

7.9.2.22 Tom an Iasgaire, fort (Asset 76)

The relative sensitivity of Tom an Iasgaire, fort (Asset 76) is judged to be High. The impact magnitude of the Proposed Development was considered to be Negligible and therefore the resulting level of effect is **Minor** and not significant in EIA terms.

The fort's setting relates to its topographic location on the River Awe and along its valley. The cumulative developments identified for this assessment may be visible for example Ladyfield and Blarghour, and if indeed they were visible they would be located beyond the elements of setting which enable an understanding, appreciation and experience of the fort and its setting.

It is not considered that the theoretical cumulative scenario would result in a greater effect than that already assessed for the Proposed Development on its own.

This assessment has judged the Proposed Development to have a **Neutral** effect significance on 27 designated heritage assets and **No Impact** on the settings of one designated heritage asset within 10km of the Site. These are detailed in Technical **Appendix 7.2**. Whilst cumulative developments may be visible, the addition of the Proposed Development and cumulative developments would not increase the impact magnitude and thus no cumulative effects are anticipated for these assets.

7.10 Summary

This chapter considers the archaeological and cultural heritage value of the Site and assesses the likely significant effects on archaeological features and heritage assets resulting from the construction, operation, and decommissioning of the Proposed Development.

The assessment has identified eight non-designated heritage assets (Assets 139-146) within the Site (**Figure 7.1**). These non-designated heritage assets can be characterised as Early Modern and Modern agricultural, land management, and recreational assets considered to be of negligible importance. Direct impacts are anticipated on five of the non-designated heritage assets. The effect significance is judged between **Negligible** to **Minor**. The effect significance is not considered to be significant in EIA terms.

This assessment has judged there to be a High potential for paleoenvironmental remains to survive in deep peat deposits on the Site. The design of the Proposed Development has taken into account the locations of deep peat and has avoided this by design, where possible. However, the depth of survival of paleoenvironmental remains is not known and may vary considerably across the Site. As such, peat deposits could be impacted by the Proposed Development, and there is, therefore, the potential for impacts on paleoenvironmental remains. The impact magnitude is judged to be Low. Therefore, the effect significance would be **Negligible**. This level of effect is not considered to be significant in EIA terms.

Mitigation in the form of toolbox talks, and invasive archaeological works including; a watching brief; and an archaeological coring programme are recommended to inform the construction team of the presence of known assets, and to identify the potential for archaeological remains, as well as to investigate the potential for archaeological and paleoenvironmental remains to survive around known assets and deposits.

A review of designated and non-designated heritage assets as recorded by HES, the NHRE, and the WoSAS HER, as well as historic mapping, aerial photography, and a walkover survey has concluded that there is the potential for paleoenvironmental remains. However, there is judged to be a Low potential for hitherto unknown archaeological remains to survive on the Site. Mitigation has been proposed to investigate, identify, and record buried archaeological remains which may survive and could be impacted by the construction of the Proposed Development.

All designated heritage within 10km of the Proposed Development have been identified as part of this assessment, in order to assess the potential for the Proposed Development to impact their settings. An assessment of the potential effects on the settings of designated heritage assets was informed by consultation with HES, a ZTV, site visits, and visualisations. Groups of assets as defined by HES and an additional 49 designated heritage assets were identified for a detailed assessment of their settings. An assessment of the impact of the Proposed Development on their settings has been undertaken.

The assessment identified **Minor** and **Neutral** effect significance and **No Impact** on the settings of the grouped and individual designated heritage assets within the 10km Study Area.

Cumulative developments have been identified and the impact of these cumulative developments on the settings of designated heritage, where Minor or above impacts were identified, has been undertaken as part of this assessment. For grouped and individual designated heritage assets where the Proposed Development was considered to have a Minor impact on their settings, the cumulative development was at worst judged to result in no greater effect than the Proposed Development on its own.