



Vale of Leven Wind Farm Limited

Vale of Leven Wind Farm

Environmental Impact Assessment Report (Volume 1)

Chapter 10 - Cultural Heritage and Archaeology

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10 CULTURAL HERITAGE AND ARCHAEOLOGY

10.1 Introduction

- 10.1.1 This chapter of the Environmental Impact Assessment (EIA) Report evaluates the effects of the Proposed Development on the Historic Environment (Cultural Heritage and Archaeology). The assessment was undertaken by Headland Archaeology (UK) Ltd who are part of the RSK Group.
- 10.1.2 A heritage asset is any element of the historic environment which has cultural significance. Both discrete features, and extensive landscapes defined by a specific historic event, process or theme, can be defined as heritage assets; assets may overlap or be nested within one another. Designated assets include Scheduled Monuments, Listed Buildings, World Heritage Sites, Conservation Areas, Inventory Gardens and Designed Landscapes, Inventory Historic Battlefields and Historic Marine Protected Areas. Other assets may also be locally designated through policies in the Local Development Plan.
- 10.1.3 The majority of heritage assets are not designated. Some non-designated assets are recorded in Historic Environment Records (HERs) maintained by local authorities and other agencies. However, many heritage assets are currently unrecorded, and the information contained in HERs is not definitive. Therefore, the identification of undesignated heritage assets is, to some extent, a matter of professional judgement.
- 10.1.4 Some heritage assets may coincide with visual receptors, or landscape character areas, which are assessed in **Chapter 6: Landscape and Visual Impact Assessment**. In such cases, it is important to recognise the difference in approach between these two topics. Cultural heritage assessment addresses effects on the cultural heritage significance of heritage assets, which may result from, but are not equivalent to, visual impacts. Similarly, an effect on a landscape character area does not equate to an effect on the cultural heritage significance of heritage assets within it.
- 10.1.5 Four heritage assets considered in this chapter are also visitor attractions: GDL00042/ LB123 Balloch Castle, SM90107 Dumbarton Castle, GDL00180/ LB13641 Finlaystone House, GDL00306/ LB24907 Overtoun House. Tourism impacts are assessed in **Chapter 13: Socio-economics**.
- 10.1.6 The objectives of this chapter are to:
- Describe the cultural heritage baseline;
 - Describe the assessment methodology and significance criteria used in completing the impact assessment;
 - Describe the potential effects, including physical effects, effects on setting and cumulative effects;
 - Describe the mitigation measures proposed to address likely significant effects; and

10.2 Assess the residual effects remaining following the implementation of mitigation. Scope and Methodology

Scope of Assessment

- 10.2.1 Assessment of potential (direct and indirect) physical effects and effects upon the setting of heritage assets is presented separately for the construction and operational stages of the Proposed Development, and potential cumulative effects are also presented separately.
- 10.2.2 The cultural heritage assessment has been carried out in the following stages:
- Definition of baseline conditions, comprising desk-based study and visits to heritage assets, leading to the identification of the cultural significance and importance of heritage assets potentially affected by the Proposed Development;
 - Assessment of the magnitude of impacts (direct and indirect physical and cumulative) during construction and operation of the Proposed Development on cultural significance of heritage assets, informed by baseline information, site visits, Zone of Theoretical Visibility (ZTV) mapping, wireframes and photomontages;
 - Assessment of the significance of effects, broadly a product of the asset's importance and the magnitude of the impact;
 - Proposal of mitigation measures to eliminate, reduce or offset adverse effects; and
 - Presentation of residual effects and any monitoring proposals.

Definition of Baseline Conditions

Desk-based Assessment and Site Visits

Study Areas

- 10.2.3 The Inner Study Area (ISA) corresponds with the land within the Site boundary, comprising the turbine area and proposed access route. . Within this area, all heritage assets are assessed for construction and operational effects. The 'turbine area' corresponds to the areas within which the proposed turbines would be located (as shown on Volume 2a **Figure 10.1**) and the 'proposed access route' relates to the route which would lead from the A813, north-east into the 'turbine area'. Both of these areas combined comprise the ISA.
- 10.2.4 All known heritage assets (as recorded by the WoSAS and Stirling Council Historic Environment Records, the National Record of the Historic Environment and Historic Environment Scotland) have been included in the assessment according to overlapping Outer Study Areas (OSA) based on their level of importance (see **Table 10.1**) to ensure that likely significant effects are recognised. The OSAs reflect that the more important the asset, the more likely significant effects could be generated over further distances, as follows:
- Beyond 20 km from proposed turbines, based on the ZTV: any asset which is considered exceptionally important, and where long-distance views from or towards the asset are thought to be particularly sensitive, in the opinion of the assessor or consultees.

- Up to 20 km from the proposed turbines: Category A Listed Buildings, World Heritage Sites and Inventory Gardens and Designed Landscapes.
- Up to 10 km from the proposed turbines: World Heritage Sites, Scheduled Monuments, Category A Listed Buildings, Inventory Historic Battlefields, Inventory Gardens and Designed Landscapes and non-designated heritage assets of national importance (with reference to West of Scotland Archaeology Service (WoSAS's) non statutory register (NSR)).
- Up to 5 km from the proposed turbines: World Heritage Sites, Scheduled Monuments, Category A and B Listed Buildings, Inventory Historic Battlefields, Inventory Gardens and Designed Landscapes, Conservation Areas and non-designated heritage assets of national importance (with reference to West of Scotland Archaeology Service (WoSAS's) non statutory register (NSR)).
- Up to 2 km from the proposed turbines: World Heritage Sites, Scheduled Monuments, all Listed Buildings, Inventory Historic Battlefields, Inventory Gardens and Designed Landscapes, Conservation Areas and all non-designated heritage assets.

10.2.5 In addition, beyond the OSA as defined above, any other designated asset which is within the ZTV and considered exceptionally important and/or sensitive to visual change within its setting, and/or where long-distance views from or towards the asset are thought to contribute to cultural significance in the opinion of the assessor or consultees are included in the assessment. This is a screening exercise, based on the approach set out in Managing Change in the Historic Environment: Setting (Historic Environment Scotland, 2016 updated 2020) and supplemented through scoping and further consultation with statutory consultees. Only those monuments identified beyond the OSA requiring detailed assessment are added to the gazetteer (Volume 3, **Appendix 10.2**). In the case of the Proposed Development, no assets were identified through this process.

10.2.6 Criteria for the identification of assets that may be affected by the Proposed Development was based on the approach set out in Managing Change in the Historic Environment (MCHE): Setting (Historic Environment Scotland, 2016, updated 2020) that sets out a range of factors which might form part of the setting of a heritage asset as follows:

- *“Current landscape or townscape context;*
- *Views to, from and across or beyond the historic asset or place;*
- *Key vistas: for instance, a ‘frame’ of trees, buildings or natural features that give the historic asset or place a context, whether intentional or not;*
- *The prominence of the historic asset or place in views throughout the surrounding area, bearing in mind that sites need not be visually prominent to have a setting;*
- *Aesthetic qualities;*
- *Character of the surrounding landscape;*
- *General and specific views including foregrounds and backdrops;*
- *Views from within an asset outwards over key elements in the surrounding landscape, such as the view from the principal room of a house, or from a roof terrace;*
- *Relationships with other features, both built and natural;*
- *Non-visual factors such as historical, artistic, literary, place name, or scenic associations, intellectual relationships (e.g. to a theory, plan, or design), or sensory factors; and*
- *A ‘sense of place’: the overall experience of an asset which may combine some of the above factors.”*

10.2.7 The heritage assets in the OSAs as outlined above were considered as part of a Stage 1 Setting Assessment (Volume 3, **Appendix 10.1**, with full details for each asset shown in Volume 3, **Appendix 10.2**) to establish which have a wider landscape setting (comprising some or all of the factors outlined above) that contributes to their cultural significance and whether it is likely that cultural significance could be impacted by the Proposed Development through causing change to their settings. Heritage assets which were identified as potentially being sensitive to change in their setting such that a significant effect on their cultural significance was possible as a result of the Proposed Development were carried forward for detailed assessment in this chapter.

Data Sources

10.2.8 The baseline for the assessment has been informed by a comprehensive Cultural Heritage Baseline and Stage 1 Setting Assessment (Volume 3, **Appendix 10.1**), based on all readily available documentary sources, following the Chartered Institute for Archaeologists' (CIfA) Standard and guidance for historic environment desk-based assessment' (2014, updated 2017 & 2020). The following sources of information were used:

- Designation data downloaded from the Historic Environment Scotland website in March 2023;
- The National Record of the Historic Environment (NRHE), including the Canmore database and associated photographs, prints/drawings and manuscripts held by HES;
- Historic Environment Record (HER) data, digital extract received from WoSAS in January 2022;
- Historic Environment Record (HER) data, digital extract received from Stirling Council in May 2022;
- The National Collection of Aerial Photography (NCAP);
- Historic maps held by the National Library of Scotland;
- Unpublished maps and plans held by the National Records of Scotland;
- Historic Landscape Assessment data, viewed through the HLAMap website;
- Geological data available online from the British Geological Survey;
- LIDAR data from the Scottish Remote Sensing Portal;
- Relevant internet resources, including Google Maps, Google Earth, Bing satellite imagery and PastMap;
- Readily available published sources and unpublished archaeological reports.

10.2.9 An in-person site inspection by a suitably competent archaeologist of all areas of proposed ground disturbance, as a result of the Proposed Development (i.e., turbine bases, infrastructure and access track routes), was undertaken on 21st April 2023, in largely clear and sunny weather conditions.

10.2.10 Notes were taken in regard to site characteristics, any visible archaeology and geographical/geological features which may have a bearing on previous land use and archaeological survival, as well as those which may constrain subsequent archaeological investigation. Records were made regarding extant archaeological features, such as earthworks or structural remains, any negative features, local topography and aspect, exposed geology, soils, watercourses, health and safety considerations, surface finds, and any other relevant information.

- 10.2.11 The heritage assets within the Outer Study Areas identified in the Stage 1 Setting Assessment (Volume 3, **Appendix 10.1**) as having the potential to be affected by the operation of the Proposed Development (i.e., through effects on their settings and the contribution made by setting to their cultural significance) were visited and fully assessed on 30th March and 20th April 2023.
- 10.2.12 Designated heritage assets are labelled throughout this assessment with the reference number assigned to them by HES (prefixed SM for Scheduled Monuments, and LB for Listed Buildings); non-designated assets are labelled with the reference number in the HER or the NRHE. Previously unrecorded heritage assets within the ISA have been assigned a number (prefixed HA for Heritage Asset). A single asset number can refer to a group of related features, which may be recorded separately in the HER and other data sources.
- 10.2.13 Assets within the ISA are shown in Volume 2a **Figure 10.1**, with detailed descriptions compiled in a Cultural Heritage Baseline and Stage 1 Setting Assessment (Volume 3, **Appendix 10.1**). Cultural Heritage Viewpoints (CHVPs) within the OSA are shown in Volume 2a, **Figure 10.2**. Photomontage and wireline visualisations supporting the Cultural Heritage chapter are presented at Volume 2b, **Figures 10.3 –10.15**.

Potential for Unknown Heritage Assets in the ISA

- 10.2.14 The likelihood that undiscovered heritage assets may be present within the ISA is referred to as archaeological potential. Overall levels of potential can be assigned to different areas of the ISA, while recognising that the archaeological potential of any zone will relate to particular historical periods and types of evidence. The following factors are considered in assessing archaeological potential:
- The distribution and character of known archaeological remains in the vicinity, based principally on an appraisal of data in the HER;
 - The history of archaeological fieldwork and research in the surrounding area, which may give an indication of the reliability and completeness of existing records;
 - Environmental factors such as geology, topography and soil quality, which would have influenced land-use in the past and can therefore be used to predict the distribution and preservation of archaeological remains;
 - Land-use factors affecting the survival of archaeological remains, such as ploughing or commercial forestry planting; and
 - Factors affecting the visibility of archaeological remains, which may relate to both environment and land-use, such as soils and geology (which may be more or less conducive to formation of cropmarks), arable cultivation (which has potential to show cropmarks and create surface artefact scatters), vegetation, which can conceal upstanding features, and superficial deposits such as peat and alluvium which can mask archaeological features.
- 10.2.15 In the Archaeological Potential section of this report, the likelihood that the ISA may contain undiscovered heritage assets, their likely location and potential density, and their likely level of importance is assessed, described, and justified.

Cultural Significance

- 10.2.16 Cultural heritage impact assessment is concerned with effects on cultural significance, which is a quality that applies to all heritage assets, and as defined by Historic Environment Scotland (Environmental Impact Assessment Handbook, NatureScot & HES 2018, v5 Appendix 1 page 175), relates to the ways in which a heritage asset is valued both by specialists and the public. The cultural significance of a heritage asset will derive from factors including the asset's fabric, setting, context and associations. This use of the word 'significance', referring to the range of values attached to an asset, should not be confused with the unrelated usage in terms of the conclusions reached on the significance of likely environmental effects in accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017.
- 10.2.17 Cultural significance is assessed in relation to the criteria in HES's 2019 Designation Policy and Selection Guidance (DPSG) Annexes 1-6, which are intended primarily to inform decisions regarding heritage designations but may also be applied more generally in identifying the 'special characteristics' of a heritage asset, which contribute to its significance. . DPSG Annex 1 is widely applicable in assessing the cultural significance of archaeological sites and monuments, for instance, while the criteria in Annex 2 can be used in defining the architectural or historic interest of buildings, whether listed or not. Cultural significance of assets is considered in terms described in DPSG Annex 1:
- Intrinsic Characteristics – those inherent in the monument i.e., “how the physical remains of a site or place contribute to our knowledge of the past”;
 - Contextual Characteristics – those relating to the monument's place in the landscape or in the body of existing knowledge i.e., “how a site or place relates to its surroundings and/or to our existing knowledge of the past”; and
 - Associative Characteristics – subjective associations, including those with current or past aesthetic preferences i.e., “how a site or place relates to people, practices, events and/or historic and social movements”.

Contribution of Setting to Cultural Significance

- 10.2.18 The special characteristics which contribute to an asset's cultural significance may include elements of its setting. Setting is defined in 'Managing Change in the Historic Environment: Setting' (HES 2016 updated 2020, Section 1) as “the way the surroundings of a historic asset or place contribute to how it is understood, appreciated and experienced”. The setting of a heritage asset is defined and analysed according to Stage 2 of the three-stage approach promoted in 'MCHE: Setting', with reference to factors listed on pages 9-10 (see Assessment of the Magnitude of Impacts on Cultural Significance, paragraphs 10.2.25-10.2.38). The relevance of these factors to the understanding, appreciation and experience of the asset determines how, and to what extent, an asset's cultural significance derives from its setting. All heritage assets have settings; however, in some cases, setting may contribute very little to the asset's significance, or only certain elements of the setting may be relevant.
- 10.2.19 Operational wind energy developments (and any other existing developments that may also be relevant) are therefore described as part of the existing baseline in the impact assessment section.

Importance of Heritage Assets

- 10.2.20 The importance of a heritage asset is the overall value assigned to it based on its cultural significance, reflecting its statutory designation or, in the case of non-designated assets, the professional judgement of the assessor (**Table 10.1**).
- 10.2.21 The criterion for Listing is that a building is of ‘special architectural or historic interest’; following DPSG Annex 2.19, Category A refers to ‘outstanding examples of a particular period, style or building type’, Category B to ‘major examples of a particular period, style or building type’, and Category C to ‘representative examples of a particular period, style or building type’. The criterion outlined in DPSG Annex 2.19, in conjunction with the Environmental Impact Assessment Handbook (NatureScot & HES 2018, v5, p.185) has therefore been used to establish relative levels of importance of Listed Buildings.
- 10.2.22 Heritage Assets are defined as “Features, buildings or places that provide physical evidence of past human activity identified as being of sufficient value to this and future generations to merit consideration in the planning system” (NatureScot & HES 2018, Environmental Impact Assessment Handbook, v5, p.122). Thus, any feature which does not merit consideration in planning decisions due to its cultural significance may be said to have negligible heritage importance; in general, such features are not considered as heritage assets and are excluded from the assessment (see accompanying Cultural Heritage Baseline and Stage 1 Setting Assessment (Volume 3, **Appendix 10.1**).

Table 10.1 Criteria for Assessing the Importance of Heritage Assets

Importance	Criteria
Very High (International)	World Heritage Sites and other assets of equal international importance, that contribute to international research objectives
High (National)	Inventory Gardens and Designed Landscapes, Scheduled Monuments, Protected Wreck Sites, Inventory Historic Battlefields, Category A Listed Buildings, Historic Marine Protected Areas, and other assets of equivalent importance that contribute to national research objectives
Medium (Regional)	Conservation Areas, Category B Listed Buildings, non-designated assets of regional importance except where their particular characteristics merit a higher level of importance, and other assets that contribute to regional research objectives
Low (Local)	Category C Listed Buildings and locally listed (non-designated) heritage assets, except where their particular characteristics merit a higher level of importance. Non-designated heritage assets of Local importance, including assets that may already be partially damaged

Assessment of Magnitude of Impacts

Effects of the Proposed Development

- 10.2.23 Effects of the Proposed Development on the historic environment can arise through direct physical impacts, indirect impacts, or impacts on setting:

- Direct physical impacts describe those activities of the Proposed Development that directly cause damage to the fabric of a heritage asset. Typically, these activities are related to construction works and will only occur within the ISA.
- Indirect impacts describe secondary processes, triggered by the Proposed Development, that lead to the degradation or preservation of heritage assets. For example, changes to hydrology may affect archaeological preservation; or changes to the setting of a building may affect the viability of its current use and thus lead to dereliction.
- An impact on the setting of a heritage asset occurs when the presence of the Proposed Development changes the surroundings of a heritage asset in such a way that it affects (beneficially or adversely) the cultural significance of that asset. Visual impacts are most commonly encountered but other environmental factors such as noise, light or air quality can be relevant in some cases. Impacts may be encountered at all stages in the life cycle of a development from construction to decommissioning but they are only likely to lead to significant effects during the prolonged operational stage of the development.

10.2.24 Likely significant direct or indirect effects on known and unknown heritage assets are discussed in terms of the risk that a significant effect could occur. The level of risk depends on the level of archaeological potential combined with the nature and scale of disturbance associated with construction activities and may vary between high and negligible for different elements or activities associated with a development, or for the development as a whole.

10.2.25 Likely significant effects on the settings of heritage assets are identified from an initial desk-based appraisal of data from HES and the HER, and consideration of current maps and aerial images. Photomontage and wireline visualisations have been prepared to illustrate changes to key views, and to aid assessment where potential setting effects have been identified (Volume 2b, **Figures 10.3-10.15**). The visualisations have been produced by the Landscape and Visual team and the methodology for preparing these is described in **Chapter 5: Landscape and Visual**.

Cumulative Effects

10.2.26 A cumulative effect occurs where the magnitude of the combined effect of two or more developments is greater than that of the Proposed Development considered individually.

10.2.27 The impact assessment for the Proposed Development on its own merits identifies the impact of that development alone upon cultural significance of heritage assets relative to a baseline scenario that includes all operational wind farms. The cumulative impact however, using the same criteria of impact magnitude (as defined in **Table 10.2**), assesses the impact of the Proposed Development combined with the impact of wind farm developments that are consented but not yet built, those under construction, and those that are currently at application stage (for which sufficient detail is known) relative to the baseline scenario.

10.2.28 Developments considered as part of the cumulative assessment are identified from the agreed list presented in Chapter 5: Landscape and Visual. within a study area of 45 km.

10.2.29 Cumulative effects are considered in this chapter for heritage assets where an effect of Minor or greater significance (see **Table 10.3**) has been identified as a result of the Proposed Development. The purpose of this threshold is to ensure that the assessment

remains proportionate and focused on those cases where there is potential for an EIA-significant effect to arise were the Proposed Development to be consented.

- 10.2.30 Visualisations supporting this chapter from cultural heritage viewpoints (CHVPs) include cumulative developments (Volume2b, **Figures 10.3-10.15**).

Assessment of the Magnitude of Impacts on Cultural Significance

- 10.2.31 The magnitude of an impact is a measure of the degree to which the cultural significance of a heritage asset will potentially change as a result of the Proposed Development (NatureScot & HES 2018, Environmental Impact Assessment Handbook, v5 Appendix 1, para 42).
- 10.2.32 Conclusions of the assessed magnitude of impacts is a product of the consideration of the elements of an asset and its setting that contribute to its cultural significance and the degree to which the Proposed Development would change these contributing elements. The assessment therefore reflects the varying degrees of sensitivity of different assets to change brought about by different types of development.
- 10.2.33 This definition of magnitude and assessment methodology applies to likely effects resulting from change in the setting as well as likely physical effects on the fabric of an asset.
- 10.2.34 The methodology adopted for the identification and assessment of potential effects resulting from change in setting follows the approach set out in Managing Change in the Historic Environment: Setting (Historic Environment Scotland, 2016 updated 2020) and the Environmental Impact Assessment Handbook (NatureScot & HES, 2018, v5 Appendix 1). The guidance sets out three stages in assessing the effect of development on the setting of a heritage asset or place as follows:
- *“Stage 1: identify the historic assets that might be affected by a development;*
 - *Stage 2: define and analysis the setting by establishing how the surroundings contribute to the ways in which the historic asset or place is understood, appreciated and experienced; and*
 - *Stage 3: evaluate potential effect of the proposed changes on the setting, and the extent to which any negative effects can be mitigated.”*
- 10.2.35 It is important to note that the magnitude of an impact resulting from change within setting is not a direct measure of the visual prominence, scale, proximity or other attributes of the Proposed Development itself, or of the extent to which the setting itself is changed. Moreover, it is necessary to consider whether, and to what extent, the characteristics of the setting which would be changed contribute to the asset’s cultural significance (NatureScot & HES 2018, Environmental Impact Assessment Handbook, v5 Appendix 1, paras 42 and 43). It is important to draw a distinction between how assessment of Landscape and Visual differs from assessment of the setting of a heritage asset. In a Landscape and Visual assessment, magnitude of impact would be directly related to the level of visual change so more change would result in a greater impact. In cultural heritage setting assessment, however, visual change will only result in an impact if it affects the contribution that setting makes to an asset’s cultural significance. As a result, there is no simple relationship between change and impact on setting and this is reflected in the advice given in Stages 2 and 3 in HES’s ‘Managing Change’ guidance (pages 9-

10). It is necessary to understand how setting contributes to significance (Stage 2) before assessing how change would impact on setting (Stage 3).

10.2.36 Magnitude of impact is assessed as high/medium/low/negligible, and adverse or beneficial, using the criteria in **Table 10.2** as a guide. In assessing the likely effects of a development, it is often necessary to take into account various impacts which affect an asset's cultural significance in different ways. For instance, there may be adverse effects on an asset's fabric and beneficial effects on cultural significance resulting from change in setting arising from a development which would not otherwise occur in a 'do-nothing' scenario; a heritage asset that might otherwise degrade over time could be preserved or consolidated as a consequence of a development. The impact assessment identifies beneficial and adverse impacts for consideration separately.

Table 10.2 Criteria for Assessing the Magnitude of Impacts on Heritage Assets

Magnitude of Impact	Criteria
High Beneficial	Alterations to an asset and/or its setting resulting in considerable increase in appreciation, understanding or awareness of the asset's cultural significance / Preservation of an asset and/or its setting where it would otherwise suffer considerable loss of cultural significance in the do-nothing scenario.
Medium Beneficial	Alterations to an asset and/or its setting resulting in moderate increase in appreciation, understanding or awareness of the asset's cultural significance / Preservation of an asset and/or its setting where it would otherwise suffer moderate loss of cultural significance in the do-nothing scenario.
Low Beneficial	Alterations to an asset and/or its setting resulting in a slight increase in appreciation, understanding or awareness of the asset's cultural significance / Preservation of an asset and/or its setting where it would otherwise suffer slight loss of cultural significance in the do-nothing scenario.
Negligible/ No Impact	The asset's cultural significance or contribution made by its setting is not materially altered.
Low Adverse	Alterations to an asset and/or its setting resulting in a slight loss of cultural significance.
Medium Adverse	Alterations to an asset and/or its setting resulting in a moderate loss of cultural significance.
High Adverse	Alterations to an asset and/or its setting resulting in a considerable loss of cultural significance.

Mitigation

10.2.37 Assessment of impacts is an iterative part of the design process. For any identified effect the preferred mitigation option is always to avoid or reduce effects through design (embedded mitigation), or through precautionary measures such as fencing off heritage assets during construction works to avoid accidental direct effects (additional mitigation).

10.2.38 Effects which cannot be mitigated in these ways may lead to adverse direct or indirect physical effects which may be mitigated by an appropriate level of survey, excavation, recording, analysis and publication of the results, in accordance with a written scheme of investigation (additional mitigation).

Assessment of the Significance of Effects

10.2.39 The significance of an effect ('EIA significance') on the cultural significance of a heritage asset, resulting from a direct or indirect physical effect or an effect on its setting is assessed by combining the magnitude of the impact and the importance of the heritage asset.

10.2.40 The matrix in **Table 10.3** provides a guide to decision-making but is not a substitute for professional judgement and interpretation, particularly where the asset importance or effect magnitude levels are not clear or are borderline between categories. EIA significance may be described on a continuous scale from none to major.

10.2.41 Following paragraph 10.2.23 of the cultural heritage Importance methodology presented above, any features of Negligible importance do not merit consideration in planning decisions and are excluded from the impact assessment as a significant effect in EIA is not possible.

Table 10.3 Criteria for Assessing the Significance of Effects on Heritage Assets

Importance	Magnitude of Impact on Cultural Significance			
	High	Medium	Low	Negligible / No Impact
Very High	Major	Major	Major or Moderate	Negligible/None
High	Major	Major or Moderate	Moderate or Minor	Negligible/None
Medium	Major or Moderate	Moderate or Minor	Minor	Negligible/None
Low	Moderate or Minor	Minor	Negligible	Negligible/None

10.2.42 Effect significance conclusions are expressed in the impact assessment as 'Beneficial' or 'Adverse'.

10.2.43 In this assessment Major and Moderate effects are regarded as 'significant' in EIA terms, while Minor and Negligible effects are 'not significant'.

Assessment Limitations

10.2.44 Information held by public data sources is generally considered to be reliable; however, the following general points are noted:

- Documentary sources are rare before the medieval period.
- Whilst it is accepted that historic documents may be biased depending on the author, with content seen through the lens of context, wherever such documentary sources are used in assessing archaeological potential, professional judgment is used in their interpretation in that the functionality of the document is considered;

- HER records can be limited because opportunities for research, fieldwork and discovery depend on the situation of commercial development and occasional research projects, rather than the result of a more structured research framework. A lack of data within the HER records does not necessarily equal an absence of archaeology;
- Where archaeological sites have been identified solely from aerial imagery without confirmation from archaeological excavation or supporting evidence in the form of find-spots for example, it is possible the interpretation may be revised in the light of further investigation;
- The significance of sites can be difficult to identify from HER records, depending on the accuracy and reliability of the original source;
- There can often be a lack of dating evidence for archaeological sites; and
- Any archaeological site visit has inherent limitations, primarily because archaeological remains below ground level may have no surface indicators.

10.3 Consultation Undertaken

10.3.1 Responses arising from scoping and other consultation carried out during the archaeology and cultural heritage assessment are summarised in **Table 10.4**.

Table 10.4 Cultural Heritage Consultation

Consultee	Summary of Consultation	Where Addressed in EIA
HES, Scoping Response (Case ID: 300058233) June 2022	<p>Stated they were content with the proposed scoping out of effects from decommissioning and construction and were content with study areas proposed.</p> <p>HES also stated that: <i>'There are a number of assets for our interests in the vicinity of the development proposals and as mentioned above, these should be assessed as part of the EIA.</i> <i>Some of these assets appear to be particularly vulnerable to setting impacts:</i></p> <ul style="list-style-type: none"> • SM90107 Dumbarton Castle • SM2911 Knockupple, long cairn • SM2329 Lang Cairn, chambered cairn and cairn, Gallangad Muir • GDL00306 Overtoun House & LB24907 Overtoun House and Garden Walls • GDL00042 Balloch Castle & LB123 Balloch Castle <p><i>Given the large number of heritage assets, we would expect the EIA Report to use the ZTV information to identify potential for significant impacts on the settings of the assets for our interests further away from the site. This is a non-exhaustive list of assets that could be impacted by the proposals:</i></p>	<p>SM90107 Dumbarton Castle, SM2911 Knockupple, long cairn, SM2329 Lang Cairn, chambered cairn and cairn, Gallangad Muir, GDL00306 Overtoun House & LB24907 Overtoun House and Garden Walls, GDL00042 Balloch Castle & LB123 Balloch Castle all retained for detailed setting assessment (Section 10.6 'Predicted Impacts'). Importance of water bodies included in assessment where relevant. Views to and from assets considered and presented in visualisations where relevant (Volume 2b, Figures 10.3a-10.15f).</p> <p>A Stage 1 Setting Assessment was carried out as part of the Cultural Heritage Baseline and Stage 1 Setting Assessment (Volume 3, Appendix 10.1). Each heritage asset in the Outer Study Area (beyond 20 km, based on a ZTV) was assessed to identify which</p>

Consultee	Summary of Consultation	Where Addressed in EIA
	<ul style="list-style-type: none"> • <i>LB823 Dovecot, Strathleven</i> • <i>LB115 Strathleven House</i> • <i>LB1125 Woodbank House with Garden Building</i> • <i>LB7625 Ross Priory & its associated GDL: Ross Priory (GDL00329)</i> • <i>LB7628 Catter House</i> • <i>SM6576 Inchmurrin Castle, castle and kiln-barn</i> • <i>SM3385 Balloch Castle, earthwork, Loch Lomond Park</i> <p><i>'We would also like to point out the importance of waterbodies as a significant historic transport route in the study area. Although many monuments will have been built and used with reference to the River Clyde, Loch Lomond and their tributaries, some sites such as Dumbarton Castle, Balloch Castle and Inchmurrin Castle were deliberately sited to assert and exercise control over these waterways and the people that used them. It is important that any assessment of the settings of assets for our interests in the EIA process should consider not only views from the monuments but views between and towards them, including those from the water where relevant.'</i></p>	<p>had a wider landscape setting that contributes to their cultural significance and whether it is likely that cultural significance would be harmed by the Proposed Development.</p> <p>Where heritage assets were located outwith the ZTV, third-party viewpoints within the ZTV which may have provided a significant view towards the heritage asset and the Proposed Development were considered.</p>
<p>WoSAS Scoping Response May 2022</p>	<p>Stated they were broadly content that the approach outlined in the Scoping Report would '<i>...allow an adequate picture of the heritage baseline against which potential direct, indirect and setting impacts can be assessed.</i>'</p> <p>Noted that that the initial assessment process should look at all sites that fall within the ZTV, to attempt to identify any features of potential regional or national importance (other than those already listed on WoSAS's Non-Statutory Register) along with those where long-distance visibility or intervisibility with other monuments is likely to have been an important factor in determining their position.</p> <p>Stated that the proposed study areas cover council areas who are not members of WoSAS i.e. Stirling Council and Inverclyde. Acknowledged that the Scoping Report states that HER data from Stirling Council was obtained but queried whether data from Inverclyde had been.</p>	<p>A Stage 1 Setting Assessment was carried out as part of the Cultural Heritage Baseline and Stage 1 Setting Assessment (Volume 3, Appendix 10.1).</p> <p>All heritage assets in the Outer Study Area (beyond 20 km, based on a ZTV) was assessed to identify which had a wider landscape setting that contributes to their cultural significance and whether it is likely that cultural significance would be harmed by the Proposed Development.</p> <p>Where heritage assets were located outwith the ZTV, third-party viewpoints within the ZTV which may have provided a significant view towards the heritage asset and the Proposed Development were</p>

Consultee	Summary of Consultation	Where Addressed in EIA
	<p>Stated that LiDAR data covers only around half the Site and that steps may need to be taken in order to address the gap in coverage. Stated that ‘...<i>ideally the whole of the development area should be subject to a systematic walkover survey carried out by an appropriately qualified professional archaeological contractor</i>’</p> <p>Welcomed the provision of visualisations to demonstrate changes in setting from existing baseline conditions.</p> <p>Advised that Loch Lomond & the Trossachs National Park Authority and Inverclyde should be consulted.</p> <p>Agreed that avoiding known heritage assets by design would mitigate against direct impacts on such features but stated that this would be less effective on mitigating against direct impacts on unknown sub-surface archaeological remains. Stated that preservation in-situ should be the preferred option wherever possible.</p> <p>Agreed that impacts from ground disturbance associated with the decommissioning of the Proposed Development, and temporary setting impacts associated with the construction phase can be scoped out of the assessment.</p>	<p>considered.</p> <p>Following the re-design of the Proposed Development, the LiDAR data covers almost the entire Site. Targeted walkover survey of the areas of proposed infrastructure was carried out on 21st April 2023, with areas not covered by the LiDAR inspected.</p> <p>Scoping Report sent to Loch Lomond and Trossachs National Park Authority (see row below).</p> <p>Proposed mitigation works in relation to sub-surface remains outlined in Section 10.7, paragraphs 10.7.14-10.7.15.</p>
Loch Lomond & the Trossachs National Park Scoping Response (June 2022)	Scoping Response did not refer to Cultural Heritage and Archaeology.	n/a
Stirling Council Scoping Response (May 2022)	Stated they were ‘... <i>generally content with (the) scope of environmental impacts set out in the report, along with approaches taken and suggested methodologies.</i> ’	n/a
West Dunbartonshire Council (June 2022)	Stated that WoSAS should be consulted regarding cultural heritage.	WoSAS consulted as outlined above.
HES (May 2023)	Response to proposed scope of setting assessment sent via email in April 2023. Stated they were content with the assets scoped into the setting assessment. Requested photomontages from all assets within their remit and additional views from and into the GDLs retained for detailed	All assets assessed under ‘Operational Effects’ sub-heading of Section 10.6 ‘Predicted Impacts’. Photomontages produced for four assets (three Scheduled Monuments and Overtoun

Consultee	Summary of Consultation	Where Addressed in EIA
	assessment (Balloch Castle, Finlaystone House, Overtoun House and Rossdhu House with Walled Garden) where the Proposed Development may be visible in the background.	House) with indicative wirelines and photographs provided to HES for other assets within their remit.
HES (July 2023) Gatecheck Response	HES requested an additional photomontage indicative of a water based view towards Dumbarton Castle. HES stated that a visualisation from Newark Castle, Port Glasgow, would be an acceptable proxy for a water based view.	The applicant commissioned an additional photomontage from this location (see Volume 2b Figure 10.7e-10.7h) which is discussed in paragraph 10.6.59.

10.4 Statutory and Planning Context

- 10.4.1 The assessment has been undertaken with reference to relevant legislation, policy and guidance relating to the historic environment as outlined in **Part 2** of Volume 3 **Appendix 10.1** Further detail of legislation and policy relevant to this chapter is outlined in **Chapter 4: Planning Policy Context**.

10.5 Existing Environment

Geology and Geomorphology

- 10.5.1 The bedrock geology within the ISA is banded north to south, including: Stratheden Group – Sandstone And Conglomerate, Interbedded (sedimentary); Inverclyde Group – Sandstone, Siltstone And Mudstone (sedimentary); and Unnamed Extrusive Rocks, Dinantian – Mafic Lava And Mafic Tuff (igneous).
- 10.5.2 Till – Diamicton is recorded along the ISA northern and western boundaries, no superficial deposits are recorded in the central and southern parts of the ISA and peat is recorded in the east. The National Soils map of Scotland records the peat as ‘peaty gleys with dystrophic blanket peat’ (<https://map.environment.gov.scot/>). The presence of poorly draining blanket peat means that the ISA is unlikely to have been occupied on year round basis in the past.

Overview of the Historic Environment

- 10.5.3 The full list of known heritage assets within the ISA and OSA is presented in the gazetteer (Volume 3, **Appendix 10.2**) and the significance of these assets is discussed by period in the Statement of Significance and Importance (**Part 6**) of Volume 3, **Appendix 10.1**.

Inner Study Area

- 10.5.4 There are no designated heritage assets within the turbine area or within a 50 m Study Area for the proposed access track (the ISA).
- 10.5.5 There are 18 non-designated heritage assets within the ISA as described in **Part 5.3** of Volume 3, **Appendix 10.1**. These comprise:
- A deserted farmstead (7802)
 - One prehistoric cairn (7981)

- Three marker cairns and boundary markers of later historic date (7982)
- One military decoy site (50509)
- Two enclosures (68091)
- A mound (68093)
- Two possible shieling huts (68094, 68095)
- A shieling ground (68099)
- The site of a cattle tryst (68100)
- An historic track (358810)
- A circular turf structure (HA25)
- Three turf banks (HA49, HA50 and HA51)

Outer Study Area

- 10.5.6 The heritage assets outlined below are described further in **Part 6.2** of Volume 3, **Appendix 10.1**.
- 10.5.7 Within 2km from the proposed turbines there are two Scheduled Monuments, and 112 further non-designated heritage assets of which two are recorded on the WoSAS NSR as probably of national importance.
- 10.5.8 Within 2-5km from the proposed turbines there is one World Heritage Site, two Inventory Gardens and Designed Landscapes, three Scheduled Monuments, two conservation areas, 19 Cat A listed buildings, 72 Cat B listed buildings, and 286 non-designated heritage assets of which five are recorded on the WoSAS NSR as probably of national importance.
- 10.5.9 Within 5-10km from the proposed turbines there are five Inventory Gardens and Designed Landscapes, 44 Scheduled Monuments, 16 Cat A listed buildings, 72 Cat B listed buildings, and 1037 non-designated heritage assets of which 25 are recorded on the WoSAS NSR as probably of national importance, and three are recorded as certainly of national importance.
- 10.5.10 Within 10-20km from the proposed turbines there are seven Inventory Gardens and Designed Landscapes, and 654 Cat A listed buildings.
- 10.5.11 No Scheduled Monuments have been identified beyond the defined 10 km OSA, and no heritage assets have been identified within the ZTV beyond 20 km requiring detailed assessment, for which setting contributes to cultural significance such that a significant impact is anticipated as a result of the Proposed Development over this distance.

Archaeological Potential of the ISA

- 10.5.12 The topography of the ISA is varied, with differing exploitation of varying resources geographically through time. A detailed outline of the archaeological potential of the ISA is provided in **Part 6.1** of Volume 3, **Appendix 10.1**. In summary, the majority of the ISA is considered to be of generally negligible archaeological potential with the following exceptions:
- Up to low potential in the Murroch Burn and Gallangad Burn valleys and the improved fields at the south-west of the ISA for prehistoric remains;

- Up to medium potential for medieval remains in the vicinity of HA5 Glendiskan, a Medieval settlement and low potential in the improved fields at the south-west of the ISA; and
- Up to high potential for later historic agricultural remains on the slopes near to watercourses in the central and northern part of the ISA for later historic remains. The improved agricultural fields through which the proposed access route would run, leading north-east, may be of medium potential for later historic agricultural remains due to the known presence of such assets in this area. The vicinity of Auchenreoch farm (HA1) and the potentially extant remains of trackway (358810) in this area may also be of up to medium potential for later historic assets relating to agriculture. There is a low potential for industrial remains to exist along the Murroch Burn valley specifically, and a low potential for such remains in river valleys generally.

Heritage Assets Considered for Setting Effects

- 10.5.13 A Stage 1 Setting Assessment has been carried out in order to consider whether further detailed assessment would be required for heritage assets within the OSA, based on whether it is likely that their cultural significance could be affected through development within their setting. Summary results are presented in **Part 6.2** of the Cultural Heritage Baseline and Stage 1 Setting Assessment (Volume 3, **Appendix 10.1**).
- 10.5.14 The Stage 1 Setting Assessment methodology considers each heritage asset in the OSA in turn to identify those assets in the ZTV which have a wider landscape setting that contributes to their cultural significance and whether it is likely that cultural significance could be harmed by the Proposed Development. Where heritage assets are located outwith the ZTV, third-party viewpoints within the ZTV which may provide a culturally significant view towards the heritage asset and the Proposed Development were considered.
- 10.5.15 Following consultation, the Stage 1 Setting Assessment found that there may be effects through changes within their setting on the significance of four Gardens and Designed Landscapes, four Scheduled Monuments, four Category A Listed Buildings, and two Category B Listed Buildings.

Inventory Gardens and Designed Landscapes

- 10.5.16 Gardens and Designed Landscapes (GDLs) derive cultural significance through designed views and vistas, inter-relationships between heritage assets therein, as well as potentially long-range views towards historic or natural features located outwith the defined landscape boundary.
- 10.5.17 Following Stage 1 Assessment and consultation, with full details in the Cultural Heritage Baseline and Stage 1 Setting Assessment (Volume 3, **Appendix 10.1**), the following Inventory Gardens and Designed Landscape (GDL) are retained for detailed assessment in the EIAR supported with photomontage and/or wireline visualisations as appropriate:
- GDL00042: Balloch Castle, located 4 km WNW of the nearest proposed turbine;
 - GDL00306 Overtoun House, located 2.5 km south of the nearest proposed turbine;

- GDL00180 Finlaystone House, located 8.5 km south-west of the nearest proposed turbine; and
- GDL00330 Rossdhu, located 9.5 km north-west of the nearest proposed turbine.

Scheduled Monuments

- 10.5.18 Scheduled Monuments derive cultural significance from their intrinsic value as they often contain buried archaeological remains that would provide information about the date of construction and the uses of the monument in each case. Settlement sites hold intrinsic value as they provide physical evidence of the former settlement patterns, whilst religious and funerary sites hold intrinsic value of ritual practices. All monuments have a setting which contributes to their significance, being informative about intentional site selection and how the site functioned in relation to the landscape and other contemporary monuments.
- 10.5.19 Following Stage 1 Assessment and consultation, with full details in the Cultural Heritage Baseline and Stage 1 Setting Assessment (Volume 3, **Appendix 10.1**), the following Scheduled Monuments (SMs) are retained for detailed assessment in the EIAR supported with photomontage and/or wireline visualisations as appropriate:
- SM2911 Knockupple, long cairn, located 1.2 km east of the nearest proposed turbine;
 - SM2329 Lang Cairn, chambered cairn and cairn, Gallangad Muir, located 1.2 km east of the nearest proposed turbine;
 - SM2281 Stockie Muir, long cairn 2000m NNW of Burncrooks Reservoir, located 3.2 km east of the nearest proposed turbine; and
 - SM90107 Dumbarton Castle, located 5.3 km south-west of the nearest proposed turbine.

Listed Buildings

- 10.5.20 Many Listed Buildings (LBs) within the OSA are designated for their architectural significance, physical remains of societies who built and used them, providing information on construction techniques, fashion and style. However, all buildings have a setting which contributes to their significance, being informative about how the building functioned in relation to its surrounding environment, often in relation to and with a group value with other buildings. The majority of the LBs identified for detailed assessment are located within GDLs and thus potentially derive cultural significance through designed views and vistas, inter-relationships between heritage assets, as well as potentially long-range views beyond the GDL.
- 10.5.21 Following Stage 1 Assessment and consultation, with full details in the Cultural Heritage Baseline and Stage 1 Setting Assessment (EIA Report **Volume 3, Appendix 10.1**), the following LBs are retained for detailed assessment in the EIAR supported with photomontage and/or wireline visualisations as appropriate:
- Category A LB123: Balloch Castle, located 4 km WNW of the nearest proposed turbine;
 - Category A LB24907: Overtoun House, located 2.5 km south of the nearest proposed turbine;
 - Category A LB13641: Finlaystone House, located 8.5 km south-west of the nearest proposed turbine;

- Category A LB14469: Rosdhu House, located 10.7 km north-west of the nearest proposed turbine;
- Category B LB42920: Renton, Alexander Street, Trinity Parish Church, located 4 km south-west of the nearest proposed turbine; and
- Category B LB3911: Auchenlarich with Stables and Gatepiers, located 2.2 km north of the nearest proposed turbine.

10.6 Predicted Impacts

Construction Effects

- 10.6.1 Development activities within the ISA have the potential to truncate or remove buried archaeological remains, resulting in a direct impact on these assets. Direct physical impacts may occur during construction as a result of intrusive groundworks, comprising any areas of cut and fill, bulk excavation and topsoil stripping, site compound establishment, and excavations for turbine and crane footings, access tracks and utilities and landscaping.
- 10.6.2 Indirect impacts describe secondary processes, triggered by the development, that lead to the degradation or preservation of heritage assets. For example, changes to hydrology may affect archaeological preservation.
- 10.6.3 Accidental direct physical impacts within the ISA may arise should activities such as, but not limited to, ancillary drainage works and uncontrolled plant movement take place in the vicinity of heritage assets.

Direct and Indirect (Physical) Impacts

- 10.6.4 There are 18 known heritage assets located within the ISA. The heritage assets identified in the Cultural Heritage Baseline and Stage 1 Setting Assessment (Volume 3, **Appendix 10.1**) of Low or higher importance and therefore considered heritage assets for planning purposes.
- 10.6.5 Of these, a direct (physical) impact upon an historic trackway (358810) two turf banks (HA49) and (HA50) and a shieling ground (68099) as a result of Proposed Development infrastructure has been identified.

Turbine Area (Volume 2a, **Figure 10.1**)

- 10.6.6 A non-designated trackway (358810), shown on the 1st Edition OS map and which remains partially extant would be truncated in five locations. The trackway is, however, no longer extant in these locations. Given that much of the asset will remain unaffected by the Proposed Development, a low magnitude impact is predicted on the asset which is of low importance, resulting in an adverse effect of **negligible significance** which is **not significant**.
- 10.6.7 A shieling ground (68099) would be truncated by a proposed access track leading to Turbine 5. Low mounds and a possible small rectangular turf structure which may relate to the shieling ground would be directly impacted by the proposed access track. The shieling ground extended over a wider area than the small part through which the proposed access track would run. A medium magnitude impact is predicted on an asset of low importance resulting in an adverse effect of **minor significance** which is **not significant**.

Site Access and Adjacent Infrastructure (Volume 2a, Figure 10.1)

- 10.6.8 The proposed access route is proposed from the A813 through improved agricultural fields east of Murroch Burn and a small area (approximately 0.1ha) of woodland recorded on the Ancient Woodland Inventory (AWI), continuing north-east through rough pasture towards the proposed turbine area.
- 10.6.9 The proposed access track would directly impact a historic trackway (358810). Approximately 18 m of the asset lies within the footprint of the proposed access track. However, there are no extant remains of trackway 358810 present in the area in which the proposed access track would be located; a negligible magnitude impact is predicted on trackway 358810, an asset of low importance, resulting in an adverse effect of **negligible significance** which is **not significant**.
- 10.6.10 Approximately 6 m of the lengths of turf banks HA49 and HA50 would be removed by the proposed access track. The majority of the features, would, however remain in-situ. A low magnitude impact is therefore predicted on assets of low importance resulting in an adverse effect of **negligible significance** which is **not significant**.
- 10.6.11 A proposed borrow pit adjacent to the proposed access track would truncate the site of a military decoy site/bunker (50509). No remains associated with this asset were observed above-ground in this area during the site visit, with the majority of the asset located approximately 100 m to the south, outwith the proposed borrow pit area. No impact is therefore predicted resulting in an effect of **none** which is **not significant**.
- 10.6.12 The north-westernmost extent of a proposed substation would truncate approximately 2 m of a historic trackway (358810), an asset of low importance. The asset is no longer extant in this area, however and the majority of the asset, where it survives, would remain preserved in-situ. A negligible magnitude impact is predicted, resulting in an adverse effect of **negligible significance** which is **not significant**.

Micrositing, Accidental and Indirect (Physical) Impacts

- 10.6.13 The following heritage assets are located within the 50 m micrositing tolerance for the Proposed Development. Additional mitigation may be required at these heritage assets should the micrositing tolerance be applied. Accidental damage to these assets is also possible given the proximity of these assets within 50 m of the Proposed Development infrastructure. Accidental direct impacts may arise should activities such as, but not limited to, ancillary drainage works, and uncontrolled plant movement take place in the vicinity of heritage assets. Elements of heritage assets which would be directly impacted by the Proposed Development (as outlined in the Direct (Physical) Impacts heading above) are included below as the remaining extant elements of these assets extend into the 50 m micrositing tolerance:
- Area of lime kilns (59903);
 - An enclosure (HA15);
 - A turf structure (HA25);
 - Turf banks (HA49, HA50 and HA51);
 - Any extant remains of non-designated trackway (358810);
 - A shieling ground (68099);
 - A burial cairn (7891);

- Enclosures (68091); and
- A deserted farmstead (7802)

- 10.6.14 With the exception of burial cairn (7891), these known assets are all of low (local) importance. If impacted due to accidental damage or during micro-siting, this may result in a construction-phase physical impact of up to high magnitude. Without mitigation, therefore, any adverse effect resulting from a physical impact during construction-phase may be of up to **minor** significance, which is **not significant**.
- 10.6.15 Burial cairn (7891) is of medium (regional) importance; If impacted due to accidental damage or during micro-siting, this may result in a construction-phase physical impact of up to high magnitude. Without mitigation, therefore, any adverse effect resulting from a physical impact during construction-phase may be of up to **moderate** significance, which is **significant**.
- 10.6.16 The 50 m micro-siting tolerance has been used as an appropriate buffer within which to assess the potential for indirect (physical) impacts on heritage assets caused by changes to ground conditions (such as changes to hydrology). The heritage assets noted above are not considered to be sensitive to changes in ground conditions; as upstanding remains composed of turf or stone, their continued preservation is not entirely reliant on hydrological conditions remaining unchanged and any changes to local hydrology brought about by the Proposed Development are unlikely to result in increased degradation of these assets. There are also no waterlogged deposits or deposits with palaeoenvironmental potential which have been identified that may be indirectly affected by hydrological changes. No indirect (physical) impacts are therefore predicted.

Archaeological Potential

- 10.6.17 There is considered to be up to high archaeological potential for hitherto unknown archaeological remains in some areas of the ISA. Direct construction impacts on previously unknown heritage assets in the ISA (turbine area and access route) are therefore possible.
- 10.6.18 An assessment of effect significance cannot be evaluated for unknown heritage assets, as neither the cultural significance of the asset nor the magnitude of the impact can be known. Consequently, an assessment of construction effects upon archaeological potential is considered.
- 10.6.19 There is a low potential for prehistoric remains and up to medium potential for medieval remains to exist within the ISA as outlined in paragraphs 10.5.12-10.5.18 above.
- 10.6.20 Any remains of prehistoric or medieval date could be of up to high (national) importance, given their relative rarity within the ISA. Any effect resulting from an impact upon archaeological remains of prehistoric or medieval date discovered during the construction phase without application of mitigation may result in an adverse effect of up to **moderate significance** which is **significant**.
- 10.6.21 The ISA is of up to high potential for historic remains as outlined in paragraphs 10.5.15-10.5.17.
- 10.6.22 Any remains of historic date are likely to relate to upland agricultural activity (e.g. remains of shielings, field boundaries or livestock enclosures) or to industrial activities (e.g. kilns). Such remains are unlikely to be of any higher than low (local) importance. Any effect

resulting from an impact upon archaeological remains of later historic period date discovered during the construction-phase without application of mitigation is likely to result an adverse effect of no more than **minor significance** which is **not significant**.

Operational Effects

Prehistoric Chambered Cairns

- 10.6.23 Prehistoric cairns derive cultural significance from their intrinsic archaeological remains and potential; excavation may yield information on the nature of these monuments and the nature of the societies who built them.
- 10.6.24 The cairns retained for detailed assessment in this chapter are all examples of 'Clyde Group' cairns (Noble 2006, 132). Cairns of this type are most commonly found in northern and western Ireland and south-western Scotland. Lacking a significant passage, they are a form of gallery grave. The burial chamber is normally located at one end of a rectangular or trapezoidal cairn, while a roofless, semi-circular forecourt at the entrance provided access (although the entrance itself was often blocked); and gives this type of chambered cairn its alternate name of court tomb or court cairn. These forecourts are typically fronted by large stones and it is thought the area in front of the cairn was used for public rituals. The chambers were created from large stones set on end, roofed with large flat stones and often sub-divided by slabs into small compartments. They are generally considered to be the earliest burial cairns in Scotland, originating in the early Neolithic; the form of the cairns developed over time, from simple, occasionally closed chambers to larger, more accessible burial chambers, suggesting an interest in increasing the capacity of the cairns for burial and also potentially improving access to the remains already interred which may have then been used during ancestor worship (*Ibid.*, 133). The forecourts were also a later addition to these monuments, further indicating development in spiritual beliefs and practices during the Neolithic. Clyde cairns are located in largely similar topographic settings, positioned to have outward views over both uplands, mountains or over water (Cummings 2016, 49). It has been suggested that outward views of the surrounding landscape from the cairns contributes to their cultural significance (*Ibid.*, 50). The cairns are generally orientated either east-west or ENE-WSW; there is no consensus as to whether this alignment is significant in terms of understanding the cairns, and it may simply be that communities building them were aware of broader cairn building practices and sought to replicate regional structural styles (*Ibid.*, 50).

SM2911 Knockupple, long cairn

- 10.6.25 SM2911 Knockupple, long cairn is a chambered long cairn dating to the Neolithic period, and probably built and in use between 3800 BC and 2500 BC. The cairn has been much disturbed by forestry activities and survives as a largely overgrown mound of dry stone rubble which is roughly trapezoidal in plan.
- 10.6.26 The cairn is orientated ENE-WSW and measures about 13 m in length by c. 7 m in width at the east end, narrowing to c. 1.5 m at the west end. There is a façade at the monument's eastern end defined by four large boulders in a slightly concave arrangement forming a forecourt area. Behind the façade are two side slabs which would have formed part of a chamber, while a kerb of stones run in a straight line across the south-west corner of the cairn. To the south of the chambered cairn is a roughly oval slab which may have formed part of the monument.

- 10.6.27 As a Scheduled Monument, SM2911 Knockupple, long cairn is of high (national) importance.
- 10.6.28 SM2911 is situated on a west facing slope within an area of felled forestry; it is approached from the north and south along an existing forestry track. Due to its much diminished nature as a result of forestry activities, the cairn does not appear prominently in views to it from the track and is difficult to discern, and is only readily experienced from within a distance of approximately 5 m. The Gallangad Burn is located approximately 150 m to the west. The disturbed nature of the cairn is such that the forecourt area, where ritual activity is thought to have taken place, is not readily appreciable; the ENE-WSW orientation is, however, still discernible.
- 10.6.29 From the cairn, views are largely restricted to the north, north-west and west. Views north are largely open, taking in areas of felled forestry and more distant moorland. SM2329 Lang Cairn, chambered cairn and cairn, Gallangad Muir, located 765 m to the north is not discernible in this view from SM2911 and there is no interrelationship experienced between the two monuments. Views north-west and west take in the steep slopes leading to Gallangad Burn and more distant moorland beyond this watercourse (Illus 10.1). Gallangad Burn is clearly audible when standing on the cairn, forming a part of the experience: it is possible the cairn was positioned in order to relate to this natural landmark and this factor of its setting remains appreciable, however this is speculative. To the south, rising topography and commercial forestry limit outward views, whilst views east are limited to the peak of the west facing slope on which the cairn is situated. Experience of the cairn is therefore to an extent contained by rising topography to the east and south and by Gallangad Burn to the west. Views are largely drawn to the north and it is likely this would have been the most open view from the cairn when it was in use.

Illus 10-1 View west from SM2911 Knockupple, long cairn



Views are to a lesser degree drawn west, towards the slopes leading to Gallangad Burn, allowing for an appreciation of the possible relationship between the cairn and this natural feature. Views over upland areas or towards water are common in outward views from Clyde cairns and in this sense views north and west from SM2911 are representative of its wider group value.

10.6.30 Volume 2b **Figure 10.3b** and **10.3e** (wirelines) and **10.3f** (photomontage), **CHVP1** indicates that all of the proposed turbines would be visible to hub height in views WSW from the cairn, with the nearest turbine located 1.52 km away. The cairn is constructed on an ESE-WNW axis, and the Proposed Development would appear offset but prominent when looking west along the alignment of the cairn. This view to the west takes in Gallangad Burn in the foreground, and the presence of the Proposed Development may present a degree of visual distraction in this view. It is not clear, however, that the cairn was orientated in order to specifically relate to the part of the landscape in which the Proposed Development is located. With the exception of Gallangad Burn, located much closer at a range of approximately 150 m, the landscape to the west of SM2911 is largely featureless, and there is nothing to suggest the cairn was aligned to be understood specifically in relation to this area of moorland approximately 1.5 km to the west. Views north are in any case much more wide-ranging and open, taking in distant hills, and are more informative in terms of understanding the monument's position in the wider landscape. Clyde cairns were often constructed in upland areas and views of this type of landscape are relatively common from these monuments. These views would remain unchanged. It would also remain possible to speculate as to whether the cairn related to the Gallangad Burn located 150 m to the west. Whilst two of the proposed turbines would partially backdrop the slopes leading to the burn, they would be set with a distinct degree of separation and would not directly interfere with any potential relationship between this natural feature and the cairn. The audibility of the burn would also not be challenged by the Proposed Development and it would remain a factor of experiencing SM2911.

10.6.31 It is therefore considered that the Proposed Development would have a low magnitude impact on the cultural significance of SM2911 Knockupple, long cairn, an asset of high importance, resulting in an adverse effect of **minor significance** which is **not significant**.

SM2329 Lang Cairn, chambered cairn and cairn, Gallangad Muir

10.6.32 SM2329 Lang Cairn, chambered cairn and cairn, Gallangad Muir is a well-preserved chambered long cairn of the Clyde Group and a round cairn, which are situated in moorland at Gallangad Muir. The long cairn is trapezoidal on plan and measures c.60 m in length by up to 15 m in width and is aligned ESE-WNW; the orientation of the cairn remains appreciable. At the east end is a concave facade of orthostats with dry-walling between. The largest stone (about 2 m high) was re-erected in about 1960. The forecourt appears to have been blocked in antiquity. In the centre of the facade are two portal stones, and behind these (but askew) is a single compartment, now covered over. There are two lateral chambers within the body of the cairn. At the west end of the long cairn is a round cairn about 8 m in diameter and 0.9 m in height which, whilst a separate feature, is not clearly distinct from the chambered cairn. Both cairns' assets are assessed together below.

- 10.6.33 As a Scheduled Monument, SM2329 Lang Cairn, chambered cairn and cairn, Gallangad Muir is of high (national) importance.
- 10.6.34 SM2329 is approached from the east along a forestry track, appearing clearly on a small natural rise from within a range of approximately 250 m (Illus 10.2). The cairn does not appear as a prominent feature in views to it from the north, north-east and north-west from where it is screened for the most part by rising topography; the cairn only becomes apparent when within a range of approximately 100 m when approached from these directions. It is bound by felled commercial forestry to the south, with the Cameron Burn located 350 m to the east and the Gallangad Burn 360 m to the west. Open, gently downward sloping moorland is present to the north.
- 10.6.35 Views from the cairn are most open to the north where there are views downslope towards moorland; distant hills are visible in views north-west. Views east are restricted by rising topography and the presence of commercial forestry, whilst views west are limited by the presence of a copse of trees adjacent to the Gallangad Burn. To the south, views are restricted to higher ground, with the slopes leading to the Gallangad Burn clearly visible in views south-west (Illus 10.3). It is possible that the cairn was positioned in order to be understood in relation to the burn as well as to the lower lying ground to the north. The higher ground to the south creates a sense of the cairn being within a topographic 'bowl', defined by this higher ground and the two burns to the east and west. There is no intervisibility with SM2911 Knockupple, long cairn located 765 m to the south.

Illus 10-2: View north-west towards SM2329 Lang Cairn



Illus 10-3 View south-west from SM2329 Lang Cairn towards Gallangad Burn



- 10.6.36 The cairn is therefore experienced within a relatively limited topographic setting; the most informative views are to the north and north-west, over lower lying ground, allowing for an appreciation of the upland setting of the cairn, and to the south-west towards the slopes leading to Gallangad Burn, which the cairn may have related to, and which acts as a natural landmark defining the landscape in which the cairn is experienced. As with SM2911 Knockupple, long cairn, SM2329 is largely typical of Clyde cairns in that it has outward views over upland areas and towards water.
- 10.6.37 Volume 2b **Figure 10.4b** and **10.4e** (wirelines) and **Figure 10.4f** (photomontage) **CHVP2** indicates that 10 of the proposed turbines would be visible to hub height in views south-west from SM2329, the nearest of which would be 1.9 km away. The proposed turbines would appear behind the slopes leading to Gallangad Burn in views south-west from the cairn. However, whilst there may be an element of visual distraction to its possible relationship with Gallangad Burn, the proposed turbines would be located along the horizon of the high ground to the south-west, set back from the burn such that it would remain possible to appreciate the proximity of the cairn to the burn and the possible relationship between the two. The longer ranging views to the north and north-west would remain unchanged, and the relatively contained setting of the cairn would be retained. Informative views towards the cairn on approach from the east would undergo no change. The cairn is largely indiscernible in views from the north-east and is only appreciable from with a range of approximately 100 m, from where the Proposed Development would be

largely screened by rising topography. The local prominence of SM2329 would therefore not be challenged by any potential view of the Proposed Development in views to it from the north-east.

- 10.6.38 It is considered that the Proposed Development would have a low magnitude impact on the cultural significance of SM2329 Lang Cairn, chambered cairn and cairn, Gallangad Muir an asset of high importance, resulting in an adverse effect of **minor significance** which is **not significant**.

SM2281 Stockie Muir, long cairn 2000m NNW of Burncrooks Reservoir

- 10.6.39 SM2281 Stockie Muir, long cairn 2000m NNW of Burncrooks Reservoir is a Clyde Cairn measuring approximately 18 m in length from the portal stones which stand at the head of a shallow forecourt at the east end; it tapers from a width of 11.5 m on the east to 7.5 m at the west end. Although the cairn has been severely disturbed, the remains of a chamber are visible at the east end.
- 10.6.40 As a Scheduled Monument, SM2329 Lang Cairn, chambered cairn and cairn, Gallangad Muir is of high (national) importance).
- 10.6.41 SM2281 is approached from the east through an area of former forestry becoming visible, if not prominent, from a distance of approximately 120 m (Illus 10.4), with shrubs and immature trees, as well as the gently sloping, east facing topography largely screening any long range views of the monument.

Illus 10-4 View west towards SM2281 Stockie Muir, long cairn



- 10.6.42 From the monument, the most notable views are to the north and north-west which take in long range views of distant hills and Loch Lomond (Illus 10.5). Given the apparent preference for positioning Clyde Cairns to take in views of upland areas and water, it is possible the cairn was located with intentional views of the loch and hills in these areas.
- 10.6.43 As with SM2911 Knockupple cairn, views east are largely limited to the east facing slope on which the monument is set. Views north-east and south-east are largely over the upland area in which cairn is located. To the south-west and west views take in the slopes of the appropriately named Cairn Burn with higher ground visible beyond the burn marking the limit of visibility in outward views. Views towards Cairn Burn reflects similar views towards burns from SM2911 Knockupple cairn and SM2329 Lang Cairn, chambered cairn, suggesting the cairn was positioned in relation to the burn.
- 10.6.44 The experience of SM2281 is therefore defined by the upland area and Cairn Burn to the south, allowing for an understanding of the cairn's possible relationship with the burn. The higher ground to the west is largely featureless and limits any long range views from the monument. The more open ground to the north, affords longer range outward views towards Loch Lomond and distant hills, allowing for an understanding of how the cairn may have been positioned in this location in order to take views of these natural landmarks, as is the case for other Clyde Cairns in the west of Scotland.

Illus 10-5 View north-west from SM2281 Stockie Muir, long cairn towards Loch Lomond and hills



10.6.45 Volume 2b Figures **10.5b** and **10.5c** (wirelines) **CHVP 3** indicates that ten of the proposed turbines would be visible to hub height in views south-west from SM2281, the nearest of which would be located 3.72 km away. However, whilst the Proposed Development may introduce an element of visual distraction to its possible relationship with Cairn Burn in views south-west from the cairn, there is no evidence that views towards the part of the landscape in which the turbines would be located are critical to understanding and appreciating the monument. This part of the landscape is largely featureless and there are no landmarks, natural or otherwise, which the cairn relates to in the area where the proposed turbines would be located. The proposed turbines would appear behind the slopes of Cairn Burn in views south-west towards this feature, however, they would appear with a distinct degree of separation from the burn. The distance at which they are located would not interfere with views towards this natural landmark nor detract from an understanding of the possible relationship between the burn and the cairn. The most informative views from the cairn are north and north-west towards Loch Lomond and distant hills which suggest a relationship between this area. These views would remain unchanged. The cairn does not appear as a prominent feature in views to it from the east, and whilst there would be a change to this view as a result of the Proposed Development, the positioning of the proposed turbines over 3 km to the west would not fundamentally alter how the cairn is understood in relation to the upland setting.

- 10.6.46 It is considered that the Proposed Development would have a negligible magnitude impact on the cultural significance of SM2281 Stockie Muir, long cairn 2000m NNW of Burncrooks Reservoir an asset of high importance, resulting in an adverse effect of **negligible significance** which is **not significant**.

SM90107 Dumbarton Castle

- 10.6.47 SM90107 Dumbarton Castle is situated on a volcanic plug of basalt (Dumbarton Rock) and comprises the remains of an Early Medieval fort, a Medieval castle, and a Georgian garrison.
- 10.6.48 Dumbarton Rock has one of the longest recorded histories as a stronghold in Britain. There is known to be significant archaeological evidence for the Early Medieval fort of Alcluith, which was the 'capital' of the British kingdom of Strathclyde. There are significant upstanding elements of the medieval royal castle, built as an important frontier fortress and later used as a place of safety and state prison. The fortifications and buildings constructed for the Georgian garrison in the 18th century are among the most important surviving in Britain.
- 10.6.49 SM90107 Dumbarton Castle derives cultural significance from its intrinsic remains and archaeological potential as an example of a defensive site used in this capacity over an extended period. Contextually, the asset derives cultural significance from its multiple functions, including: defence/security and landscape control/strategic positioning, situated at a defensible position in the Firth of Clyde, and as a display of wealth and power as a dominant landmark, also allowing for control of maritime traffic. The importance of each of these inter-related functions may have changed relatively through time, depending on changing social and political priorities. The setting of the castle that contributes to cultural significance focusses on the Firth of Clyde primarily, and its hinterland more generally.
- 10.6.50 Dumbarton Rock is approached through the town of Dumbarton, from where it is prominently visible in views south-east from the bridge crossing the River Leven and from the Riverside Road east of the river. Travelling eastwards from this area through the town, Dumbarton Rock is largely screened from view by intervening urban development becoming prominently visible from the northern end of Castle Street, within a range of approximately 400 m. The ability to understand the castle's dominance over this area in views to it from much of Dumbarton has therefore been diminished by the urban environment which characterises the town. The imposing nature of the rock is, however, apparent when within 400 m of it, and the 18th century wall and magazine is visible from this northern approach along Castle Street, allowing for an appreciation of the heavily fortified nature of the castle when in use in the post-medieval period.
- 10.6.51 Dumbarton Rock is ascended from the south, along a modern path which leads to King George's Battery and the Governor's House, both of which date to the 18th century. The battery provides open views over the Clyde to the east, south and west, allowing for an understanding of the strategic importance of the castle. From the battery, the visitor passes through the Governor's House, appreciable as the administrative centre of the monument. Passing through the Governor's House, the visitor proceeds to a platform with a staircase leading north to the Guard House. From this location, it is possible to proceed north-east along a narrow path towards Bower Battery, which further highlights the defensible nature of the monument. From this position there are clear views over the

Clyde to the east, south and west. The Guard House, just north of the Governor's House, sits between the two crags which form Dumbarton Rock and allows for an understanding of how this structure would have controlled movement through this part of the monument. From the structure, there are views over the Clyde to the south, south-east and south-west, further highlighting the ability of the inhabitants of the castle to monitor maritime movement.

- 10.6.52 From the Guard House, the visitor ascends a staircase passing through the Portcullis Arch emerging at a landing which leads to the French Prison, allowing for an understanding of how the castle was used in this capacity during the Napoleonic Wars. To the north of the French Prison is the Duke of York's Battery which provides open views north-east, north and north-west over the town of Dumbarton with distant hills also visible. Views north-west take in the River Leven, allowing for an understanding of how the Castle would have controlled and monitored this body of water as well as the land either side of it (Illus 10.6).

Illus 10-6 View north-west from Duke of York Battery overlooking the River Leven



10.6.53 From the French Prison, the visitor may proceed south-east towards a staircase leading to White Tower Crag, the highest vantage point on Dumbarton Rock. From here there are open 360-degree views of the surrounding landscape, the most notable of which take in views east, west and south over the Clyde, strongly reinforcing the ability of the visitor to understand the monument's ability to control this body of water. Views north-west also take in the River Leven, reinforcing the dominance of the monument over this body of water. Views north take in the town of Dumbarton, highlighting how the monument would have monitored and controlled this area of the landscape. Views north from this location take in the hills on which the Proposed Development would be located. The lower slopes of these hills define the extent of settlement, allowing for an understanding of where this may also have extended historically, overlooked by Dumbarton Castle. These views also demonstrate the extent of modern development to the north, indicated by the urban environment of Dumbarton and by Dumbuckhill Quarry, visible in views east.

Illus 10-7 View west over River Clyde from White Tower Crag



- 10.6.54 The northern crag of Dumbarton Rock hosts the Duke of Argyll's Battery, the Prince Regent's Battery, a double wall and magazine; (the latter two features are visible in views on approach to the castle along Castle Road). These features provide further understanding of the heavily fortified nature of Dumbarton Castle and its dominance over the wider area is understood through similar views from these areas to those from White Tower Crag. The highest point of the northern crag (known as The Beak) is the location of the remains of the Early Medieval fort which existed here, allowing for an understanding of the long history of Dumbarton Rock as a desirable, fortifiable site.
- 10.6.55 Volume 2b **Figure 10.6b, 10.6f** (wirelines) and **10.6g** (photomontage) **CHVP 4** indicates that 10 of the proposed turbines would be visible to hub height in views north-east from White Tower crag, the nearest of which would be located 5.55 km away. The proposed turbines would also be visible from the northern crag of the Dumbarton Rock as well as the Duke of York's Battery. Whilst this would introduce visual change to north-east facing views from these locations, this area to the north of Dumbarton Castle has already been extensively changed through urban development such that the introduction of the proposed turbines would not significantly alter the existing conditions which characterise this area. The distance at which the proposed turbines are located is such that they would not prevent the visitor from understanding the dominance that Dumbarton Castle would have exerted over the area of Dumbarton. The lower slopes of the hills on which the Proposed Development would be located serve to define the extent of settlement over which the castle dominates; there is no evidence that the hills beyond this were a critical area the castle sought to control. The key views over the Clyde, the River Leven and the town of Dumbarton would all remain fully appreciable and the ability to understand and

appreciate Dumbarton Castle as a defensive stronghold with a long history would be retained.

- 10.6.56 Dumbarton Rock is a notable feature in views from the south side of the Firth of Clyde along the A8. Views from this area are indicative of how the rock and the castle may have appeared to approaching ships. From this area, the dominance of the rock over the Clyde, and the ability of those that inhabited it to control and monitor maritime traffic and control the land in the surrounding area can be understood and appreciated. It is likely that views towards the rock on approach by boat from the north-west would provide a similar experience, albeit, based on waterside views from Port Glasgow (see for example, views from Newark Castle, Port Glasgow Volume 2b **Figure 9.7e-9.7h**), Dumbarton Rock only becomes clearly discernible from this vicinity, approximately 7 km to the west. The 18th century structures which form much of the castle are difficult to discern in views from this distance and as the visitor proceeds east along the A8 from Port Glasgow, trees which line the road largely screen any views of the monument. The 18th century structures become more readily appreciable further to the east in views north to the castle from the town of Langbank. There are more gaps in the treeline which follows the A8 in this vicinity, allowing for an understanding and appreciation of how Dumbarton Castle overlooked and controlled the Clyde.
- 10.6.57 Volume 2b **Figure 10.7b, 10.7c** (wirelines) and **10.7d** (photomontage) **CHVP5** indicates that 10 of the proposed turbines would be visible to hub height in views north-east from the town of Langbank, the nearest of which would be located 7.32 km away. Four of the proposed turbines would backdrop Dumbarton Castle, distracting from the dominance that Dumbarton Castle would have had over the wider landscape. Landscape and Visual viewpoint 10 (Volume 2b **Figure 5.25b, 5.25d** (wirelines) and **5.25e** (photomontage), located 430 m to the north-west on Main Road, Langbank, indicates that the Proposed Development would be offset from Dumbarton Rock in views to it from this area and would not present the same level of dominance over the monument. There is therefore an area of approximately 250 m east and west of CHVP5, along the A8, from where the Proposed Development would at least partially backdrop SM90107 Dumbarton Castle. The change to these views, which are also representative of how the monument appears on approach from the Clyde, would therefore challenge the dominance of the monument.
- 10.6.58 The area from which the proposed turbines would backdrop Dumbarton Castle is, however, relatively limited, and the magnitude of visual distraction from the dominance of the monument would diminish when continuing west along the A8 and west along the Firth of Clyde as the turbines would become further offset from the castle.
- 10.6.59 Volume 2b **Figure 10.7f, 10.7g** (wirelines) and **10.7h** (photomontage) **CHVP5a** presents views towards SM90107 Dumbarton Castle from Newark Castle, Port Glasgow. As confirmed through consultation with HES, this viewpoint is considered an appropriate proxy for how the monument would appear when approached from the west on boat along the Clyde. The visualisation indicates that all of the proposed turbines would be present in views towards the asset from this location. However, as stated in the preceding paragraph the Proposed Development would be offset from the monument at this distance and would not backdrop it. From this distance, Dumbarton Rock does not appear as dominant over the Clyde as it does in closer range views albeit it is likely that in the past people approaching the monument from the west by boat would have been able to identify Dumbarton Rock from this location and would have understood how the castle

controlled this routeway. Whilst there may be a degree of visual distraction in views towards SM90107 as a result of the Proposed Development, the degree of separation between the monument and the proposed turbines is such that it would remain possible to understand how Dumbarton Castle would have controlled and monitored maritime traffic along the Clyde. The perceived dominance of the monument over this routeway would therefore not be challenged by the Proposed Development.

- 10.6.60 In the round, taking into account the experience of SM90107 Dumbarton Castle from the castle itself, in views to it from the town of Langbank and the A8 and Newark Castle, Port Glasgow (the latter two of which are indicative of views from the Firth of Clyde) and how this would change as a result of the Proposed Development, a low adverse impact is predicted on an asset of high importance resulting in a **minor** adverse effect which is **not significant**. The key views from the monument would be fully retained.

Inventory Gardens and Designed Landscapes and Listed Buildings

- 10.6.61 Gardens and Designed Landscapes (GDLs) derive cultural significance through their artistic layout which may include designed views and vistas, inter-relationships between heritage assets therein, as well as potentially long-range views towards historic or natural features located outwith the defined landscape boundary.
- 10.6.62 Many Listed Buildings (LBs) are designated primarily for their architectural significance, physical remains of societies who built and used them, providing information on construction techniques, fashion and style. All buildings have a setting which contributes to their significance, being informative about how the building functioned in relation to its surrounding environment, often in relation to and with a group value with other buildings. The majority of the LBs identified for detailed assessment are located within GDLs and thus potentially derive cultural significance through designed views and vistas, inter-relationships between heritage assets, as well as potentially long-range views beyond the GDL. The nested settings of LBs within GDLs are assessed below.

GDL00306 / LB24907 Overtoun House

- 10.6.63 GDL00306 Overtoun House is a typical representative example of a mid to late 19th century parkland landscape with picturesque burnside walks and the remnants of a contemporary garden. The influence of landscape designers Edward Kemp and Henry Milner adds greatly to the interest of the site, as there are few known examples of their work in Scotland. LB24907 Overtoun House is located within and forms a key component of the GDL. The house was built in 1860-63 and comprises a Scottish Baronial mansion house built for James White of Overtoun.
- 10.6.64 The Inventory entry for GDL00306 Overtoun House deems it of 'Outstanding' value for its historical and architectural aspects and 'High' for its scenic aspects.
- 10.6.65 Overtoun first appears on Johann Blaeu's Atlas of 1654 as a farm, house and walled enclosure; the GDL was created in the 1860s, with the construction of LB24907 Overtoun House and associated ornamental grounds. The GDL as it appears today is largely the same as that shown on the Second Edition OS map of 1899, comprising fields used for pasture at the south, with tree lined pathways adjacent to Overtoun Burn at the west extending to the north towards an area of parkland.
- 10.6.66 LB24907 Overtoun House comprises three and two storeys with a five-storey square tower at the north-west corner. There is a rectangular Terraced Garden to the south of

the house is and a bridge, designed by Henry Milner, over the Overtoun Burn to the west. The West Lodge of the house, probably built around 1892, is stone-built with crow-stepped gables and a corner tower with slated pepperpot roof.

10.6.67 GDL00306 Overtoun House derives cultural significance from its design intended to provide both a pleasant park landscape for LB24907 Overtoun House, defined by woodland walks along Overtoun Burn and productive agricultural land to the south. As well as its intrinsic architectural interest, the reciprocal relationship between LB24907 Overtoun House and the GDL contributes to the building's cultural significance, with it functioning as the residential centre of the GDL.

10.6.68 As an Inventory Garden and Designed Landscape and a Category A Listed Building, GDL00306 Overtoun House and LB24907 Overtoun House are of high (national) importance.

10.6.69 The Inventory entry describes the setting and location of the GDL and LB24907 Overtoun House as follows:

'Overtoun House is situated in the hills to the north-east of Overtoun. It lies at the end of a minor road reached from the A82 just West of Dumbarton, by turning north through the village of Milton. The house stands on a platform with the Lang Craigs to the east. The wooded Barwood Hill lies to the south of the house, and the Overtoun Burn lies to the west. Overtoun estate is well concealed from public roads and only comes into view after one has proceeded up Milton Brae, the minor road that leads off the A82. There are views from the house and formal garden over the Firth of Clyde, and views from Dumbarton of the backdrop of planting of the Overtoun estate. The Lang Craigs form a dramatic backdrop to the setting of the house and the designed landscape.'

10.6.70 On the approach into, and when leaving, the GDL from the south and north respectively along Milton Brae, agricultural land located to the west of the road currently used for grazing livestock is the main focus of views, allowing for an understanding of the productive function of this southern area of the GDL. Views north and west are largely limited by the presence of trees which line the road. As noted above LB24907 Overtoun House is largely screened from view, only coming into view from within a distance of approximately 250 m. LB24907 Overtoun House is the primary focus on approach to it as Milton Brae turns to the north-west, allowing for an appreciation of the architecture of the structure as well as an understanding of it as the centre around which the GDL functions.

10.6.71 From the car park at the north elevation of LB24907 Overtoun House (Illus 10.8), views are focussed on an area of parkland, defined by policy woodland which lines the Overtoun Burn at the west and by a strip of trees lining a north-south running track at the east. Views of Lang Craigs hills to the north-east are the only landmark outwith this area visible from the north of the house. An overhead powerline is present in the foreground of this view, distracting somewhat from the relationship between the house and this area of parkland. From the bridge at the west of the house, there are views north-west and south-east over Overtoun Burn, however, these are largely limited to the burn itself, with long range views obscured by the woodland which lines the burn.

Illus 10-8 View north-east from the north elevation of LB24907 Overtoun House, centred on the location of the Proposed Development



- 10.6.72 Views north from just south of the ornamental garden at the south of LB24907 Overtoun House are largely dominated by the house itself, with clear views of Lang Craigs hills to the north-east also possible, albeit slightly obscured by an overhead pylon. Views in all other directions from this area are obscured by the trees which line the woodland walkway which runs north-east to south-west at the west of LB24907 Overtoun House. Overtoun Burn is the primary focus when walking along the paths adjacent to it to the west of LB24907 Overtoun House, with the trees which line it and rising topography to the north preventing any long range views from these areas.
- 10.6.73 Views from parkland to the north of LB24907 Overtoun House are largely contained by the presence of trees to the north, east and west, creating to some extent a sense of seclusion. From within a range of approximately 260 m to the north-east within this area, there are clear views south-west back to LB24907 Overtoun House, reinforcing the relationship between the parkland and the house it was designed to serve.
- 10.6.74 The experience within the GDL is therefore largely focussed on the environs of LB24907 Overtoun House, (which acts as the focal point for the GDL), the tree lined paths along Overtoun Burn and the parkland to the north. The approach to the house along Milton Brae allows for an appreciation of the agricultural land to the south-west and the productive role this plays within the GDL. It also allows for an understanding of the separation of this productive land at the south-west from the recreational grounds in the environs of LB24907 Overtoun House.
- 10.6.75 Volume 2b **Figures 10.8b** and **10.8c** (wirelines) **CHVP6** indicates that four of the proposed turbines to hub height and the tips of six proposed turbines would theoretically be visible in views NNE from LB24907 Overtoun House, the nearest of which would be located 2.96 km away. Figure 10.8d (photomontage), however, indicates that the policy

woodlands which line Overtoun Burn and a considerable portion of this area of parkland to the north of the house would screen views of the Proposed Development such that there would be no change to outward views from the house and the grounds to its north. Whilst the Proposed Development would theoretically constitute visual change to this view should the woodland be removed this is considered very unlikely. It is likely the policy woodland was planted in order to create a sense of seclusion, defining the burnside walkways and parkland to the north, excluding long range outward views from the north of the house and from within the parkland in this area; it would continue to function in this capacity.

- 10.6.76 Views of Lang Craigs hills, the natural landmark backdropping LB24907 Overtoun House, would also remain unchanged. Similarly, the Proposed Development would be screened by LB24907 Overtoun House in views to it from just south of the ornamental gardens. The extensive woodland cover which defines the agricultural land to the south-west of the GDL would also screen views of the Proposed Development such that there would be no change to how this area is understood and appreciated as the productive area of the GDL.
- 10.6.77 It would remain possible to understand and appreciate the reciprocal relationship between GDL00306 Overtoun House and LB24907 Overtoun House and the factors of setting which contribute to the assets' cultural significance would be retained.
- 10.6.78 It is therefore considered that there would be a negligible magnitude impact on the cultural significance of GDL00306 Overtoun House and LB24907 Overtoun House assets of high importance, resulting in an adverse effect of **negligible significance** which is **not significant**.

GDL00180/ LB13641 Finlaystone House

- 10.6.79 GDL00180 Finlaystone House is a designed landscape which in its present form was laid out between 1750 and 1860. Major improvements to the gardens were undertaken in the late 19th & early 20th centuries (from 1955). James Whitton is thought to have been involved in the design of the terraced garden c. 1900. The GDL comprises areas of parkland, some of which is used for grazing livestock, formal and informal gardens (the 'New Garden' and the 'Bog Garden') associated with LB13641 Finlaystone House and extensive areas of woodland.
- 10.6.80 The Inventory entry for GDL00180 Finlaystone House deems it of 'Outstanding' value for its historical, architectural and nature conservation aspects and 'High' value for its artistic, horticultural and scenic aspects.
- 10.6.81 LB13641 Finlaystone House was built c.1760 around an earlier castle and remodelled in the Baroque style by Sir John James Burnet in c.1900 although the turrets predate this extension. The South Lodge stands on the Old Greenock Road at the end of the south drive. The listing also comprises stables, garages and garden buildings which lie to the east of a walled garden. They are thought to have been built in the mid-19th century and were altered c.1900. Also present is a laundry (currently in use as a tearoom) on the west bank of Finlaystone Burn, a stone bridge across the Finlaystone Burn, two sundials, a stone Japanese lantern and stone ornaments.
- 10.6.82 As an Inventory Garden and Designed Landscape and a Category A Listed Building, GDL00180 Finlaystone House and LB13641 Finlaystone House are of high (national importance).

- 10.6.83 The Inventory entry for GDL00180 Finlaystone House describes the location and setting of the GDL and LB13641 as follow:

'Finlaystone House is situated on the south bank of the Firth of Clyde between the village of Langbank and the town of Port Glasgow, some 18 miles (29km) west of Glasgow. The village of Kilmacolm lies 2.5 miles (4km) to the south. The A8(T) forms the northern boundary of the policies whilst the old Greenock Road forms that to the south. The mansion is set on a whinstone cliff south of the River Clyde. The Finlaystone Burn flows northwards through the policies and cuts down to the River Clyde over a series of waterfalls; it was dammed to form a pond in the south of the policies for the purpose of providing water power for electricity generation...The surrounding landscape to the south is farmed while, to the west, lie the housing and industrial developments of Port Glasgow; Langbank is to the east. To the north, across the Firth of Clyde, lies Dumbarton Rock and the town of Dumbarton beyond which views are gained to the Kilpatrick Hills. Views can be gained along and across the Clyde, particularly from the terraced garden. From the A814, on the northern shore of the Firth of Clyde, views can be gained across to Finlaystone and the woods and house are of some significance from the A8(T) along the boundary of the site.

Finlaystone House stands on a cliff above the Firth of Clyde...The designed landscape extends north to the A8(T), south to the old Greenock Road, west beyond Brackenhead Plantation and east to Marypark. In 1830, the Glasgow/Greenock railway line separated the rest of the estate from the foreshore although this remains part of the estate...

There are several estate plans at Finlaystone including a survey plan of 1861, and documentary evidence is also provided by General Roy's plan of 1750 and the OS map editions of 1866 & 1910. These show that the policies were extended to the east between 1750 and 1860 and have remained consistent in size since then. Four drives link the house with the outer limits of the policies; of these, only the east and south drives remain in regular use.'

- 10.6.84 The GDL is most commonly entered via a roughly east-west running road off the A8 Greenock Road. The road is tree lined, with no long range views possible, although agricultural land immediately north of the road is visible for approximately c. 300 m after turning onto the road from the A8. This allows for an appreciation of this productive area of the GDL. LB13641 Finlaystone House is screened from view by trees, becoming visible from within a range of approximately 100 m when crossing the bridge over Finlaystone Burn. The house appears somewhat offset to the north-west from this area of the road and is not a clearly intended focal point of this approach (Illus 10.9). It is, however, possible to appreciate the architectural interest of the house from this range, albeit a large tree located to the east of the house prevents an unobstructed view of it. Views from this eastern elevation of the house are restricted to the policy woodland which the visitor passes through on the approach to the house itself, with no long range views possible.

Illus 10-9 View west of LB13641 Finlaystone House



- 10.6.85 From the bridge, it is possible to appreciate the 'New Garden' which is located either side of Finlaystone Burn; in views south from the bridge, the old laundry building is backdropped by the plants and vegetation which form the garden and it is likely this was an intentionally designed view and provides an experience of the GDL aesthetics.
- 10.6.86 Continuing south along the access road provides views of the old laundry and outbuildings associated with LB13641 Finlaystone House, allowing for an understanding of the structures associated with supporting the country house. Finlaystone Burn provides an aural element to the experience, with the waterfall located approximately 180 m south of the old laundry building clearly audible. To the east of the burn is policy woodland with woodland trails; whilst the woodland in this area is more extensive in the present day than it was historically, the First Edition OS map of 1864 indicates there were tracks through or along woodland at the east LB13641 Finlaystone. The current woodland trails therefore allow for an appreciation of what would have been, and continues to be, an important recreational aspect of the GDL.
- 10.6.87 To the west of the structures which sit on the west side of the access road is the walled garden which the visitor can pass through, allowing for an appreciation of this designed element of the GDL. The visitor can leave the walled garden at its northern extent from where it is possible to see LB13641 Finlaystone House in views north, with the River Clyde beyond the house (Illus 10.10). This western side of LB13641 Finlaystone House is the only area of the GDL from where there are any outward views over the Clyde.

Illus 10-10 View north-east of LB13641 Finlaystone House



- 10.6.88 From the gardens to the west of LB13641 Finlaystone House, it is possible to understand the relationship between the house and this area, which would have provided a recreational space for its inhabitants and visitors. The architectural elements of the house can also be appreciated in views east from this area. The western elevation of the house overlooks the gardens, creating a sense of this being an area of private recreation, in contrast to the eastern elevation which overlooks the public road leading into the GDL. Outward views northwards over the River Clyde are largely screened by mature policy woodland which line the northern area of the garden, although there is one area of the garden immediately north-west of LB13641 Finlaystone House (described in the list entry as the 'terraced garden' from where it is possible to gain views north and partial views east and west along the Firth of Clyde. It is possible to appreciate LB13641 Finlaystone House's elevated position, with its northern elevation overlooking the river and towards the hills on the opposite side of the Clyde.
- 10.6.89 Paths lead west from the garden from where it is possible to view agricultural land which bound the gardens in this area, allowing for an understanding of the segregation between the productive and recreational areas of the GDL.
- 10.6.90 The experience of GDL00180/ LB13641 Finlaystone House is therefore largely inward focussed, with only the western area of LB13641 Finlaystone House offering any outward views beyond the boundary of the GDL. It is within the context of the GDL itself that it and LB13641 Finlaystone House are best understood and appreciated. The differing areas of the GDL, used for recreation and as grazing for livestock can be understood, whilst the designed elements associated LB13641 Finlaystone House can be appreciated.

- 10.6.91 Volume 2b **Figures 10.9b** and **10.9e** (wirelines) **CHVP7**, **Figure 10.10b**, **10.10c** (wirelines) and **Figure 10.10d** (photomontage) **CHVP8** indicate that 10 of the proposed turbines would be visible to hub height in views north-east from the garden terrace immediately north-west of the house from where it is possible to gain partial views east and west along the river and from the area south of LB13641 Finlaystone House from where views of the Clyde are possible. The nearest proposed turbine would be located 8.5 km away from the garden terrace and 8.5 km away from the area south of LB13641 Finlaystone House.
- 10.6.92 Whilst this would introduce visual change to these views, outward views to the north from LB13641 Finlaystone House and this area of the GDL do not make a substantial contribution to the cultural significance of the assets. The principal elevations of LB13641 Finlaystone House face east and west, away from the Proposed Development and focus views on the policy woodland at the west and the garden at the east. Policy woodland has existed at the north of LB13641 Finlaystone House since at least the production of the First Edition OS map of 1864, suggesting that outward views to the north originally made a limited contribution to the designed elements of the GDL. Whilst it would be possible to see the Proposed Development from the viewpoints outlined above, these locations do not specifically draw the visitor's view north-east towards the area in which the Proposed Development would be located and are in any case at least partially screened by policy woodland. There are no identifiable viewpoints within the GDL or LB13641 Finlaystone House which were designed with long range views towards the area of the Proposed Development. The house and GDL are understood, appreciated and experienced from within their own environs and would continue to function in this capacity. It would remain possible to understand and appreciate the assets as a substantial 19th century country house, with earlier historical roots, which functions within a designed landscape used for both recreation and for productive agriculture. The factors of setting which contribute to the assets' cultural significance would be adequately retained such that it would remain possible to understand and appreciate both the GDL and LB13641 Finlaystone House.
- 10.6.93 It is therefore considered that there would be a negligible magnitude impact on the cultural significance of GDL00180/ LB13641 Finlaystone House assets of high importance, resulting in an adverse effect of **negligible significance** which is **not significant**.
- GDL00330 / LB14469 Rossdhu
- 10.6.94 GDL00330 Rossdhu is a parkland landscape on a promontory of Loch Lomond, partly based on an improvement plan by Thomas White Senior, 1797. The GDL comprises areas of parkland, including a substantial deer park, policy woodland which is present largely at the west, south and central areas, and a walled garden located in roughly the centre of the GDL. The GDL provides the setting for LB14469 Rossdhu House and associated structures as well as a former castle which once stood at the north of the GDL, and a chapel. The GDL currently functions as a golf course, although much its designed elements remain appreciable.
- 10.6.95 The Inventory entry for GDL00330 Rossdhu deem it of 'Outstanding' value for its architectural, scenic and nature conservation qualities and of 'High' value for its historical interest.

- 10.6.96 LB14469 Rossdhu House is a three-storey classical mansion, erected in 1772. The architect is recorded as Thomas Brown although Sir John Clerk was consulted and was probably the designer. The portico and wings were added in the early 19th century. The house was the seat of the Colquhoun family built close to an earlier castle (Rossdhu Castle, itself a Scheduled Monument SM5271). The architect was probably John Baxter, and the house was enlarged by Sir James Colquhoun in 1819. The house is now a golf club and was extensively renovated in 1995/96.
- 10.6.97 As an Inventory Garden and Designed and Category A Listed Building GDL00330 Rossdhu and LB14469 Rossdhu House are of high (national) importance.
- 10.6.98 The Inventory listing for GDL00330 Rossdhu describes its location and setting as follows:
- 'Rossdhu is situated on the west shore of Loch Lomond, some 3km (2 miles) south of Luss and 7km (4.5 miles) north of Balloch. The policies are bounded by the policy wall along the A82(T) to the west side, and by the loch on the north, east and south sides. The site is sheltered by the Luss hills to the west which rise to 700m (2297 ft) at Beinn Chaorach. The Finlas Water rises in these hills and flows through the policies into Loch Lomond. ... The setting enables views along Loch Lomond in both directions and across the loch to Ben Lomond. The surrounding landscape of loch and islands, with its backdrop of hills, is important to the designed landscape. Views into the park from the landward side are limited by the high policy walls but Rossdhu is an attractive landscape feature from the loch.*
- Rossdhu House is set to the north of the parkland on a small promontory which is surrounded on three sides by the waters of Loch Lomond. A previous stronghold was set further to the west on the same promontory but the new site of the present house enables fine views of Loch Lomond and the islands. The designed landscape is bordered by the policy walls and the loch, and has been thus enclosed since the early 19th century. General Roy's map of 1750 shows only a small wooded enclosure around the old castle, with two fields enclosed adjacent to the road, and woodland lining the shore. The policies were enclosed by the 27th Laird, Sir James, who succeeded in 1805. He drained the parks, laid out the drives and made additions to the house. The resulting layout is shown on the 1st edition OS map of c.1855, and has remained similar to the present day. There designed landscape extends to 235 hectares (581 acres).'*
- 10.6.99 Access into GDL00330 Rossdhu/LB14469 Rossdhu was not possible at the time of the site visit; this assessment has therefore been carried out based on the nearest publicly accessible views into the GDL, a publicly available 360-degree photograph taken from the east of LB14469 Rossdhu and with the aid of wireline visualisations.
- 10.6.100 Views into the GDL from the west are restricted by woodland, with only partial inward views possible from the golf course entrance off the A82. An access track from here, bound by policy woodland to the north leads east towards the walled garden. North of the walled garden is the area formerly used as a deer park and it is within this area that around half of golf course is present. The rest of the course is to the west of this, with strips of policy woodland having been removed to make way for the fairways and greens. Policy woodland would largely restrict outward views from these areas, although the northern part of the former deer park is more open. The character of the northern extent of the GDL is defined by LB14469 Rossdhu House. From the east elevation of the house it is possible to appreciate the architecture of the building and there are views eastwards

over Loch Lomond towards distant hills, with Inchmurrin Island also discernible, albeit trees in this area partially obscure views (Illus 10.11). Views east over Loch Lomond allow for an understanding of how the present day house (which was built in much the same location as an earlier castle) would have been positioned to control and monitor the loch.

Illus 10-11 View south-east from east elevation of LB14469 Rossdhu House (from publicly available Google imagery)



10.6.101 Volume 2b **Figures 10.11c** and **10.11d** (wirelines) **CHVP 9** indicates that 10 of the proposed turbines would be visible to hub height, with their bases located over the horizon, in views south-east from the east of LB14469 Rossdhu House, with the nearest turbine located 11.23 km away. Whilst this would introduce visual change to this view, the distance at which the proposed turbines would be located is such that they would be difficult to discern. This view from the east elevation of LB14469 Rossdhu House is wide ranging and not understood to have been designed specifically to take in views of the area of the landscape in which the Proposed Development would be located. As stated in the Inventory listing for GDL00330 Rossdhu ‘*The surrounding landscape of loch and islands, with its backdrop of hills, is important to the designed landscape.*’ It is considered likely the area east of LB14469 Rossdhu House was designed to be more open and to enjoy views of the wider area defined by Loch Lomond and hills as a whole, rather than specifically to relate to one particular part of this wider landscape. Whilst the Proposed Development would introduce visual change to this view, these natural features would remain discernible and it would remain possible to understand, appreciate and experience the relationship between GDL00330/LB14469 Rossdhu House and this landscape. It would also remain possible for the visitor to understand, appreciate and experience the historic designed features of the GDL to the south of LB14469 Rossdhu House (such as the walled garden and the deer park) which have been largely retained as part of the modern golf course. The factors of setting which contribute to the assets’ cultural significance would be adequately retained such that it would remain possible to understand and appreciate the cultural significance of the GDL and LB14469.

10.6.102 It is therefore considered that there would be a negligible magnitude impact on the cultural significance of GDL00330/LB14469 Rossdhu House assets of high importance, resulting in an adverse effect of **negligible significance** which is **not significant**.

GDL00042/LB123 Balloch Castle

10.6.103 GDL00042 Balloch Castle is a landscape park typical of the early 19th century and improved in the second half of the 20th century. The GDL comprises paths and walks

through areas of woodland and parkland and a walled garden at the south. LB123 Balloch Castle is situated at the north-east of the GDL overlooking parkland to the west, with associated gate lodges also present.

10.6.104 The Inventory entry for Balloch Castle IGDL deems it of 'High' or 'Outstanding' value for its scenic, architectural, artistic, horticultural and nature conservation aspects.

10.6.105 Designed in the early 1800s, the park was commissioned by John Buchanan to complement the Gothic-style castle he was building on a low rise overlooking Loch Lomond. Planted with a variety of specimen trees, rhododendrons and areas of ornamental planting, the park is typical of early 19th century landscape parks and has remained largely unaltered in terms of its layout since its establishment. The estate was in various private hands until 1915 when it was purchased by Glasgow City Corporation. The estate is currently a busy Country Park open to the public and maintained by West Dunbartonshire Council.

10.6.106 LB123 Balloch Castle was built as a residence in 1808–1809 at the order of John Buchanan of Ardoch (1761–1839), who had bought the estate in 1800 and established the parkland which forms much of the GDL. The castle was designed by Robert Lugar and is built in the Tudor Gothic style.

10.6.107 As an Inventory Garden and Designed Landscape and a Category A Listed Building, GDL00042 and LB123 Balloch Castle are of high (national) importance).

10.6.108 The Inventory entry for the GDL outlines its location and setting as follows:

'[the GDL] is situated on the south-east shore of Loch Lomond on the edge of the designated National Scenic Area, half a mile north of the town of Balloch and within easy walking distance of it. The Park is bounded to the west by Loch Lomond and the River Leven, to the north by the Burn of Balloch, and to the east by its woodland belts. The Park slopes gently westwards down to Loch Lomond, and the Castle is set on a high point taking full advantage of the spectacular views over the south end of Loch Lomond.

The Country Park extends over 217 acres (88ha) of the former 815 acre (330ha) estate and covers the policies of the Castle. The existing landscape was designed in the 19th century and has retained the same structure since'.

10.6.109 Currently the GDL is most commonly approached from the southern car parks in Moss O'Balloch alongside the River Leven. A second, smaller car park beside the castle can be accessed from the eastern side of the GDL. From the south, paths wind through woodland planted across the southern third of the GDL. One path follows the bank of the river and allows glimpses of the far bank through the trees. These glimpsed views gradually open up as one approaches the mouth of the river, and the southern end of Loch Lomond becomes more visible. The riverside path continues along the loch side, following the perimeter of the GDL. The 1864 OS mapping clearly depicts these woodland paths and the managed views across the loch. Other paths from the south take a more direct route towards the castle, passing the walled garden before leaving the ornamental woodland to cross an area of undulating landscaped parkland, planted with ornamental trees. From these paths the castle appears as a prominent feature on the slopes to the east, but views west and north across the loch are restricted by the loch-side woodland. The mountains behind Luss and Auchentullich on the western shore of the loch are the principal topographic features in views from the parkland.

10.6.110 Upon reaching the castle, in its position overlooking the parkland, views across the loch open up to the west and north. The ornamental trees and parkland form the foreground of these views, which sweep away west and north, across the loch side woodland. To the west and north, across the downward sloping parkland, Loch Lomond can be seen curving away to the north, with mountains rising behind it. Views are drawn to these more open viewpoints, forming a key visual relationship between the castle, GDL and the loch. Views east from the eastern elevation of the castle are obscured by policy woodland located immediately in front of the castle in this area.

10.6.111 Views towards GDL00042/LB123 Balloch Castle from the west side of Loch Lomond are generally screened by tree cover along the A82; from Duck Bay, however, it is possible to glimpse LB123 Balloch Castle and the west facing slope of the GDL which leads to the castle (Illus 10.12). Although the castle is difficult to discern from this viewpoint, it is

Illus 10-12 View east from Duck Bay towards LB123 Balloch Castle (highlighted)



10.6.112 The most informative experience of GDL00042/LB123 Balloch Castle is, however, when within the boundaries of the GDL; from here it is possible to understand, appreciate and experience the reciprocal relationship between the GDL and the castle as its focal point. The relationship between the GDL and castle and the loch are also discernible in views westwards from the castle, allowing for an appreciation of its setting overlooking the loch.

10.6.113 The most informative views from the castle are from its western elevation, overlooking the parkland of the GDL and Loch Lomond. This view would remain unaffected.

10.6.114 Volume 2b **Figure 10.12b** and **10.12d** (wirelines) **CHVP10** indicates that ten of the proposed turbines would theoretically be visible in views east from LB123 Balloch Castle,

the nearest of which would be located 4.55 km away. However, the policy woodland located immediately east of the castle would screen any views of the proposed turbines. Whilst the Proposed Development would theoretically constitute visual change to this view should the woodland be removed this is considered very unlikely given the policy woodland in this area continues for a further 130 m to the east. There is in any case no evidence that the castle was constructed in order to enjoy views east, and this area has been at least partially covered in woodland since the production of the First Edition OS map of 1864.

10.6.115 Volume 2b **Figure 10.13b** and **10.13c** (wirelines) **CHVP11** indicates that ten of the proposed turbines would be visible in views south-east towards GDL00042/LB123 Balloch Castle from Duck Bay on the west bank of Loch Lomond. The nearest proposed turbine would be located 6.42 km away. Whilst this would introduce visual change to this view towards GDL00042/LB123 Balloch Castle, this view does not make a substantial contribution to the cultural significance of the assets. Whilst it is possible to appreciate the castle in relation to its parkland from this viewpoint, the castle itself is difficult to discern (Illus 10.12), and there is no evidence that GDL00042/LB123 Balloch Castle were intended to have been viewed from this side of Loch Lomond. The proposed turbines would be offset from the castle and would not backdrop it or the GDL. There are no viewpoints further north from where GDL00042/LB123 Balloch Castle are discernible from this side of the loch; as such there are no views from where the Proposed Development would appear directly behind the assets.

10.6.116 The factors of setting which contribute to the assets' cultural significance would be adequately retained such that it would remain possible to understand and appreciate both the GDL and LB123 Balloch Castle.

10.6.117 It is therefore considered that there would be a negligible magnitude impact on the cultural significance of GDL00042/LB123 Balloch Castle assets of high importance, resulting in an adverse effect of **negligible significance** which is **not significant**.

LB42920 Renton, Alexander Street, Trinity Parish Church, Church Of Scotland with Boundary Wall and Gatepiers

10.6.118 LB42920 is a Category B Listed Building located in the town of Renton. The church is a T-plan gothic church with a tall three stage entrance tower at its centre. It was designed by David Barclay and constructed 1891-1892. The church grounds extend north, south and east towards the River Leven, with a burial vault present at the north of the grounds.

10.6.119 As a Category B Listed Building Renton, Alexander Street, Trinity Parish Church, Church Of Scotland with Boundary Wall and Gatepiers is of medium (regional) importance.

10.6.120 The church is approached via the B857 (Lennox Street) in the town of Renton, from where the visitor turns onto Leven Street. The church acts as the terminal focal point in views east along Leven Street, flanked by terraced houses either side on the approach to it, giving the impression of the church playing an important role in the lives of the local community. The church is prominently visible, silhouetted against the sky and backdropped by the western slopes of Little White Hill (Illus 10.13) the peak of which is located approximately 500 m south of the Proposed Development site.

Illus 10-13 View east along Leven Street towards LB42920



10.6.121 The architectural detail of the church can be appreciated in views to it from Leven Street as well as from its grounds. From the grounds of the church, views of the River Leven are possible, allowing for an appreciation of the church's elevated position over the river. To the north-east of the river is a modern industrial estate. The hills which backdrop the view of the church from Leven Street are discernible from the grounds but mature trees at the east of the grounds and at the east of the River Leven do not allow for unobstructed views. The grounds largely function as a pleasant area which can be used by the congregation although there is one burial plot present in the grounds.

10.6.122 The church primarily derives its cultural significance from its architecture, however it seems likely its location at the east of Leven Street was intentionally chosen to allow for it to be backdropped by the hills to the east. The contextual experience of LB42920 is largely derived from its prominent appearance as a focal point framed by Leven Street.

10.6.123 Volume 2b **Figures 10.14b** and **10.14d** (wirelines) **CHVP12** indicates that 10 of the proposed turbines would be visible to hub height in views north-east from the grounds of LB42920, with the nearest turbine located 4.04 km away. Whilst this would theoretically introduce visual change in outward views from the grounds of the church, such views do not make a substantial contribution to the cultural significance of the asset. Outward views are largely screened by trees, and any views north-east take in an already heavily industrialised area, with an industrial estate and modern housing developments visible through gaps in the tree cover. There is no evidence that the hills to the north-east were an intended focal point for views from the grounds of the church, with the grounds instead acting as an area to be used by the congregation and from where the church itself can be appreciated. Views to the church from Leven Street which take in the slopes of Little White Hill would remain unaffected as the Proposed Development would be located over

500 m further north from this area and would not appear in views east along Leven Street. Views north-east towards the Proposed Development from Leven Street are screened by terraced housing at the north of the street and would undergo no change. It would remain possible to understand, appreciate and experience LB42920 Renton, Alexander Street, Trinity Parish Church, Church Of Scotland with Boundary Wall and Gatepiers in relation to its key local setting, with the hillside backdrop undergoing no change. The factors of setting which contribute to LB42920's cultural significance would be retained.

10.6.124 It is therefore considered that there would be a negligible magnitude impact on the cultural significance of LB42920 Renton, Alexander Street, Trinity Parish Church, Church Of Scotland with Boundary Wall and Gatepiers, an asset of medium importance, resulting in an adverse effect of **negligible significance** which is **not significant**.

LB43911 Auchenlarich With Stables and Gatepiers

10.6.125 LB43911 Category B Listed Building is a 19th century L-plan farmhouse substantially remodelled and Baronialised in the late 19th century and early 20th century. The house comprises a two storey, five bay rectangular plan villa with crowstepped gables. The gatepiers are composed of red sandstone, whilst the stable is a rectangular, crow-stepped two storey structure located to the north of the farmhouse.

10.6.126 As a Category B Listed Building LB43911 Auchenlarich With Stables and Gatepiers is of medium (regional) importance.

10.6.127 The house is approached from the south via Caldarvan Station Road. The house is largely screened by trees in views to it from the south but can be glimpsed through the trees from the crossroads of Auchincarroch Road. The house remains screened from view by tree cover until the visitor is within a range of approximately 250 m, from where it is possible to view the house overlooking a field currently used for grazing livestock, allowing for an understanding of its original and continued use as a farmhouse.

10.6.128 Continuing north, the house is screened from view again by a hedgerow and it is not discernible in views along the driveway leading to it from Caldarvan Station Road. The house is visible in views south-west to it from the north, allowing for a fuller appreciation of its architecture (Illus 10.14).

Illus 10-14 View south towards LB43911



10.6.129 The house's situation is such that it provides a focal point within its original agricultural hinterland, comprising fields immediately to the north and south, with Blairbeich Plantation defining the western extent of the building. In this sense, the grounds of the house are relatively modest, with no designed features which would draw views in a particular direction to or from the building; the orientation of the house to the south-east is likely to have allowed it to overlook local agricultural land, instead of to allow for any long range, designed view. The wider area is characterised by improved fields used for pasture and it is within this productive, agricultural landscape that the house functions.

10.6.130 Volume 2b **Figures 10.15b** and **10.15f** (wirelines) **CHVP13** indicates that ten of the proposed turbines would theoretically be visible in views south from LB43911 Auchenlarich With Stables and Gatepiers, the nearest of which would be located 2.98 km away. Whilst this would theoretically introduce visual change in views from the house looking south, the presence of forestry which comprises Blairbeich Plantation would screen views of the proposed turbines. Even assuming this woodland was removed, however, there is no evidence that the house was positioned in order to enjoy long range south facing views. The house appears to have been orientated to face south-east, overlooking the agricultural land immediately south, away from the area in which the Proposed Development would be located. The house is understood, appreciated and experienced as a farmhouse with architectural interest, still in use in its original capacity which relates to its immediate agricultural setting. This would remain the case despite the presence of the Proposed Development. The factors of setting which contribute to LB43911's cultural significance would be retained.

10.6.131 It is therefore considered that there would be a negligible magnitude impact on the cultural significance of LB43911 Auchenlarich With Stables and Gatepiers, an asset of medium importance, resulting in an adverse effect of **negligible** which is **not significant**.

Cumulative Assessment

10.6.132 Cumulative operational effects can occur when the contribution made to the cultural significance of a heritage asset by its setting is directly altered by the Proposed Development in combination with other developments. The assessment of effects uses the same methodology applied in considering the likely effects of Proposed Development alone. All analysis of asset significance and the contribution made by setting remains unchanged. All that is altered is the nature of change predicted for the one or more scenarios under consideration.

10.6.133 Cumulative operational effects are considered in cases where an effect of minor or greater significance has been predicted on the setting of a heritage asset as a result of the Proposed Development. In this assessment an effect of minor significance has been predicted on SM2911 Knockupple, long cairn; SM2329 Lang Cairn, chambered cairn and cairn, Gallangad Muir; and SM90107 Dumbarton Castle.

10.6.134 For the cumulative assessment, wind farm developments that are consented but not yet built, those under construction, and those that are currently at application stage (for which sufficient detail is known) are considered where they also feature prominently within views of or towards this asset, as demonstrated by visualisations. In this case, SM2329 Lang Cairn, chambered cairn and cairn, Gallangad Muir and SM90107 Dumbarton Castle have views of other proposed or consented developments as outlined below.

10.6.135 SM2329 Lang Cairn, chambered cairn and cairn, Gallangad Muir

10.6.136 The tips of three turbines for the consented Shelloch Wind Farm, located 21.4 km away would be visible in views ENE from SM2329 Lang Cairn, chambered cairn and cairn, Gallangad Muir. The tips of three turbines for the proposed Earlsburn Extension, located 25.3 km away would also be visible (Volume 2b **Figure 10.4d**) in views ESE. Neither scheme is located within parts of the landscape that are considered to contribute to the monument's cultural significance such that the assessed impact magnitude concluded for the Proposed Development in isolation is likely to be increased.

SM90107 Dumbarton Castle

10.6.137 The following wind farm developments would be visible in views south-east and south from SM90107 Dumbarton Castle (Volume 2b **Figure 10.6c**) and in views south-west (Volume 2b **Figure 10.6d**):

- Greengairs/Greengairs East Wind Farm (under construction) located 39 km-40.1 km away. The tips of four turbines and one turbine up to hub height would be visible.
- Forrestfield Farm Wind Farm (consented) located 46.7 km away. Four turbines up to hub height would be visible.
- Dewshill Wind Farm (proposed) located 45.1 km away. Three turbines up to hub height would be visible.
- Hartwood Wind Farm (consented) located 45.6 km away. Seven turbines up to hub height would be visible.

- Rigmuir Wind Farm (consented) located 34.7 km away. Three turbines up to hub height would be visible.
- Low Drumclog Wind Farm (proposed) located 40.6 km away. The tips of three turbines would be visible.
- Baco Wind Farm (consented) located 18.3 km away. The tips of one turbine would be visible.

10.6.138 None of these schemes are located within parts of the landscape that are considered to contribute to the monument's cultural significance such that the assessed impact magnitude concluded for the Proposed Development in isolation is likely to be increased.

10.7 Mitigation

10.7.1 The preferred mitigation option is to avoid or reduce impacts through design (embedded mitigation), or through precautionary measures such as fencing off heritage assets during construction works. Impacts which cannot be eliminated in these ways will lead to residual effects.

10.7.2 Where construction effects are unavoidable, these will be offset by excavation and recording of the remains.

Mitigation Measures Prior to and During Construction

Direct (Physical) Effects

10.7.3 Adverse direct (physical) effects of **negligible significance** are predicted on the following non-designated heritage assets:

- Trackway 358810
- Turf banks HA49 and HA50

10.7.4 In the case of 358810, there are no extant remains of the feature in the areas of proposed infrastructure whilst the majority of turf banks HA49 and HA50 would be preserved in-situ. No mitigation is therefore proposed.

10.7.5 Adverse effects of **minor significance** are predicted on non-designated shieling ground 68099.

10.7.6 It is proposed that the location of shieling ground (68099) is subject to a programme of pre-construction photographic recording and topographic survey of any upstanding features which may relate to the asset. A watching brief of ground breaking works in this area is also proposed.

Mircositing and Accidental Impacts

10.7.7 Adverse effects of up to **minor significance** are possible on the following heritage assets as a result of accidental damage or mircositing:

- Area of lime kilns (59903);
- An enclosure (HA15);
- A turf structure (HA25);
- Turf banks (HA49, HA50 and HA51);
- Any extant remains of non-designated trackway (358810);

- A shieling ground (68099);
- A burial cairn (7891);
- Enclosures (68091); and
- A deserted farmstead (7802)

- 10.7.8 Adverse effects of up to **moderate significance** are possible on burial cairn (7891) as a result of accidental damage or micrositing.
- 10.7.9 The above heritage assets will in the first instance be fenced off prior to construction works commencing in order to avoid any accidental impacts.
- 10.7.10 Should micrositing activities result in direct impacts on any of the above heritage assets, programmes of pre-construction photographic recording, topographic survey and archaeological excavation as appropriate will be carried out prior to construction commencing. Following the implementation of pre-construction mitigation, a watching brief of any micrositing ground breaking works which would directly impact any of the above heritage assets is proposed.
- 10.7.11 Further guidance on appropriate mitigation can be found at Part 6 (Historic Environment/Archaeology) of NatureScot's Good Practice During Wind Farm Construction (NatureScot, 2019).

Archaeological Potential

- 10.7.12 The ISA is considered to be of generally negligible archaeological potential with exceptions as outlined in paragraphs 10.5.11-10.5.18 above. Impacts on currently undiscovered archaeological remains elsewhere in the ISA may therefore occur during the construction phase. Archaeological monitoring is likely to be required over at least some of the construction groundworks for the Proposed Development.
- 10.7.13 The scope and nature of additional mitigation will be outlined in a written scheme of investigation (WSI) and agreed with DGC in advance of construction.
- 10.7.14 Due to the potential for adverse effects of up to **moderate** significance to arise from the truncation of previously unknown prehistoric or medieval remains, a watching brief of ground-breaking works is proposed in any areas considered to be of low or higher potential for remains of these dates. These areas are shown on Volume 2a, **Figure 10.1**.
- 10.7.15 A watching brief of ground-breaking works in any areas of the ISA considered to be of medium or higher potential for post-medieval remains is proposed. These areas are shown on Volume 2a, **Figure 10.1**.

Mitigation Measures During Operation

- 10.7.16 Adverse operational effects of **minor significance** are predicted upon three Scheduled Monuments; adverse operational effects of **negligible significance** are predicted upon one Scheduled Monument, four Category A Listed Buildings, two Category B Listed Buildings and four GDLs. These effects are **not significant** and no additional mitigation beyond the applied mitigation embedded in the design of the Proposed Development is proposed.

10.8 Summary of Residual Effects

Residual Construction Phase Effects

Direct (Physical) Effects

- 10.8.1 Residual adverse direct (physical) effects of **negligible significance**, which are **not significant** are predicted on the following non-designated heritage assets:
- Trackway 358810
 - Turf banks HA49 and HA50
- 10.8.2 Implementation of proposed mitigation for shieling ground (68099) as outlined in paragraph 10.7.6, would result in a residual adverse direct (physical) effect of **negligible significance** which is **not significant**.

Micrositing and Accidental Effects

- 10.8.3 Potential direct (physical) adverse effects on the following heritage assets as a result of accidental damage or during micrositing would be reduced to **negligible** (following the implementation of proposed mitigation outlined in paragraph 10.7.9 and 10.7.10) which is **not significant**:
- Area of lime kilns (59903);
 - An enclosure (HA15);
 - A turf structure (HA25);
 - Turf banks (HA49, HA50 and HA51);
 - Any extant remains of non-designated trackway (358810);
 - A shieling ground (68099);
 - Enclosures (68091); and
 - A deserted farmstead (7802)
- 10.8.4 Potential direct (physical) adverse effects on burial cairn (7891) as a result of accidental damage or during micrositing would be reduced to **minor** (following the implementation of proposed mitigation outlined in paragraph 10.7.9 and 10.7.10) which is **not significant**:

Archaeological Potential

- 10.8.5 Any direct (physical) adverse effects of **moderate significance** possible on previously unknown remains of prehistoric and medieval date would be reduced to residual adverse direct (physical) effects of **negligible significance** which is **not significant** following implementation of the proposed mitigation outlined in paragraphs 10.7.14-10.7.15.
- 10.8.6 Any direct (physical) adverse effects of **minor significance** possible on previously unknown remains of date would be reduced to residual adverse direct (physical) effects of **negligible significance** which is **not significant** following implementation of the proposed mitigation outlined in paragraph 10.7.14-10.7.15.

Residual Operational Effects

- 10.8.7 Residual adverse operational effects of **negligible significance** are predicted upon:
- SM2281 Stockie Muir, long cairn 2000m NNW of Burncrooks Reservoir;

- GDL00306 / LB24907 Overtoun House;
- GDL00180/ LB13641 Finlaystone House;
- GDL00330 / LB14469 Rossdhu;
- GDL00042/LB123 Balloch Castle;
- LB42920 Renton, Alexander Street, Trinity Parish Church, Church Of Scotland with Boundary Wall and Gatepiers; and
- LB43911 Auchenlarich With Stables and Gatepiers

10.8.8 Residual adverse operational effects of **minor significance** are predicted upon three Scheduled Monuments:

- SM2911 Knockupple, long cairn;
- SM2329 Lang Cairn, chambered cairn and cairn, Gallangad Muir; and
- SM90107 Dumbarton Castle

10.8.9 These identified residual effects are **not significant**.

10.8.10 Cumulative impact assessment, considering other proposed, consented, and operational wind farms in the vicinity has identified **no significant residual cumulative effects**.

10.9 References

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