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6. Cultural Heritage

6.1 Introduction

- 6.1.1 This chapter considers the potential effects of the proposed Larbrax Wind Farm (hereafter referred to as ‘the Proposed Development’) on Cultural Heritage. It presents the results of a desk-based assessment and considers the likely significant effects on cultural heritage associated with the construction and operation (including cumulatively) of the Proposed Development.
- 6.1.2 The specific objectives of the chapter are to:
- Identify the cultural heritage baseline within and in the vicinity of the Proposed Development site;
 - Consider the Proposed Development site in terms of its archaeological potential;
 - Appraise the effects of the construction and operation (including cumulative effects) of the Proposed Development on the cultural heritage resource; and,
 - Propose measures, where appropriate, to mitigate any predicted significant adverse effects.
- 6.1.3 This Cultural Heritage Assessment was prepared by Oliver Rusk MA (Cantab) MLitt ACIfA of CFA Archaeology Ltd (CFA), a Registered Organisation (RO) of the Chartered Institute for Archaeologists (CIfA), based in Musselburgh, East Lothian. Mr Rusk is a Consultant with CFA with eight years post-graduate experience as an archaeologist and is an Associate of the Chartered Institute for Archaeologists (ACIfA).
- 6.1.4 This chapter is supported by the following figures which are referenced throughout the text, and which can be found in **Volume 3a: Figures** and **Volume 3c: Landscape and Visual Amenity Visualisations (Part 2) and Cultural Heritage Visualisations**.
- **Figure 6.1: Cultural Heritage: Inner Study Area;**
 - **Figure 6.2a-b: Cultural Heritage: Outer Study Area;** and
 - **Figures 6.3 to 6.10: Cultural Heritage Visualisations.**
- 6.1.5 The following appendices are also referred to throughout the chapter and can be found in Volume 4: Technical Appendices:
- **Technical Appendix 6.1: Heritage Assets within the Inner Study Area;**
 - **Technical Appendix 6.2: Heritage Assets within the Outer Study Area and within 5 km of the Proposed Development.**
 - **Technical Appendix 6.3: Heritage Assets within the Outer Study Area and within 5 km – 10 km of the Proposed Development.**
- 6.1.6 Where appropriate, cross-reference is made to **Chapter 5: Landscape and Visual Impact Assessment**, and relevant visualisations which also support this chapter.
- 6.1.7 The following terminology will be referred to throughout this chapter:
- Heritage asset: a physical element of the historic environment – a building, monument, site, place, area, or landscape identified as having cultural significance.
 - Hut circle: a low, circular or oval bank of turf, earth or stone, which represents the remains of a roundhouse of later prehistoric date.
 - Setting: the surroundings of a heritage asset that contribute to its cultural significance; the way it is understood, appreciated and experienced.
 - Cultural Significance: the aesthetic, historic, scientific, social or spiritual value for past, present or future generations, inherent to the intrinsic, contextual or associative characteristics of a heritage asset.

6.2 Assessment Methodology

Legislation, Policy and Guidance

Legislation

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

- The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (the 'EIA Regulations').
- The Ancient Monuments and Archaeology Areas Act 1979 (as amended by Town and Country Planning (Historic Environment Scotland) Amendment Regulations 2015);
- The Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 (as amended by Town and Country Planning (Historic Environment Scotland) Amendment Regulations 2015); and
- Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 as amended by the Historic Environment Scotland Amendment Regulations 2015.

Policy

6.2.2 Planning policy relevant to archaeology and cultural heritage that has been considered as part of this assessment includes:

- National Planning Framework for Scotland 4 (NPF4) Policy 7;
- Historic Environment Policy for Scotland (HEPS) 2019;
- Dumfries and Galloway Local Development Plan 2 (LDP2) (DGC 2019);
- Dumfries and Galloway Local Development Plan 2, Historic Built Environment. Supplementary Guidance February 2020 (DGC 2020a):
 - Policy HE1: Listed Buildings;
 - Policy HE2: Conservation Areas;
 - Policy HE3: Archaeology;
 - Policy HE4: Archaeologically Sensitive Areas;
 - Policy HE6: Gardens and Designed Landscapes;
 - Policy IN1: Renewable Energy; and,
 - Policy IN2: Wind Energy.
- Dumfries and Galloway Local Development Plan 2, Wind Energy Development: Development Management Considerations. Supplementary Guidance February 2020 (DGC 2020b):
 - Section 3H: Historic Environment and Cultural Heritage.
- Dumfries and Galloway Local Development Plan 2, Part 1 Wind Energy Development: Development Management Considerations – Appendix C – Landscape Capacity Study. Supplementary Guidance. February 2020 (DGC 2020c).

Guidance

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

- Scottish Natural Heritage (SNH¹) & Historic Environment Scotland (HES) (2018) 'Environmental Impact Assessment Handbook';

¹ Scottish Natural Heritage (SNH) changed its name to NatureScot as of 24 August 2020.

- Institute of Environmental Management and Assessment (IEMA) (2021) 'Principles of Cultural Heritage Impact Assessment in the UK';
- Planning Advice Note 1/2013 (PAN 1): Environmental Impact Assessment (revised 2017);
- Planning Advice Note 2/2011 (PAN 2): Planning and Archaeology;
- HES (2019b) 'Designation Policy and Selection Guidance';
- HES (2016) 'Managing Change in the Historic Environment: Setting';
- Chartered Institute for Archaeologists (ClfA) (2014a) 'Code of Conduct: professional ethics in archaeology' (revised 2022);
- ClfA (2014b) 'Standard and Guidance for Commissioning Work or Providing Consultancy Advice on Archaeology and the Historic Environment' (updated 2020); and,
- ClfA (2014c) 'Standard and Guidance for Historic Environment Desk-Based Assessment'.

Consultation

6.2.4 To inform the assessment, consultation was undertaken with HES and Dumfries and Galloway Council Archaeology Service (DGCAS) to agree methods of assessment and visualisation requirements. **Table 6.1** summarises the consultation and responses received. No formal EIA Scoping Opinion was received from Dumfries and Galloway Council as noted in **Chapter 2: Approach to the EIA**. No formal response to consultation was received from DGCAS.

Table 6.1 Consultation Responses

| Consultee and Date | Scoping/Other Consultation | Issue Raised | Response/Action Taken |
|--|---|--|--|
| Historic Environment Scotland 16 th January 2024 | Viewpoint and Visualisations Consultation | Content with the viewpoint locations and visualisations proposed. | Noted. A list of visualisations provided for the assessment is included in Table 6.5 . |
| | | Requested that a photomontage be provided to demonstrate the effects of screening from woodland and further inform assessment of the potential significant impact to the setting of Lochnaw Castle (LB 13498) and its GDL (GDL 00407). | Noted. Restricted access to the Lochnaw estate precludes the provision of a photomontage. Dense vegetation observed from an alternative viewpoint (LVIA VP7) in 2015 and 2023 demonstrates that the Proposed Development would be entirely screened in views from the Castle and from within the GDL. |
| | | Observed that where the Proposed Development would be visible from the east of Loch Ryan, the interposition of the Loch and the hills west of Stranraer would create a sense of distance and separation from any monuments. | Noted. Heritage assets with statutory designations and non-statutory designations from which there is some degree of theoretical visibility predicted by the blade tip and hub height ZTVs are assessed in tabulated |

| Consultee and Date | Scoping/Other Consultation | Issue Raised | Response/Action Taken |
|--|--------------------------------------|--|--|
| | | | form in Technical Appendix 6.2 . |
| Historic Environment Scotland 29 th January 2024 | Follow-on Visualisation Consultation | Content that wireline-only visualisations will be provided for CH VP8: Lochnaw Castle (LB 13498) and GDL (GDL 00407) and LVIA VP7: Lochnaw Loch Shore. | Noted. A list of visualisations provided for the assessment is included in Table 6.5 . |
| Historic Environment Scotland 28 th March 2024 | Follow-on Visualisation Consultation | Observed that recent forestry planning applications indicate that woodland screening within Lochnaw Castle GDL is managed for long-term retention by the estate. | Noted. |
| DGCAS 8 th July 2024 | HER Data Request | Confirmed that the assessment can proceed using the information supplied in July 2023. Review of the current HER data confirms that, though there are minor recent alterations, none are of a nature that would require assessment with regard to the Proposed Development. | Noted. |

Study Area

6.2.5 Two study areas have been used for the assessment:

- The Inner Study Area (**Figure 6.1**): The Proposed Development Site, defined by the redline boundary within which components of the Proposed Development and associated infrastructure are to be sited (the Site), forms the study area for the identification of heritage assets that could receive direct effects arising from the construction of the Proposed Development. **Figure 6.1** shows the site boundary, the Proposed Development layout and the locations of heritage assets within the Site (described in **Technical Appendix 6.1**).
- The Outer Study Area (**Figure 6.2**): a study area extending 10 km from the outermost turbines of the Proposed Development, was used for the identification of heritage assets whose settings may be affected by the operation of the Proposed Development (external receptors). The study area extent was agreed by HES as being appropriate. **Figure 6.2a-b** shows the turbines of the Proposed Development, together with the blade tip height ZTV and the location of heritage assets within 10 km of the proposed turbines from which there will be a theoretical view of the turbines, and which are included in the assessment. A list of these heritage assets is provided in **Technical Appendix 6.2** and **Technical Appendix 6.3**, which also provide a tabulated summary assessment of the predicted effects on their settings on a case-by-case basis.

6.2.6 **Figure 6.2a-b** identifies the locations of other operational, consented and application stage wind energy developments in the wider area. The visualisations provided along with the assessment (**Figures 6.3 to 6.10** and LVIA Figures 5.2.1, 5.2.3, 5.2.5, 5.2.6, 5.2.7, 5.2.9, 5.2.11 and 5.2.13) show those cumulative developments that will be at least theoretically visible from the represented viewpoint locations. The cumulative developments included in the assessment reflect those agreed with consultees and listed in **Table 5.6** of **Chapter 5**.

Desk Based Research and Data Sources

- 6.2.7 A desk-based assessment has been conducted in order to review the findings of the previous assessment for the Consented Larbrax Wind Farm against any updated or newly available datasets. The following information sources were consulted as part of the desk-based assessment:
- HES Spatial Data Warehouse (HES 2024²): provided up-to-date data on the locations and extents of Scheduled Monuments, Listed Buildings, Conservation Areas, Inventory status Garden and Designed Landscapes and Inventory status Historic Battlefields;
 - Dumfries and Galloway Historic Environment Record (HER): a digital database extract was obtained for an area encompassing the Site and an area extending to 10 km from the Site boundary, in order to inform the assessment;
 - Dumfries and Galloway Council HER: the Council's on-line mapping resource³ (Historic Environment Viewer) was checked for any high sensitivity heritage assets, in order to inform the assessment;
 - Scottish Remote Sensing Portal (Scottish Government 2023⁴): for 0.5 m DTM Lidar data (where available) covering the Inner Study Area; and
 - Relevant bibliographic references: to provide background and historic information including the Larbrax Wind Farm Environmental Statement (ES 2015) and Larbrax Moor Cultural Heritage Feasibility Study (Tweedie 2012).

Field Survey

- 6.2.8 No new field survey has been undertaken within the Inner Study Area. A walkover survey of the Site was conducted in support of the previous application for the Consented Larbrax Wind Farm (Tweedie 2012⁵; ES 2015⁶). The results of that survey have been used to inform the baseline condition of heritage assets and the archaeological potential within the Site. Previous site visits and visualisations produced in support of the previous application have also been used to inform the setting assessment for those assets considered most likely to receive impacts from the operation of the Proposed Development.

Assessing Significance

- 6.2.9 The effects of the Proposed Development on heritage assets have been assessed on the basis of their type (direct effects, indirect impacts, setting impacts, and cumulative impacts) and nature (adverse or beneficial). The assessment has taken into account the value/sensitivity of the heritage asset, and its setting, and the magnitude of the predicted impact.
- Direct impacts: occur where the physical fabric of the asset is removed or damaged, or where it is preserved or conserved, as a direct result of the Proposed Development. Such impacts are most likely to occur during the construction phase and are most likely to be permanent.
 - Indirect impacts: occur where the fabric of an asset, or buried archaeological remains, is removed or damaged, or where it is preserved or conserved, as an indirect result of the Proposed Development even though the asset may lie some distance from the Proposed Development. Such impacts are most likely to occur during the construction phase and are most likely to be permanent.
 - Setting impacts: these are generally direct and result from the Proposed Development causing change within the setting of a heritage asset that affects its cultural significance or the way in which it is understood, appreciated, and experienced. Such impacts are generally, but not exclusively, visual, occurring directly as a result of the appearance of the Proposed Development in the surroundings of the asset. However, they may relate to other senses or factors, such as noise, odour or emissions, or historical relationships that do not relate entirely to intervisibility, such as historic patterns of land-use and related historic features. Such impacts may occur at any stage of a proposal's lifespan and may be permanent, reversible, or temporary.

² HES (2024) Historic Environment Scotland (HES) GIS downloader, available at <http://portal.historicenvironment.scot/spatialdownloads> (Accessed May 2024).

³ DGC (2024) Historic Environment Viewer, available at <https://dumgal.gov.uk/article/15631/Historic-Environment-Viewer> (Accessed June 2024).

⁴ Scottish Government (2023). Scottish Remote Sensing Portal, available at: <https://remotesensingdata.gov.scot> (Accessed June 2023).

⁵ Tweedie, H. (2012) Larbrax Moor: Cultural Heritage Feasibility Study. CFA Report No. 2066.

⁶ Larbrax Wind Farm Environmental Statement (2015) Chapter 11: Archaeology & Cultural Heritage, ES Volume 2.

- Cumulative impacts: can relate to impacts on the physical fabric or on the setting of assets. They may arise as a result of impact interactions, either of different impacts of the Proposed Development itself, or additive impacts resulting from incremental changes caused by the Proposed Development together with other projects already in the planning system or allocated in a Local Development Plan.
- Adverse effects are those that detract from or reduce cultural significance or special interest of heritage assets.
- Beneficial effects are those that preserve, enhance or better reveal the cultural significance or special interest of heritage assets.

Sensitivity

6.2.10 Cultural heritage assets are assigned value/importance through the designation process. Designation ensures that sites and places are recognised and protected by law through the planning system and other regulatory processes. The level of protection and how a site or place is managed varies depending on the type of designation and the laws and policies that apply to it (HES 2019⁷). **Table 6.2** summarises the relative sensitivity of key heritage assets (including their settings) relevant to the Proposed Development, based on the guidance set out in the SNH/HES EIA Handbook (version 5; 2018).

Table 6.2 Sensitivity of Heritage Assets

| Sensitivity of Asset | Definition/Criteria |
|----------------------|--|
| High | Assets valued at an international or national level, including: <ul style="list-style-type: none"> ■ Scheduled Monuments; ■ Category A Listed Buildings; ■ Inventory Gardens and Designed Landscapes; and ■ Non-designated archaeological sites that meet the relevant criteria for designation (including sites recorded in HERs as non-statutory register (NSR) sites of presumed national importance). |
| Medium | Assets valued at a regional level, including: <ul style="list-style-type: none"> ■ Archaeological sites and areas that have regional value (contributing to the aims of regional research frameworks); ■ Archaeologically Sensitive Areas (ASA) (where these are identified in Local Authority records); ■ Non-Inventory Designed Landscapes (NIDL) (where these are identified in Local Authority records); ■ Category B Listed Buildings; and ■ Conservation Areas. |
| Low | Assets valued at a local level, including: <ul style="list-style-type: none"> ■ Archaeological sites that have local heritage value; ■ Category C Listed Buildings; and ■ Unlisted historic buildings and townscapes with local (vernacular) characteristics. |
| Negligible | Assets of little or no intrinsic heritage value, including: <ul style="list-style-type: none"> ■ Artefact find-spots (where the artefacts are no longer in situ and where their provenance is uncertain); and |

⁷ HES (2019) 'Designation Policy and Selection Guidance', Edinburgh.

| Sensitivity of Asset | Definition/Criteria |
|----------------------|--|
| | <ul style="list-style-type: none"> Poorly preserved examples of particular types of minor historic landscape features (e.g. quarries and gravel pits, dilapidated sheepfolds, etc). |

Magnitude

6.2.11 The magnitude of impact (adverse or beneficial) has been assessed in the categories, high, medium, low and negligible as described in **Table 6.3**.

Table 6.3 Magnitude of Change

| Magnitude of Change | Definition/Criteria | |
|---------------------|---|---|
| | Adverse | Beneficial |
| High | <p>Changes to the fabric or setting of a heritage asset resulting in the complete or near complete loss of the asset's cultural significance.</p> <p>Changes that substantially detract from how a heritage asset is understood, appreciated, and experienced.</p> | <p>Preservation of a heritage asset in situ where it would otherwise be completely or almost completely lost.</p> <p>Changes that appreciably enhance the cultural significance of a heritage asset and how it is understood, appreciated, and experienced.</p> |
| Medium | <p>Changes to those elements of the fabric or setting of a heritage asset that contributes to its cultural significance such that this quality is appreciably altered.</p> <p>Changes that appreciably detract from how a heritage asset is understood, appreciated, and experienced.</p> | <p>Changes to important elements of a heritage asset's fabric or setting, resulting in its cultural significance being preserved (where this would otherwise be lost) or restored.</p> <p>Changes that improve the way in which the heritage asset is understood, appreciated, and experienced.</p> |
| Low | <p>Changes to those elements of the fabric or setting of a heritage asset that contribute to its cultural significance such that this quality is slightly altered.</p> <p>Changes that slightly detract from how a heritage asset is understood, appreciated, and experienced.</p> | <p>Changes that result in elements of a heritage asset's fabric or setting detracting from its cultural significance being removed.</p> <p>Changes that result in a slight improvement in the way a heritage asset is understood, appreciated, and experienced.</p> |
| Negligible | Changes to fabric or setting of a heritage asset that leave its cultural significance unchanged and do not affect how it is understood, appreciated, and experienced. | |

Significance

6.2.12 The predicted significance of the effect was determined through a standard method of assessment considering both the sensitivity of the asset (**Table 6.2**) and magnitude of predicted impact (**Table 6.3**) and detailed in **Table 6.4** below. Where two outcomes are possible through application of the matrix e.g. moderate/minor effect, professional judgment supported by reasoned justification, has been employed to determine the level of significance.

Table 6.4 Significance Criteria

| Magnitude of Impact | Sensitivity of Asset | | | |
|---------------------|----------------------|------------------|----------------|------------------|
| | High | Medium | Low | Negligible |
| High | Major | Major/Moderate | Moderate/Minor | Minor/Negligible |
| Medium | Major/Moderate | Moderate | Moderate/Minor | Minor/Negligible |
| Low | Moderate/Minor | Moderate/Minor | Minor | Negligible |
| Negligible | Minor/Negligible | Minor/Negligible | Negligible | Negligible |

- 6.2.13 In the assessment that follows, **Major** and **Moderate** effects are considered to be 'significant' in the context of The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (EIA Regulations). **Minor** and **Negligible** effects are considered to be 'not significant'.
- 6.2.14 The SNH/HES EIA Handbook (2018) Appendix 1, paragraph 42 advises that:
"In the context of cultural heritage impact assessment, the receptors are the heritage assets and impacts will be considered in terms of the change in their cultural significance".
- 6.2.15 Historic Environment Scotland's guidance document, 'Managing Change in the Historic Environment: Setting' (HES 2016), notes that:
"Setting can be important to the way in which historic structures or places are understood, appreciated and experienced. It can often be integral to a historic asset's cultural significance."
"Setting often extends beyond the property boundary or 'curtilage' of an individual historic asset into a broader landscape context".
- 6.2.16 The guidance also advises that:
"If proposed development is likely to affect the setting of a key historic asset, an objective written assessment should be prepared by the applicant to inform the decision-making process. The conclusions should take into account the significance of the asset and its setting and attempt to quantify the extent of any impact. The methodology and level of information should be tailored to the circumstances of each case".
- 6.2.17 The guidance recommends that there are three stages in assessing the impact of a development on the setting of a historic asset or place:
- Stage 1: identify the historic assets that might be affected by the Proposed Development;
 - Stage 2: define and analyse 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 the potential impact of the proposed changes on the setting, and the extent to which any adverse impacts can be mitigated.
- 6.2.18 The SNH/HES EIA Handbook (2018) Appendix 1, paragraph 43 advises that:
"When considering setting impacts, visual change should not be equated directly with adverse impact. Rather the impact should be assessed with reference to the degree that the proposal affects those aspects of setting that contribute to the asset's cultural significance".
- 6.2.19 Following these recommendations, the blade tip height ZTV has been used to identify those heritage assets from which there would be theoretical visibility of the Proposed Development and to assess the degree of potential visibility. Consideration has also been given to designated heritage assets where there is no predicted visibility of the Proposed Development from the asset but where views of or across the asset are important factors contributing to its cultural significance. In such cases, consideration was given to whether the Proposed Development could appear in the background of those views.
- 6.2.20 Scheduled Monuments, Category A and B Listed Buildings, Conservation Areas, Inventory Garden and Designed Landscapes and HER sites of presumed national importance, where present within the ZTV and within 10 km of the

outermost turbines, are included in the assessment. These assets are included in the tabulated assessments in **Technical Appendix 6.2** and **6.3**, using the parameters set out in **Table 6.2**, and they are shown on Figure 6.2.

- 6.2.21 Non-designated assets identified in the HER as 'regionally significant' archaeological assets (including ASAs), Category C Listed Buildings and Non-Inventory Designed Landscapes (NIDLs) within 5 km of the outermost turbines are included in the assessment.
- 6.2.22 Consideration has also been given to designated heritage assets beyond 10 km where long-distance views and intervisibility are considered to be an important aspect of their settings. None were identified that have settings that could be adversely affected by the Proposed Development.
- 6.2.23 It is important to note the difference between cultural heritage assessment and landscape and visual impact assessment (LVIA). Cultural heritage assessment addresses effects on the cultural significance of heritage assets, which may result from, but are not equivalent to, visual impacts. The LVIA focuses more on subjective present experience and amenity with the key receptors being people, while cultural heritage has a focus on understanding of cultural significance with the key receptors being the assets themselves. Whilst assessment viewpoints may be shared between these assessments (see **Table 6.5**), they are therefore being used for different purposes. An effect on visual amenity (or landscape character), does not therefore necessarily equate to an effect on the cultural significance of heritage assets.

Cumulative Effects

- 6.2.24 The assessment of cumulative effects on heritage assets is based upon consideration of the effects of the Proposed Development on the settings of assets with statutory and non-statutory designations within the Outer Study Area (which includes the Inner Study Area), in addition to the likely effects of cumulative developments. **Figure 6.2a-b** shows the Proposed Development along with other cumulative developments addressed in **Chapter 5**. For assessment of the potential cumulative effects on heritage assets, cumulative developments with footprints situated within the 10 km Outer Study Area of the Proposed Development are considered. No designated heritage assets within the Outer Study Area have been identified as having settings sensitive to adverse effects from the Proposed Development, in combination with any cumulative developments more than 10 km from the Site.
- 6.2.25 Operational, under construction developments and existing grid infrastructure elements, are considered as part of the baseline and taken to be such for the assessment of effects on the settings of heritage assets for the Proposed Development.
- 6.2.26 Other cumulative developments which are consented, at the application stage or are reasonably foreseeable (including the consented Glenhead of Aldouran Extension) are considered as being potential additions to the baseline and considered in the cumulative impact assessment.
- 6.2.27 The assessment takes into account the nature and relative scales of the various developments, their distance from the affected assets, and the potential degree of visibility from the assets of the various developments.

Assessment Assumptions and Limitations

- 6.2.28 The desk-based assessment draws on the records in the HER, provided in a digital geographic information system (GIS) dataset acquired in July 2023. A request for an updated dataset was made in July 2024, upon which it was confirmed by DGCAS that no significant changes to the data to be noted. As such, the data is assumed to have been current and up to date at the time of the latter request.
- 6.2.29 The desk-based assessment draws on evidence taken from historic maps and the grid co-ordinates attributed to those taken from them are approximations, based on a professional interpretation of topographic relationships derived from examination of the maps. Where possible, these variations have been evaluated using modern maps and modern aerial photography to compensate for the historic mapping inaccuracies and to provide an accurate grid co-ordinate and, where possible, extent for the assets identified from such sources.
- 6.2.30 Designated heritage assets within the Outer Study Area (**Figure 6.2a**) have been identified from the HES database downloaded from the HES website in May 2024. That data is assumed to have been current and up to date at the time of acquisition.

6.3 Existing Conditions

Heritage Assets within the Inner Study Area (Figure 6.1; Technical Appendix 6.1)

- 6.3.1 Numbers in brackets in the following text refer to heritage asset numbers as shown on **Figure 6.1** and listed in the **Technical Appendix 6.1**.
- 6.3.2 There are four Scheduled Monuments within the Inner Study Area, designated as having heritage value at the national level and to be of high sensitivity:
- Fort Point, fort and salt-pans (SM 1982), a prehistoric promontory fort and 17th century salt-pans;
 - Meikle Larbrax, farmstead 1040 m NW of (SM 4838), a pre-improvement farmstead;
 - Meikle Larbrax, hut circle 1000 m NNE of (SM 4786), a Bronze Age or Iron Age hut circle; and
 - Meikle Larbrax, hut circles 460 m NW of (SM 4792), two Bronze Age or Iron Age houses.

Prehistoric

- 6.3.3 The HER records a possible burnt mound (2) to the south of Loch More. The mound is situated on the north-west bank of a drainage channel and measures 12 m in diameter. As a potential feature related to prehistoric activity in the local landscape, it is considered to have heritage value at a regional level and to be of medium sensitivity.
- 6.3.4 The HER records the findspot (1) for a circular stone with cup-like indentations, of uncertain date, recovered to the north-east of Loch More. The artefact has been removed and the findspot is of little residual heritage value and of negligible sensitivity.

Medieval/Post-Medieval Settlement and Agriculture

- 6.3.5 The HER records the location of a rectilinear building (3) detectable on lidar imagery to the northwest of Larbrax Cottages. The building measures 12 m northeast-southwest by 7 m and is situated within an irregular enclosed field (4).
- 6.3.6 Two areas of rig and furrow cultivation (4 and 5) are recorded in the HER to the south of Larbrax Moor. To the north-west of Larbrax Cottages, an irregular enclosed field (4) is surrounded by a curvilinear turf bank depicted on the 1st and 2nd edition Ordnance Survey maps (1849 and 1894). No cultivation marks are detectable within the enclosure on LiDAR imagery. To the north-east, an oval area of rig and furrow (5) measures 80 m north-south by 40 m, detectable on LiDAR imagery. The cultivation marks are orientated west-north-west to east-south-east with a wavelength of 5 m. An area of lazy bed cultivation (10) was recorded during field survey undertaken by AECOM (ES 2015), to the south-west of Drumawhern. An extensive area of rig and furrow (17) is also recorded in the HER to the east of Drumwhisley farmstead (SM 4838), orientated east-west with a wavelength of 4 m.
- 6.3.7 Three clearance cairns (11, 12 and 13) were recorded during field survey undertaken by AECOM (ES 2015) and CFA Archaeology Ltd (Tweedie 2012), situated to the south of Loch More (11), to the north of Salt Pans Bay (12), and to the south of Hind Hill (13). They are probably associated with post-medieval field clearance yet could potentially be of prehistoric date.
- 6.3.8 As relict features of the historic farming landscape across Larbrax Moor, the remains of the building, cultivation marks and clearance cairns are assessed as having heritage value at a local level and to be of low sensitivity.

Miscellaneous Features

- 6.3.9 Two areas of quarrying (6 and 7) are depicted on the 1st and 2nd edition Ordnance Survey maps (1849 and 1894), to the north of the Cairngarroch Plantation (6) and to the south of Loch Beg (7). These former quarries are of no intrinsic heritage value and are of negligible sensitivity.
- 6.3.10 An area of peat cutting (8) is visible on modern aerial photography to the southwest of Drumawhern, measuring up to 100 m north-south by 30 m. Additional areas of peat cutting (15 and 16) are detectable in lidar imagery to the north and south of Hind Hill (15), and in the east of Larbrax Moor (16). The cuttings are extensive and indicative of sustained use from at least the pre-improvement period, disturbed by later extraction and construction of local tracks. As minor relict features associated with pre-improvement resource extraction or land drainage, obscured by later cuttings and natural regeneration, they have little heritage value and are of negligible sensitivity.

- 6.3.11 A square sheepfold (9) is depicted on the 1909 Ordnance Survey map, abutting a field boundary to the west of Loch Beg. The bank of the sheepfold is faintly detectable on lidar imagery and has been partially truncated by a modern woodland plantation. As a partially preserved feature of the early 20th century pastoral landscape, any surviving remains have little intrinsic heritage value and are of negligible sensitivity.
- 6.3.12 Up to six shooting butts (14a-f) are depicted on the 1894 and 1909 edition Ordnance Survey maps, surrounding Drumawhern. No remains of the shooting butts were recorded during field survey undertaken by CFA Archaeology Ltd (Tweedie 2012). One probable structure (14f) is visible on modern aerial photographs atop the sea cliff to the southwest of Drumawhern. As minor features of post-medieval recreational activity, any surviving remains of the shooting butts have little heritage value and are of negligible sensitivity.

Historic Landscape Character

- 6.3.13 The Site encompasses Galdenoch Moor and Larbrax Moor; an area of coastal lowland with tracts of rough grazing and improved pasture. The eastern half of the Site is relatively flat and open, with the exception of, a few woodland plantations, while elevation drops steeply to the west towards the exposed coastal cliffs of the Rhins of Galloway.
- 6.3.14 HLA Map data show that the Site occupies an area of former medieval/post-medieval settlement and agriculture, dominated by rectilinear fields and farms to the south and west, and traditional peat cutting to the east surrounding Hind Hill.
- 6.3.15 Roy's 'Military Survey of Scotland' map (1747-55) shows the Site as mainly consisting of uncultivated moorland, apart from around the historic farm of Galdenoch to the north-east of the Site, where there is evidence for cultivated fields. A road is depicted crossing the Galdenoch Moor from Lochnaw to the 17th century salt pans (SM 1982) at Fort Point. By the time of the 1st edition Ordnance Survey map (1849), attempts to drain and improve the land are indicated by several drainage channels depicted across Galdenoch Moor and the enclosure of two large fields along the coast to the north of Fort Point. The salt pans (SM 1982) are annotated as ruins by this time, though the kiln may have been utilised in agricultural improvements after salt production ceased at the end of the 18th century. With the exception of the unroofed buildings at Drumwhisley (SM 4838), no farmsteads are established within the Site on the 1st or 2nd edition Ordnance Survey maps (1849 and 1894). The depiction of numerous shooting butts at Drumawhern indicates that the moorland was commonly used for recreation.
- 6.3.16 Extensive peat cutting (15) at Larbrax Moor and Hind Hill, in addition to small-scale quarrying (6 and 7), is detectable on lidar imagery and indicates widespread resource extraction from the otherwise unproductive moorland. Areas of cultivation are limited, principally surrounding Drumwhisley farmstead (SM 4838) and within small, enclosed areas (4 and 5) to the east. Possible lazy beds (10) are recorded near Drumawhern.
- 6.3.17 The Old Statistical Account states that by 1792 no attempt had been made at improvement of the lands along the coast of the Irish Channel, largely due to its remoteness and lack of any safe port (OSA 1792⁸, 319). The author of the New Statistical Account notes that much of the coastland is barren with large tracts kept solely for sheep and young cattle (NSA 1845⁹, 124). These descriptions accord well with the evidence of historic land-use identified by the assessment, that the majority of the Site would have been used for rough grazing and extraction of readily attainable resources. The Site has seen little change in land-use since the post-medieval period.

Archaeological Potential of the Site

- 6.3.18 The archaeological record shows evidence for prehistoric settlement throughout the Inner Study Area, and throughout the wider Rhins peninsula, including domestic settlements (SM 4786 and SM 4792) of Bronze Age or Iron Age date on Larbrax Moor and several promontory forts along the coast. Findspots of Mesolithic date are recorded across the wider coastal landscape (Wickham-Jones 1994; Saville 2003) and it is likely that the area surrounding later settlements has been repeatedly occupied since the early prehistoric period.
- 6.3.19 The pattern and scope of land-use within the Inner Study Area in the medieval period is characterised by the pre-improvement farmstead (SM 4838) of Drumwhisley and associated areas of rig and furrow cultivation along the coast. The exposed coastline was not hospitable for more widespread or lasting settlement, with rough inland pasture used predominantly for grazing livestock and small-scale resource extraction, indicated by relict quarries.

⁸ Rose, Rev J. (1792) Parish of Leswalt, in Statistical Account of Scotland, Vol. III: 319.

⁹ McCubbin, Rev A. (1845) Parish of Leswalt, in New Statistical Account of Scotland, Vol. IV: 124.

- 6.3.20 Much of the Inner Study Area remains unimproved pasture; visible on modern aerial photography and borne out in the study of historic maps, which indicate limited efforts to enclose or improve the land for cultivation following the abandonment of the medieval farmstead. Land use throughout the post-medieval period appears to have consisted of expedient resource extraction and sporting activities, typical of a remote moor in the hinterland of high-status residences such as Galdenoch Castle and Lochnaw Castle. These are evinced by the Fort Point salt pans (SM 1982), widespread peat cuttings and numerous shooting butts.
- 6.3.21 Based on evidence indicative of a landscape conducive to prehistoric occupation and activity from the Mesolithic to the Iron Age, it is assessed that there is a moderate potential for hitherto undiscovered archaeological features of prehistoric date to survive within the Inner Study Area. The potential for previously unrecorded archaeology associated with the medieval and post-medieval farming landscape is considered to be moderate, in the vicinity of known sites. Elsewhere, within the unimproved moorland and within areas of managed woodland, there is considered to be no more than low potential for undiscovered features of medieval or later date.

Heritage Assets within the Outer Study Area (Figure 6.2a-b; Technical Appendices 6.2 and 6.3)

- 6.3.22 Within 10 km of the outermost turbines of the Proposed Development there are:
- Thirty-one Scheduled Monuments, of high sensitivity (20 with predicted visibility of the Proposed Development);
 - One Inventory Garden and Designed Landscape (GDL), of high sensitivity (with predicted visibility of the Proposed Development);
 - Five Category A Listed Buildings, of high sensitivity (two with predicted visibility of the Proposed Development);
 - Sixty-six Category B Listed Buildings, of medium sensitivity (eight with predicted visibility of the Proposed Development); and
 - Two Conservation Areas, of medium sensitivity (one with some marginal predicted visibility of the Proposed Development).
- 6.3.23 In addition, there are 13 non-designated heritage assets (six with predicted visibility of the Proposed Development) within 10 km of the outermost turbines that are classified in the HER as assets of 'national importance' and of high sensitivity, and 11 non-designated heritage assets (seven with predicted visibility of the Proposed Development) within the 5 km of the outermost turbines, that are classified in the HER as assets of 'regional importance' and of medium sensitivity.
- 6.3.24 Within 5 km of the outermost turbines there are nine Category C Listed Buildings, of low sensitivity (seven with predicted visibility of the Proposed Development).
- 6.3.25 There are no Archaeologically Sensitive Areas and no Non-Inventory Designed Landscapes that lie within 5 km of the outermost turbines of the Proposed Development.

6.4 Implications of Climate Change for Existing Conditions

- 6.4.1 This assessment uses projections for the 2060s and RCP8.0. The summary of the relevant climate change projections using the UK Climate Change Projections 2018 (UKCP18) for the west of Scotland are:
- Temperatures are projected to increase, particularly in summer;
 - Winter rainfall is projected to increase and summer rainfall is most likely to decrease;
 - Heavy rain days (rainfall greater than 25mm) are projected to increase, particularly in winter;
 - Near surface wind speeds are expected to increase in the second half of the 21st century with winter months experiencing more significant effects of winds; however, the increase in wind speeds is projected to be modest; and
 - An increase in frequency of winter storms over the UK.
- 6.4.2 As the most far-reaching projection, the 2060 scenario is considered to be appropriate for the design life of the project. RCP8.5 is selected as a precautionary approach on the basis that it is a worst-case pathway where greenhouse gas emissions continue to grow unmitigated. This Representative Concentration Pathway (RCP) has been used to indicate the temperature, precipitation, wind speed and storms in West Scotland which encompasses the Proposed Development and study area.

Temperature

- 6.4.3 Temperatures in West Scotland are projected to increase, with projected increases in summer temperatures greatest. The central estimate of increase in winter mean temperature is 2.1°C; it is very unlikely to be less than 0.6°C and is very unlikely to be more than 3.7°C. The central estimate of increase in summer mean temperature is 2.8°C; it is very unlikely to be less than 1.1°C and is very unlikely to be more than 4.6°C.

Precipitation

- 6.4.4 Winter rainfall is projected to increase, and summer rainfall is most likely to decrease. The central estimate of change in winter mean precipitation is 19%; it is very unlikely to be less than -2% and is very unlikely to be more than 45%. The central estimate of change in summer mean precipitation is -15%; it is very unlikely to be less than -34% and is very unlikely to be more than 4%.
- 6.4.5 With respect to the continued validity of UKCP18 projections for summer rainfall (see above), whilst the full range of summer rainfall outcomes from UKCP18 are considered to remain valid in informing planning decisions, rainfall patterns across the UK are not consistent and will vary dependent on seasonal and regional scales and will continue to vary in the future (Met Office 2019).

Wind Speed and Storms

- 6.4.6 Changes in wind speeds are not currently available at the regional level and there remains considerable uncertainty in the projections, with respect to wind speed. However, there are small changes in projected wind speed (Defra, DECC and Met Office 2010). Across the UK, near surface wind speeds are expected to increase in the second half of the 21st century with winter months experiencing more significant impacts of winds (Met Office 2019). This is accompanied by an increase in frequency of winter storms over the UK. However, the increase in wind speeds is projected to be modest.

Effects of Climate Change and Cultural Heritage.

- 6.4.7 As outlined in HES (2019) 'A Climate Change Risk Assessment' increased water and moisture are major factors in chemical, biological and physical decay processes that are prolific in the deterioration of stonework. This, in combination with increased vegetation growth, has the potential to have a negative impact on stone-built heritage assets. The stone-built structures identified as part of this assessment comprise elements of Scheduled Monuments of national importance and are mainly of drystone construction. It is assessed that changes in climate would have a low to negligible impact on these features.
- 6.4.8 There is a low risk that an increase in the frequency of winter storms could have an impact on the Scheduled Monuments situated atop the coastal cliffs, as a result of potential increased rates of coastal erosion throughout the projected period.
- 6.4.9 There is a low risk of disturbance of buried archaeological remains within the Site resulting from increased extreme wetting and drying of soils, leading to ground instability, as well as changes in chemical composition, compaction and erosion that may lead to adverse effects on long term survival of such remains.
- 6.4.10 There is a low risk that warmer and drier summers, with longer spells of dry weather, and an increased risk of forest and moorland fires would damage any cultural heritage within the Site.
- 6.4.11 It is therefore assessed that any changes in temperature, precipitation and wind speed will have a low to negligible impact on the current condition of the identified cultural heritage assets within the Site.

6.5 Future Baseline in the Absence of the Proposed Development

- 6.5.1 If the Proposed Development was not to proceed, there would likely be no change to the baseline condition of the various heritage assets and features that presently survive within the Site. The current land-use as improved pasture and rough grazing would be likely to continue, and those heritage assets that survive would be subject only to natural decay and erosion processes. This erosion would be most pronounced along the western edge of the Site, where coastal erosion has already precipitated the collapse of the sea cliff and the loss of elements of heritage assets on promontories.

6.6 Embedded Design Mitigation

- 6.6.1 The results of the desk-based study and previous field surveys were digitised as GIS data showing the locations (and, where relevant, the extents) of identified heritage assets. The layout of the Proposed Development, including the positioning of the turbines and the siting of other infrastructure, was subsequently designed to avoid or minimise direct effects and minimise the effects on setting on cultural heritage assets as far as possible. The layout shown on **Figure 6.1** therefore embeds design-based mitigation into the siting of the turbines and ancillary infrastructure.

6.7 Micrositing

- 6.7.1 It is proposed that the turbines and other infrastructure will be subject to a 100 m micrositing allowance which will be applied should adverse ground conditions be encountered during pre-construction ground investigations, or where more optimal ground conditions are available. Movement of infrastructure will, however, be dependent on other onsite constraints and subject to advice from an Ecological Clerk of Works (ECoW). This small allowance will ensure that the final position of the turbines and associated infrastructure are not varied to such a degree as to cause a notable change in the predicted environmental effects outlined in the EIA Report. Beyond this distance, any relocation of components will require either written approval from Dumfries and Galloway Council or will be treated as a formal variation to the application.
- 6.7.2 At two locations (a possible burnt mound (2) and an area of peat cuttings (15)), the recorded heritage asset lies within the micrositing allowance. These assets are addressed in the 'Construction Effects' section below.
- 6.7.3 All other identified heritage assets lie more than 100 m from the Proposed Development infrastructure, outwith the proposed micrositing allowance, and would not be adversely affected by the Proposed Development.

6.8 Scope of the Assessment

Effects Assessed in Full

- 6.8.1 The following potential effects were identified following a review of baseline data, project design and embedded mitigation for consideration in this assessment:
- Direct and indirect effects on non-designated cultural heritage sites or features within the Site where the Proposed Development infrastructure could encroach upon them;
 - Impacts on the settings of cultural heritage assets with statutory and non-statutory designations within 10 kilometres (km) of the outermost turbines of the Proposed Development. Scheduled Monuments, non-designated assets identified in Historic Environment Records (HER) as 'potentially of schedulable quality' (Non-Statutory Register (NSR) sites) where views and intervisibility are an important aspect of their settings, Category A and B Listed Buildings and Conservation Areas, where present within the blade tip height ZTV and within 10 km of the outermost turbines, are included in the assessment. Non-designated assets identified in the HER as 'regionally significant' archaeological assets (including Archaeologically Sensitive Areas (ASAs)), Category C Listed buildings and Non-Inventory Designed Landscapes (NIDLs) are considered where present within 5 km of the outermost turbines.
 - Cumulative operational effects on the setting of cultural heritage assets resulting from the Proposed Development in combination with other wind farms that are either operational, consented, under construction or at the application stage.

Effects Scoped Out

- 6.8.2 On the basis of the desk based and field survey work undertaken, the professional judgement of the EIA team, experience from other relevant projects and policy guidance or standards, and feedback received from consultees, the following effects areas have been 'scoped out' of detailed assessment, as proposed in the EIA Scoping Report:
- Indirect impacts arising from dewatering of peat deposits or vibration through quarry blasting;
 - Operational and cumulative effects on the settings of designated heritage assets more than 10 km from the outermost turbines of the Proposed Development (none beyond that distance have been identified as having settings that could be adversely affected by the Proposed Development);
 - Impacts on setting of cultural heritage assets during construction; and

- Direct impacts on cultural heritage assets during operation.

6.9 Assessment of Effects

- 6.9.1 The assessment of effects is based on the project description as outlined in **Chapter 4: Development Description**. Unless otherwise stated, potential effects identified are considered to be adverse effects.

Construction Effects

Predicted Construction Effects

- 6.9.2 The Proposed Development has been designed to avoid impacts on heritage assets as far as possible (**Figure 6.1**), however three heritage assets could be directly affected by construction works associated with the Proposed Development. These are:
- The recorded location of a shooting butt (14b), of negligible sensitivity, is crossed by the proposed access track to T4. Construction works for the upgrading of the existing track would disturb any surviving remains. It is likely that any remains have been previously truncated by the existing track. It is assessed that, without mitigation, the predicted impact, on an asset of negligible sensitivity, would be of high magnitude, resulting in an effect of negligible significance (not significant in EIA terms). No mitigation measures are recommended with regard to the predicted effect.
 - A possible burnt mound (2), of medium sensitivity, lies within 80 m of the proposed borrow pit to the east of T2. Micrositing of the borrow pit and associated access could potentially disturb the feature. It is assessed that, without mitigation, the predicted impact, on an asset of medium sensitivity, would be of high magnitude, resulting in an effect of major significance (significant in EIA terms). Mitigation measures to offset the predicted effect are set out below.
 - An area of relict peat cutting (15) to the south of Hind Hill, of negligible sensitivity, lies within 10 m of the proposed new access track. Micrositing of the new access track could potentially disturb a small section of the remains. It is assessed that, without mitigation, the predicted impact, on an asset of negligible sensitivity, would be of low magnitude, resulting in an effect of negligible significance (not significant in EIA terms). No mitigation measures are recommended with regard to the predicted effect.
- 6.9.3 All other identified heritage assets are sufficiently distanced from the Proposed Development such that no direct adverse effects are predicted.
- 6.9.4 As outlined in paragraph 6.3.21 there is a moderate potential for the discovery of unrecorded archaeological remains within the Site, which is mainly covered by unimproved pasture and where buried archaeological remains may have survived undisturbed. Any ground-breaking activities associated with the construction of the Proposed Development (such as those required for turbine bases and crane hard-standings, access tracks, cable routes, compounds, borrow pits, etc.) have the potential to disturb or destroy unrecorded features of cultural heritage interest. Other construction activities, such as vehicle movements, materials storage, soil and overburden storage and landscaping also have the potential to cause permanent and irreversible effects on the cultural heritage. Without mitigation, the predicted direct impact could be of high magnitude, potentially resulting in a potential effect of **major** significance (significant in EIA terms).

Committed Additional Mitigation

- 6.9.5 NPF4 (2023) provides a mitigation hierarchy: avoid, minimise, restore and offset. Avoidance and minimisation measures can be achieved through design, whilst compensatory measures offset effects that have not been avoided or minimised.
- 6.9.6 Historic Environment Policy for Scotland (HEPS) requires the recognition, care and sustainable management of the historic environment and the emphasis in Planning Advice Note (PAN) 2/2011: Planning and Archaeology (PAN2) is for the preservation of important remains in situ where practicable and by record where preservation is not possible. The mitigation measures presented below take this policy advice and planning guidance into account and provides various options for protection or recording ensuring that, where practical, surviving assets are preserved intact to retain the present historic elements of the landscape.

- 6.9.7 All mitigation works presented in the following paragraphs would take place prior to, or, where appropriate, during, the construction of the Proposed Development. The scope of works would be detailed in one or more Written Scheme(s) of Investigation (WSI) developed in consultation with Dumfries and Galloway Council.

Preservation In-Situ

- 6.9.8 Micrositing of the Proposed Development will take into account the desirability of preservation in situ where practicable. Preservation in situ of identified heritage assets would be achieved through marking off those assets that lie within the micrositing allowance prior to commencement of construction of the Proposed Development.
- 6.9.9 A possible burnt mound (2) that lies within 80 m of a proposed borrow pit and access tracks, would be marked off and avoided during construction works.
- 6.9.10 Marking out will be achieved using high visibility marker posts set 5 m from the edge of the identified heritage assets and these markers will be retained for the duration of the construction phase. Assets for marking out will be identified on the ground by a qualified archaeologist using the baseline information provided in **Technical Appendix 6.1**. Marking out of the assets will be undertaken by the appointed main contractor.
- 6.9.11 In the event of micrositing of infrastructure, where avoidance of heritage assets is not possible, archaeological monitoring in the form of a watching brief will be undertaken.

Evaluation / Watching Brief / Excavation

- 6.9.12 Taking account of the avoidance through the design of identified cultural heritage baseline within the Site, and the embedded mitigation set out above in relation to preservation in situ, it is assessed that there are no locations where a watching brief could be expected to encounter buried archaeological remains of currently known heritage assets.
- 6.9.13 Taking account of the moderate probability of encountering undisturbed buried archaeological remains within the Site, an archaeological watching brief should be maintained during all ground disturbance works. The scope of any archaeological watching brief(s) during the construction works will be agreed through consultation with the Council in advance of development works commencing and will be set out in the WSI.
- 6.9.14 Where buried remains are encountered during archaeological monitoring of groundworks, further mitigation may be required to a scope of works approved by the Council. The preferred mitigation of any archaeological find would be preservation in situ: this could be achieved by recording the locations and extents of any features identified and retaining them unexcavated beneath a geotextile membrane placed on the subsoil surface and beneath the track make up layer. Where disturbance of the remains is unavoidable (for example, where track side ditches are required) allowance will be made for the excavation of the features to a scheme to be agreed with the Council under the terms of the WSI.
- 6.9.15 If significant discoveries are made during any archaeological monitoring works which are carried out, and it is not possible to preserve the discovered site or features in situ, provision will be made for the excavation where necessary, of any archaeological remains encountered. The provision will include the consequent production of written reports, on the findings, with post-excavation analysis conservation of finds and publication of the results of the works, where appropriate.

Construction Guidelines

- 6.9.16 Written guidelines, in the form of Construction Method Statements (CMS), will be issued for use by all construction contractors, outlining the need to avoid causing unnecessary damage to known heritage assets. The guidelines will set out arrangements for calling upon retained professional support in the event that buried archaeological remains of potential archaeological interest (such as building remains, human remains, artefacts, etc.) should be discovered in areas not subject to archaeological monitoring.
- 6.9.17 The guidelines will make clear the legal responsibilities placed upon those who disturb artefacts or human remains.

Residual Construction Effects

- 6.9.18 For heritage assets within the Site, completion of the programme of archaeological mitigation works set out above (Paragraphs 6.9.5 - 6.9.17) will avoid, minimise or offset the loss of any archaeological remains that may occur as a result of the construction of the Proposed Development. Taking the proposed mitigation into account, any residual effect arising from construction of the Proposed Development in relation to direct effects on the cultural heritage

resource within the Site (including on any new archaeological discoveries, which will be mitigated through preservation by record) will be of no more than **negligible** significance (not significant in EIA terms).

Operational Effects

Predicted Operational Effects

- 6.9.19 The assessment of operational effects of the Proposed Development on the settings of heritage assets has been carried out with reference to the layout of the Proposed Development and locations of the cultural heritage assets shown on **Figure 6.2a-b** that fall within the blade tip height ZTV and from which there is some predicted degree of visibility of the Proposed Development. The criteria detailed in **Tables 6.2, 6.3** and **6.4** have been used to assess the nature and magnitude of the effects which are set out in tabulated summary format in **Technical Appendix 6.2** and **6.3**.
- 6.9.20 There are no Archaeologically Sensitive Areas (ASAs) or Non-Inventory Designed Landscapes (NIDLs) that are within 5 km of the Proposed Development turbines. Those that are between 5 km and 10 km all have localised settings, within their respective policies and the townscape of Stranraer, and they are consequently not considered in the assessment in **Technical Appendix 6.3**.
- 6.9.21 Wireline visualisations (**Figures 6.3 – 6.10**) are provided to inform the assessment of selected heritage assets within the Outer Study Area (as agreed with HES through post-scoping consultation). These are listed in **Table 6.5**. The selection of these was based on their proximity to the Proposed Development and an initial appraisal of the blade tip height ZTV. These viewpoints are also consistent with those used for the assessment of the Consented Larbrax Wind Farm.
- 6.9.22 Photomontages from seven designated heritage assets (SM 2018; SM 2001; LB 10115; SM 4811; SM 4885; LB 16758; and LB 13556) are provided as LVIA visualisations. These are referenced where appropriate in the assessment text and are included in **Table 6.5**.

Table 6.5 Cultural Heritage Visualisations

| Figure No | Asset Name | Status |
|---|--|--|
| Figure 6.3 (CH VP 1) | Meikle Larbrax, hut circles 460 m northwest of (SM 4792) | Scheduled Monument |
| Figure 6.4 (CH VP 2) | Meikle Larbrax, farmstead 1040 m northwest of (SM 4838) | Scheduled Monument |
| Figure 6.5 (CH VP 3) | Fort Point, fort and salt-pans (SM 1982) | Scheduled Monument |
| Figure 6.6 (CH VP 4) | Meikle Larbrax, hut circle 1000 m north-northeast of (SM 4786) | Scheduled Monument |
| Figure 6.7 (CH VP 5) | Entrance to Meikle Larbrax, fort (SM 1992) | Scheduled Monument |
| Figure 6.8 (CH VP 6) | Interior of Meikle Larbrax, fort (SM 1992) | Scheduled Monument |
| Figure 6.9 (CH VP 7) | Cairn Pat, fort (SM 1958) | Scheduled Monument |
| Figure 6.10 (CH VP 8) and 5.2.7 (LVIA VP 7) | Lochnaw Castle (LB 13498) and GDL (GDL 00407) | Inventory Garden and Designed Landscape and Category A Listed Building |
| Figures 5.2.1, 5.2.3 and 5.2.5 (LVIA VP 1, 3 & 5) | Galdenoch Castle (SM 2018) – representative viewpoints from vicinity | Scheduled Monument |
| Figure 5.2.6 (LVIA VP 6) | Tor of Craigoch, hill fort (SM 2001) and Agnew Monument (LB 10115) | Scheduled Monument and Category B Listed Building |
| Figure 5.2.9 (LVIA VP 9) | High Auchneel, forts (SM 4811 and SM 4885) | Scheduled Monument |

| Figure No | Asset Name | Status |
|-------------------------------|-------------------------------------|----------------------------|
| Figure 5.2.11 (LVIA VP 11) | Killantringan Lighthouse (LB 16758) | Category B Listed Building |
| Figure 5.2.13 (LVIA VP 13) | Marian Tower (LB 13556) | Category B Listed Building |

6.9.23 The tabulated assessment (**Technical Appendix 6.2** and **6.3**) has resulted in identification of the following effects within the Outer Study Area:

- Negligible effects on nine Scheduled Monuments.
- Negligible effects on two HER sites of national importance.
- Negligible effects on five HER sites of regional importance.
- Negligible effects on four Category B Listed Buildings.
- Negligible effects on eight Category C Listed Buildings.
- Minor effects on 11 Scheduled Monuments.
- Minor effects on two Category A Listed Buildings.
- A minor effect on two Category B Listed Building.
- A minor effect on one Inventory Garden and Designed Landscape (GDL).
- Minor effects on four HER sites of national importance.
- Minor effects on three HER sites of regional importance.

6.9.24 The assets that are represented by visualisations, and which have been agreed through post-scoping consultation are discussed in more detail below. Other designated heritage assets and non-statutory designated heritage assets from which there is some degree of theoretical visibility predicted by the blade tip and hub height ZTVs are assessed in tabulated form in **Technical Appendix 6.2** and **6.3**.

Hut circles 460 m northwest of Meikle Larbrax (SM 4792) (Figure 6.3: CHVP1)

6.9.25 The earthwork remains of two hut circles, of Bronze Age or Iron Age date, stand on a low rise to the south of Larbrax Moor within improved pasture. The slightly elevated inland position of the monument affords open views in all directions, taking in the adjacent coastline and the hills surrounding the moorland. Turbines of the operational North Rhins Wind Farm are visible above the skyline in the view to the south-east. The monument is not seen as a prominent feature of the landscape, with views towards the settlement from beyond the immediate surroundings frequently screened by the undulating topography. The setting of the prehistoric settlement is characterised by its placement adjacent to good quality agricultural land and may be further informed by its proximity to Iron Age promontory forts (SM 1982 and SM 1992), to the north-west and south. However, there is no demonstrable visual link to these low-lying fortifications along the coast, as intervisibility is interrupted by intervening topography. The hut circles are a Scheduled Monument, an asset of heritage value at a national level and of high sensitivity.

6.9.26 The bare-earth ZTV (**Figure 6.2**) indicates that there would be visibility of all four turbines of the Proposed Development in the view to the north-northwest from the hut circles. The wireline visualisations (**Figure 6.3a-d**) show that all four turbine hubs would be visible, clustered in the view to the north-northwest from the monument, with T2 aligned with and largely screening T4 beyond. The nearest turbine would be situated 530 m from the monument. The Proposed Development would not interrupt views of the coast, which are obstructed by topography to the northwest, providing partial screening of the proposed turbines. Extensive views to and from the surrounding undulating coastline would be unaltered and the proposed turbines, though visible as prominent and dynamic features, would be seen as clearly distinct in function and character in views towards the monument.

6.9.27 The Proposed Development would occupy a narrow arc of the view to the north-northwest from the monument, as a result of the closely grouped alignment of the turbines and would not detract from the open views attainable in other directions. Extensive views to and from the surrounding undulating coastline would remain unaltered. The proposed turbines would be partially screened by woodland in the foreground in views from the hut circles and would not

appreciably diminish the integrity of their coastal setting overlooking the surrounding agricultural land. It would remain possible for visitors to understand, appreciate and experience the monument in its wider setting.

- 6.9.28 Overall, it is assessed that the change to the baseline setting would have an impact of negligible magnitude on the setting of the monument, an asset of high sensitivity, and give rise to an effect assessed as being of **minor** significance (not significant in EIA terms).

Farmstead 1040 m northwest of Meikle Larbrax (SM 4838) (Figure 6.4: CHVP2)

- 6.9.29 The remains of a pre-improvement farmstead are situated just above the high-water mark at Drumwhisley, with associated cultivation marks extending across the coastal slope above, to the east. The structural remains of the farmstead have been impacted by coastal erosion and are isolated by the sea cliffs, which restrict access and visibility inland. Views from the monument are predominantly seaward, with visibility along the coastline to the north and south constrained by the rugged terrain. The secluded placement of the farmstead, positioned to maximise utilisation of the agricultural land to the east and to provide access to marine resources, forms a key aspect and focus of its setting. The farmstead is a Scheduled Monument, an asset of heritage value at a national level and of high sensitivity.
- 6.9.30 The bare-earth ZTV (**Figure 6.2**) indicates that there would be visibility of all four turbines of the Proposed Development in the view to the north from the farmstead. The wireline visualisation (**Figure 6.4a**) demonstrates that all four turbines of the Proposed Development would be visible at hub height in the view to the north from the structural remains, largely screened by the topography of the steep sea cliff. Atop the coastal slope, the nearest turbine would be situated 400 m from the monument. Visibility of the Proposed Development would be progressively limited by the terrain when moving down from the cultivated slope, such that the topography would provide a sense of separation from the proposed turbines. Principal views from the farmstead (**Figure 6.4b-d**), out to sea and to the south along the coast, would be unaffected.
- 6.9.31 The Proposed Development would add an industrial element to the otherwise agricultural and natural landscape in the limited views to the north. However, visibility of the proposed turbines from the monument would not significantly detract from the secluded setting of the structural remains or obscure their association with the adjacent cultivated ground. The Proposed Development would not detract from the predominant seaward views and would not appreciably diminish the integrity of the farmstead's marginal setting. It would remain possible for visitors to understand, appreciate and experience the farmstead in its localised setting on the rugged coastline.
- 6.9.32 Overall, it is assessed that the change to the baseline setting would have an impact of negligible magnitude on the setting of the farmstead, an asset of high sensitivity, and give rise to an effect assessed as being of **minor** significance (not significant in EIA terms).

Fort Point, fort and salt-pans (SM 1982) (Figure 6.5: CHVP3)

- 6.9.33 The remains of an Iron Age promontory fort and a post-medieval salt-pans are situated on a low spur of land at the north end of Salt Pans Bay. The fort has a prominent position at the head of the bay and commands open views of the sea to the west and along the coastline to the south. Visibility in other directions is enclosed by the topography of the bay with landward views limited by rising ground to the east. As such, there is no demonstrable intervisibility between the similar promontory forts distributed along the coast of the Rhins peninsula to the north and south. The maritime focus of each element of the monument forms the integral aspect of its setting. The site is a Scheduled Monument, an asset of heritage value at a national level and of high sensitivity.
- 6.9.34 The bare-earth ZTV (**Figure 6.2**) indicates that there would be visibility of turbines of the Proposed Development in the views arcing from north to south-east from the fort. The wireline visualisations (**Figure 6.5a-d**) demonstrates that three turbines of the Proposed Development would be visible in landward views, beyond the top of the coastal slope, the nearest turbine being situated 300 m away from the monument. Both turbine tips and hubs would be visible though the enclosing topography would largely screen T3 from the view to the north (**Figure 6.5d**). The proposed turbines would not interrupt or significantly alter the character of landward views, which are obstructed by rising topography. Views along the coast and out to sea would be unaffected.
- 6.9.35 The Proposed Development would not alter the principal views from the monument, directed along the coastline to the south and out to sea (**Figure 6.5c**). Topographical screening of the proposed turbines, afforded by the rugged coastline, would create a sense of separation in landward views from the monument, which would not diminish the integrity of the open setting. The character and cultural significance of the remains would be unaltered, and visibility of the Proposed Development would not appreciably diminish the integrity of the defensive setting of the fort in views

looking across the bay or from out at sea. It would remain possible for visitors to understand, appreciate and experience the multi-phase monument in its coastal setting.

- 6.9.36 Overall, it is assessed that the change to the baseline setting would have an impact of low magnitude on the setting of the fort and salt-pans, an asset of high sensitivity, and give rise to an effect assessed as being of **minor** significance (not significant in EIA terms).

Hut circle 1000 m north-northeast of Meikle Larbrax (SM 4786) (Figure 6.6: CHVP4)

- 6.9.37 The remains of a hut circle, of Bronze Age or Iron Age date, are cut into gently sloping ground within improved pasture on the east of Larbrax Moor. The site affords open views that take in the surrounding hills in an arc from the northeast to the south. Turbines of the operational North Rhins Wind Farm are visible above the skyline in the view to the south-east. The low-lying position of the monument limits views across the undulating topography towards the coast, which obstructs intervisibility with other prehistoric hut circles and forts along the coastline. It is not seen as a prominent feature of the landscape and appears backdropped by the topography in views from across the moorland or from nearby rises. The placement of the settlement in relation to the surrounding good quality agricultural land forms a key aspect of its setting. The site is a Scheduled Monument, an asset of heritage value at a national level and of high sensitivity.
- 6.9.38 The bare-earth ZTV (**Figure 6.2**) indicates that there would be visibility of all four turbines of the Proposed Development from the hut circles. The wireline visualisation (**Figure 6.6a**) shows that all four turbines would be seen in the view to the west-northwest from the monument; the nearest situated at a distance of 900 m. The Proposed Development would not interrupt views of the coast, which are obstructed by topography to the west, providing partial screening of the proposed turbines. Extensive views to and from the surrounding undulating coastline (**Figure 6.6b-d**) would be unaltered and the proposed turbines, though visible as prominent and dynamic features, would be seen as clearly distinct in function and character in views towards the monument.
- 6.9.39 The Proposed Development would introduce four turbines to the view to the west-northwest from the monument, altering the character of a portion of the view across the open moorland. However, the proposed turbines would not interrupt any visibility of the coast, attainable to the southwest, and would not detract from the wider views of the surrounding topography across the peninsula. The character and cultural significance of the hut circle would be unaltered, and the integrity of its open setting would not be diminished. It would remain possible for visitors to understand, appreciate and experience the monument and its position in the immediate surroundings.
- 6.9.40 Overall, it is assessed that the change to the baseline setting would have an impact of negligible magnitude on the setting of the monument, an asset of high sensitivity, and give rise to an effect assessed as being of **minor** significance (not significant in EIA terms).

Meikle Larbrax, fort (SM 1992) (Figure 6.7 and 6.8: CHVP5 and CHVP6)

- 6.9.41 The earthwork remains of a large Iron Age fort occupy a narrow promontory at the south end of Larbrax Bay. The low, sloping promontory is flanked by coastal spurs to the north and south of the bay that obstruct long-distance views along the coastline and preclude intervisibility with similar forts. Rising ground to the northeast limits landward views along the narrow valley of the Green Burn, directing the principal view out to sea. Views towards the fort are interrupted by the undulating topography of the peninsula, though it would have been a prominent landmark on approach from the sea. The fort is a Scheduled Monument, an asset of heritage value at a national level and of high sensitivity.
- 6.9.42 The bare-earth ZTV (**Figure 6.2**) indicates that there would be visibility of all four turbines of the Proposed Development from the fort. The wirelines and photomontage (**Figure 6.7a-f** and **6.8a-d**) demonstrate that all four turbines would be visible, clustered in the view to the north-northwest from the monument at distances greater than 1.6 km. Both turbine tips and hubs would be visible, though they would be low-lying above the skyline of the rugged coast due to topographic screening. The two turbines at Meikle Galdenoch would be removed should the Proposed Development receive planning permission. The immediate topography, which obstructs views from the monument in this direction, would provide a sense of distance and separation, by which the Proposed Development would appear set back from the coastal setting of the fort. Open landward views in other directions and along the coastline to the south would be unaffected (**Figure 6.7b-d** and **6.8b-d**).
- 6.9.43 The Proposed Development would occupy a narrow arc of the view to the north-northwest from the fort, as a result of a close alignment of the proposed turbines. It would not detract from the enclosed coastal setting of the promontory fort and would not alter the principal views from the monument, across the Green Burn to the east, or to the west out

to sea. The Proposed Development would not diminish the prominence of the fort, where it is seen from immediately along the coastline to the south, backdropped by the coast of Larbrax Bay. It would remain possible for visitors to understand, appreciate and experience the fort and the integrity of its defensive setting would be preserved.

- 6.9.44 Overall, it is assessed that the change to the baseline setting would have an impact of negligible magnitude on the setting of the monument, an asset of high sensitivity, and give rise to an effect assessed as being of **minor** significance (not significant in EIA terms).

Cairn Pat (SM 1958) (Figure 6.9: CHVP7)

- 6.9.45 The remains of a large hillfort of Iron Age date are situated atop Cairn Pat, central to the Rhins peninsula. This commanding position dominates the surrounding coastal lowland with panoramic views taking in Loch Ryan, Luce Bay and the North Channel. Turbines of the operational Glen App, Arecleoch and Kilgallioch Wind Farms are visible above the skyline in the distant view to the northeast from the monument (**Figure 6.9b**). The operational North Rhins Wind Farm occupies the horizon to the northwest, 2.5 km from the hillfort (**Figure 6.9a**). Cairn Pat is visible as a prominent landmark that appears most dominant in views towards the fort from the lowland to the east and northeast. Undulating topography limits intervisibility with contemporary forts (SM 1982; SM 1992; SM 4811; SM 4885) along the coast to the northwest. The hillfort is a Scheduled Monument, an asset of heritage value at a national level and of high sensitivity.
- 6.9.46 The bare-earth ZTV (**Figure 6.2**) indicates that there would be visibility of all four turbines of the Proposed Development from the hillfort. The bare-earth ZTV (**Figure 6.2**) indicates that all four turbines would be visible in the view to the northwest from the hillfort, at a distance of 9 km. The wireline visualisations (**Figure 6.9a**) show that at least three turbine tips would be visible, almost entirely screened from view by intervening topography, seen beyond and in line with operational turbines of the North Rhins Wind Farm. Panoramic views (**Figure 6.9b-d**) of the Rhins peninsula and far-reaching views of the coastline would be unaltered. The Proposed Development would not obstruct or noticeably alter views towards Cairn Pat across the undulating landscape.
- 6.9.47 The Proposed Development would constitute a minor alteration to the existing wind development infrastructure visible in views from the monument. Where visible, the proposed turbines would not noticeably alter the character and integrity of views to and from the hillfort. It would remain possible for visitors to understand, appreciate and experience the dominant position of the fort overlooking the Rhins peninsula and the integrity of its defensive setting would not be diminished.
- 6.9.48 Overall, it is assessed that the change to the baseline setting would have an impact of negligible magnitude on the setting of the hillfort, an asset of high sensitivity, and give rise to an effect assessed as being of **negligible** significance (not significant in EIA terms).

Lochnaw Castle (LB 13498) and GDL (GDL 407) (Figure 6.10: CHVP8 and Figure 5.2.7: LVIA VP 7)

- 6.9.49 The Inventory Garden and Designed Landscape of Lochnaw Castle occupies a natural geological basin at the head of the Aldouran Glen, 7 km northwest of Stranraer. The 18th and 19th century gardens and woodland policies are centred on the late 16th century Castle (LB 13498) on the southern shore of Lochnaw Loch. The ruins of the earlier 14th century seat of the medieval estate, Old Lochnaw Castle (SM 6232), are situated on an island within the loch. Views from the Castle grounds are broadly enclosed by the surrounding hills and managed woodland. Rising topography screens visibility of the coast to the west. The Category B listed Kinsale Tower situated on the high ground of Craighead Wood overlooks the designed landscape from the south and provides a visual link to the coastline from within the designed GDL. The Lochnaw estate has historical associations with the Category B listed Agnew Monument (LB 10115) which provides views towards the GDL from the northeast. The GDL is an asset of heritage value at a national level and of high sensitivity and forms the setting for one Scheduled Monument and nine Listed Buildings, including two of Category A and of high sensitivity. The detailed assessment identifies the potential impacts on the settings of Category A listed Lochnaw Castle (LB 13498) and GDL (GDL 407), as agreed in post-scoping consultation with HES (**Table 6.1**). Other designated and non-designated assets within the GDL are assessed in tabulated form in **Technical Appendix 6.2**.
- 6.9.50 The bare-earth ZTV (**Figure 6.2**) indicates that there would be visibility of all four turbines of the Proposed Development from the majority of the GDL. The wireline visualisations from Lochnaw Castle (**Figure 6.10a**) and from the eastern shore of Lochnaw Loch (**Figure 5.2.7**) show that all four turbines of the Proposed Development would be visible at hub height in the view to the west-southwest at distances greater than 2.5 km. The proposed turbines would be visible at a low elevation above the skyline, largely screened by intervening topography. Visibility of the

Proposed Development from the Category A listed Castle and from the eastern loch shore would be further reduced by the presence of mature woodland screening, such that key views and vistas of and between the core elements of the GDL would not be appreciably affected. Views throughout and overlooking the GDL in other directions would not be altered (**Figure 6.10b-d**).

- 6.9.51 The Proposed Development would introduce four turbines to the view to the west-northwest from within the GDL, altering the character of a portion of the view beyond the topographical basin. However, the proposed turbines would not interrupt any visibility of the coast from Lochnaw Castle or the loch shore and any visual impact would be significantly reduced by intervening woodland screening. Where the visual prominence of the Proposed Development may be more noticeable from other locations within the GDL, such as from Burnbank Cottage and on approach to the southwest lodge, the proposed turbines would not detract from the ability to understand, appreciate and experience the character of the designed landscape and the visual links between its elements or with the Agnew Monument to the northeast. The proposed turbines would be seen obliquely in views throughout the GDL from Kinsale Tower and would not appreciably diminish the integrity of the secluded woodland setting.
- 6.9.52 Overall, it is assessed that the change to the baseline setting would have an impact of low magnitude on the setting of the Category A Listed Building and the GDL, both assets of high sensitivity, and give rise to effects assessed as being of **minor** significance (not significant in EIA terms).

Galdenoch Castle (SM 2018) (Figures 5.2.1, 5.2.3 and 5.2.5: LVIA VP 1, 3 and 5)

- 6.9.53 The upstanding ruins of the 16th-century, L-plan, tower house are situated at the east end of the modern working farm at Meikle Galdenoch, surrounded by improved pasture and arable fields. The monument stands within a slight valley, close to the Green Burn and is partially enclosed by woodland, the farmhouse to the south-east and modern agricultural buildings to the west. Rising topography and buildings screen views of the coast to the west and south-west, directing views principally across the rural land to the east from a low elevation. Wider reaching views would be attainable from the upper levels of the tower house, yet access restrictions result in visitors experiencing the monument from the ground level. Galdenoch Castle is not a prominent feature in the landscape due to its low elevation. Where it is visible on approach along the B738 from the east and north, it appears backdropped against the topography and modern farm buildings and is frequently obscured by intervening hills or woodland. The castle is a Scheduled Monument, an asset of heritage value at a national level and of high sensitivity.
- 6.9.54 The bare-earth ZTV (**Figure 6.2**) indicates that there would be visibility of all four turbines of the Proposed Development in the view to the south-west from the Castle. The photomontage (**Figure 5.2.3**) demonstrates that all four turbines would be visible in the view to the south-west from the monument, at distances greater than 1.2 km. Turbine tips and hubs would both be visible, though the proposed turbines would be partially screened by topography in the foreground, with visibility of T3 further screened by intervening woodland. Views of and along the coast from the monument would not be interrupted. In the view towards the monument, from the west (**Figure 5.2.1**) and from the B738 to the east (**Figure 5.2.5**), the proposed turbines would be visible obliquely, evenly spaced along the coastline. The Meikle Galdenoch turbines visible in LVIA VP5 would be removed should the Proposed Development be granted planning permission.
- 6.9.55 The Proposed Development would not detract from views towards the monument or appreciably diminish the prominence of the castle within its setting. Where visible from the monument, the Proposed Development would not obstruct or alter key views away from the coast. It would remain possible for any visitor to understand, experience and appreciate the siting of this asset and the key aspects of the setting of relevance to the castle; as such the integrity of these key aspects of the castle's setting would be retained.
- 6.9.56 Overall, it is assessed that the change to the baseline setting would have an impact of low magnitude on the setting of Galdenoch Castle, an asset of high sensitivity, and give rise to an effect assessed as being of **minor** significance (not significant in EIA terms).

Tor of Craigoch, hill fort (SM 2001) and Agnew Monument (LB 10115) (Figure 5.2.6: LVIA VP6)

- 6.9.57 The remains of a prehistoric hillfort, comprising stone and earth ramparts, are situated atop a small, steep-sided hill affording far-reaching views throughout the northern Rhins peninsula. Panoramic views from the fort include visibility of the coast to the east and west, in addition to distant views across the undulating topography of the peninsula to the north and south. However the predominant view from the monument lies to the east along the Sole Burn, which has an open aspect overlooking Loch Ryan and includes intervisibility with the promontory fort at Mid Dinduff (SM 7343) of a possibly contemporary date. Intervening topography and the low elevation of promontory forts along

the west coast precludes intervisibility between Tor of Craigoich hillfort and other similar prehistoric forts (SM 1982; SM 1983; SM 1992; SM 4811) in the surrounding landscape. The monument is a prominent feature in the local landscape, most evident on approach along the A718 from the southeast, where it forms part of the skyline. The fort is a Scheduled Monument, an asset of heritage value at a national level and of high sensitivity. The Category B Listed Agnew Monument, an asset of regional heritage value and of medium sensitivity, stands in the centre of the fort and has historical associations with Lochnaw Estate, visible in the vista to the southwest from the 19th century commemorative tower.

- 6.9.58 The bare-earth ZTV (**Figure 6.2**) indicates that there would be visibility of all four turbines of the Proposed Development from the hillfort. The photomontage (**Figure 5.2.6**) shows that all four turbines would be visible, evenly spaced along the coastline, in the view to the southwest 4.9 km from the monument. The proposed turbines would appear above and beyond the woodland policies of the Lochnaw Castle GDL. The Proposed Development would not obstruct visibility of or between other prehistoric sites or appreciably alter views of the surrounding landscape. Views in other directions including the commanding vantage over Loch Ryan to the east would be unaltered. The presence of the proposed turbines, situated in a marginal location along the coast, would not detract from the prominence of the hillfort and commemorative monument as a landmark in its rural setting.
- 6.9.59 The Proposed Development would constitute a limited alteration to the distant view to the southwest from the monuments and would not interrupt views of the surrounding landscape of the Rhins peninsula. Visibility of the Proposed Development would not appreciably detract from appreciation of the vista towards Lochnaw Estate or inhibit appreciation of the historical associations of the Agnew Monument. It would remain possible for visitors to understand, appreciate and experience the fort and the integrity of its defensive setting would be preserved. Overall, it is assessed that the change to the baseline setting would have an impact of low magnitude on the setting of Tor of Craigoich hillfort, an asset of high sensitivity, and give rise to an effect assessed as being of **minor** significance (not significant in EIA terms). It is assessed that there would be an impact of low magnitude on the setting of the Agnew Monument, an asset of medium sensitivity, resulting in an effect of **minor** significance (not significant in EIA terms).

High Auchneel, forts (SM 4811 and SM 4885) (Figure 5.2.9: LVIA VP9)

- 6.9.60 The remains of four Iron Age forts are situated on low, sloping coastal promontories to the west of Rough Hill. The rugged terrain obstructs views to the north and south and precludes intervisibility with similar forts along the coast. Rising ground to the northeast limits landward views, directing the principal view out to sea. The predominant seaward views are reiterated in the most direct approach to the forts, down the coastal slope from the east. Views towards the forts are interrupted by the undulating topography of the peninsula, though they would have been a prominent landmark on approach from the sea. The forts are a Scheduled Monument, an asset of heritage value at a national level and of high sensitivity.
- 6.9.61 The bare-earth ZTV (**Figure 6.2**) indicates that there would be tip-height visibility of all four turbines of the Proposed Development in the view to the south from the forts. The photomontage (**Figure 5.2.9**) demonstrates that, from the undulating farmland above the coastal slope, to the east, the Proposed Development would be visible over 3 km distant, across undulating terrain that partially screens the proposed turbines and separates them from the immediate coastal setting of the forts.
- 6.9.62 Where visible, the Proposed Development would not interrupt or obstruct views to or from the forts and would not detract from appreciation of their defensive setting on the coastal promontories. The character of the remote and rugged landscape and the integrity of the open seaward views would be retained. It would remain possible for visitors to understand, appreciate and experience the fort and the integrity of its defensive setting would be preserved. Overall, it is assessed that the change to the baseline setting would have an impact of negligible magnitude on the setting of the monument, an asset of high sensitivity, and give rise to an effect assessed as being of **minor** significance (not significant in EIA terms).

Killantringan Lighthouse (LB 16758) (Figure 5.2.11: LVIA VP11)

- 6.9.63 The early 20th century lighthouse complex, comprising a two-storey keeper's house, circular tower and a foghorn, are situated on the high point of the rocky peninsula at Black Head. The commanding position affords open views of the adjacent coastline, with landward views constrained by rising topography. Far-reaching views are attainable from Black Head across Killantringan Bay to the north and out to sea in an arc from south to northwest. The lighthouse is a prominent structure with architectural and functional characteristics that are readily understood when viewed from the immediately adjacent coastline. It has a functional coastal setting that is principally defined with respect to

seaward views from the lighthouse and its prominence from the sea. The lighthouse complex is a Category B Listed Building, an asset of heritage value at a regional level and of medium sensitivity.

- 6.9.64 The photomontage (**Figure 5.2.11**) demonstrates that all four turbines of the Proposed Development would be visible, clustered in the view to the north from the lighthouse at distances greater than 5.1 km. The proposed turbines would be visible above the skyline and slightly set back from the coastal cliffs, beyond the headland of Cranberry Point. Views from the lighthouse in other directions would be unaltered. Where visible in views towards or across the monument, the Proposed Development would not interrupt or obstruct visibility of the lighthouse, and they would not appear dominant in the backdrop of views along the coast or out to sea.
- 6.9.65 The Proposed Development would introduce four turbines in a narrow arc of the view to the north from the monument. The proposed turbines would not detract from the prominence of the lighthouse in views of and along the coastline and their function and character would not diminish appreciation of the monument in its coastal setting. It would remain possible for visitors to the lighthouse to understand and experience this asset as a functional building sited to afford warning and protection to seafarers. Its key characteristics in relation to open seaward views and the integrity of its maritime setting would be unaffected.
- 6.9.66 Overall, it is assessed that the change to the baseline setting would have an impact of negligible magnitude on the setting of Killantringan Lighthouse, an asset of medium sensitivity, and give rise to an effect assessed as being of **negligible** significance (not significant in EIA terms).

Marian Tower (LB 13556) (Figure 5.2.13: LVIA VP13)

- 6.9.67 A commemorative circular tower monument, dated 1808, is situated atop Craigengerloch Hill to the southeast of Balsarroch House, the former home of the Ross family. According to local tradition, the tower was built by the Arctic voyager Sir John Ross to mark the spot where his wife, Marian, awaited his return from sea. Its elevated position affords far-reaching views throughout the North Rhins peninsula and visibility out to sea to the west. Turbines of the operational Glen App and North Rhins Wind Farms are visible above the skyline to the east and south-southwest, respectively. The tower is a prominent landmark though the undulating topography frequently screens the monument from views from the surroundings, such as when travelling along the B738 from the southwest. The monument is a Category B Listed Building, an asset of heritage value at a regional level. It is also classified in the HER as an asset of potentially schedulable quality and of high sensitivity.
- 6.9.68 The bare-earth ZTV (**Figure 6.2**) indicates that there would be visibility of all four turbines of the Proposed Development from the monument. The photomontage (**Figure 5.2.13**) shows that all four turbines would be visible, just above the skyline to southwest and almost entirely screened by intervening topography at a distance of 7 km. All turbine tips and hubs would be visible though the proposed turbines would not be prominent in the distant view from the monument. The Proposed Development would not interrupt or obstruct views of the coast or out to sea, such as those attainable to the west and views in other directions would be unaltered. The proposed turbines would not significantly alter views of the tower from the surrounding landscape.
- 6.9.69 The Proposed Development would constitute a minor alteration to the view to the southwest from the monument and would not noticeably alter the character or integrity of its open coastal setting. Panoramic views of the undulating peninsula would be uninterrupted, and the tower would remain dominant in views from the immediate surroundings. It would remain possible to understand, appreciate and experience the commemorative monument and its vantage overlooking the North Rhins landscape. The integrity of its setting, its capacity to contribute to the cultural significance of the monument, would not be noticeably altered.
- 6.9.70 Overall, it is assessed that the change to the baseline setting would have an impact of negligible magnitude on the setting of Marian Tower, an asset of high sensitivity, and give rise to an effect assessed as being of **negligible** significance (not significant in EIA terms).

Committed Additional Mitigation

- 6.9.71 No mitigation is proposed in respect of the predicted effects on the settings of heritage assets during the operation of the proposed Development. Effects on the settings of heritage assets are long-term and cannot be reduced by any form of mitigation other than design.

Residual Operational Effects

- 6.9.72 During its operational lifetime, the residual effects of the Proposed Development on the settings of heritage assets in the Outer Study Area will be the same as the predicted effects.
- 6.9.73 All effects on the settings of heritage assets in the surrounding landscape are of either **Minor** or **Negligible** significance (not significant in EIA terms).

Cumulative Effects During Construction

Predicted Cumulative Effects During Construction

- 6.9.74 Construction of the Proposed Development alongside the consented Glen of Aldouran Extension would not give rise to any direct cumulative effects on cultural heritage assets. No heritage assets that would be potentially affected by the construction of the Proposed Development would be directly affected by construction works related to cumulative developments. Cumulative construction effects are therefore the same as those predicted for the Proposed Development alone.

Committed Additional Mitigation

- 6.9.75 No mitigation is proposed in respect of the predicted construction cumulative effects on heritage assets.

Residual Cumulative Effects During Construction

- 6.9.76 Cumulative construction effects in relation to direct effects on the cultural heritage resource within the Site (including on any new archaeological discoveries, which will be mitigated through preservation by record) will remain of no more than **minor** significance (not significant in EIA terms).

Cumulative Effects During Operation

Predicted Cumulative Effects During Operation

- 6.9.77 The Proposed Development could, in combination with other wind farm developments in the area that are operational, consented but not yet built, or are the subject of valid applications, result in adverse cumulative effects on the setting of cultural heritage assets. Operational and under construction developments are taken to be part of the baseline for the assessment of effects on the settings of heritage assets set out above. Other developments that are consented but not yet under construction and those that are the subject of valid applications are considered as being potential additions to the baseline and are considered in the cumulative impact assessment.
- 6.9.78 **Figure 6.2a-b** shows the cumulative developments in the surrounding landscape as well as the locations of the cultural heritage assets within the Outer Study Area. Visualisation viewpoints are also shown. The visualisations provided (**Table 6.5**) show the cumulative developments where they would be visible from the heritage assets assessed in detail above.
- 6.9.79 The consented Glenhead of Aldouran Extension would introduce one turbine that, where visible, would be seen in context with the operational Glenhead of Aldouran development. The wireline visualisations (**Figure 5.2.3, 5.2.6, 5.2.9, 5.2.11, 5.2.13** and **Figures 6.3-6.10**) demonstrate that there would be no more than distant tip-only visibility of the consented turbine from most of the sensitive receptors assessed above, due to screening from intervening topography. Visibility of the consented turbine to the northeast from Lochnaw Castle and GDL would be screened by intervening woodland, such that there would be no noticeable visual impact in combination with the Proposed Development.
- 6.9.80 Overall, the combined effect of the Proposed Development with the consented Glenhead of Aldouran Extension on the setting of cultural heritage assets would be no greater than that assessed for the Proposed Development alone, of **minor** or **negligible** significance (not significant in EIA terms) as summarised in **Technical Appendix 6.2 and 6.3**.
- 6.9.81 There are no further cumulative developments within the 10 km Outer Study Area which are consented, at the application stage or are reasonably foreseeable. Those beyond the 10 km Outer Study Area, including the proposed Mid Moile Wind Farm, would be generally screened by intervening topography or woodland from most of the assets assessed above. Where visible these developments would be seen beyond Loch Ryan, in the opposite direction to

the Proposed Development and, based on professional judgement, they are considered to have little or no adverse impact on the setting of cultural heritage assets, in combination with the Proposed Development.

Committed Additional Mitigation

- 6.9.82 No mitigation is proposed in respect of the predicted cumulative operational effects on the settings of heritage assets occurring for the duration of the operation of the Proposed Development.

Residual Cumulative Effects During Operation

- 6.9.83 During its operational lifetime, the residual cumulative effects of the Proposed Development on the settings of heritage assets in the Outer Study Area will be the same as the predicted cumulative effects.
- 6.9.84 As such, all cumulative effects on the settings of heritage assets in the surrounding landscape remain of either **minor** or **negligible** significance (not significant in EIA terms).

6.10 Interrelationship Between Effects

- 6.10.1 In regard to effects of the Proposed Development on heritage assets, some potential interactions may arise from landscape changes and with effects on the setting of heritage assets. The landscape aspects are described in **Chapter 5: Landscape and Visual Impact Assessment**.
- 6.10.2 As mentioned, the effects arising from the Proposed Development on the surrounding landscape and those affecting the setting of key heritage assets are however distinct; the first is an effect on the landscape character and how the effects are perceived by people, while the second is an effect on the heritage setting of individual assets or groups of assets. Taking this into consideration it is assessed that the in-combination cumulative effect will be negligible and not significant.

6.11 Summary of Likely Significant Effects

- 6.11.1 **Table 6.6** below summarises the predicted significant effects of the Proposed Development on Cultural Heritage assets prior to and following the implementation of the proposed mitigation.
- 6.11.2 No significant residual effects in EIA terms are predicted as a result of the Proposed Development.

Table 6.6 Summary of Likely Significant Effects

| Predicted Effects | Significance | Committed Additional Mitigation | Significance of Residual Effect |
|--|--------------|---|---------------------------------|
| Construction | | | |
| Potential adverse direct effect on Loch More, burnt mound (2), which lies within the micro-siting allowance. | Major | Mark off and avoid during construction works. | Negligible (not significant) |
| Potential adverse effects on buried archaeology. | Major | Archaeological watching brief to be carried out during any ground-breaking works. | Minor (not significant) |

Glossary/Abbreviations

Table 6.7 Glossary

| Term in Full | Abbreviation |
|---|--------------|
| Archaeologically Sensitive Area | ASA |
| Associate of the Chartered Institute for Archaeologists | ACIfA |

| Term in Full | Abbreviation |
|--|--------------|
| CFA Archaeology Ltd | CFA |
| Chartered Institute for Archaeologists | CIfA |
| Construction Method Statements | CMS |
| Digital Terrain Model | DTM |
| Dumfries & Galloway Council | DGC |
| Dumfries & Galloway Council Archaeology Service | DGCAS |
| Ecological Clerk of Works | ECoW |
| Environmental Impact Assessment | EIA |
| Environmental Statement | ES |
| Geographic Information System | GIS |
| Historic Environment Policy for Scotland | HEPS |
| Historic Environment Scotland | HES |
| Historic Environment Record | HER |
| Institute of Environmental Management and Assessment | IEMA |
| Inventory Garden and Designed Landscape | GDL |
| Landscape and Visual Impact Assessment | LVIA |
| Listed Building | LB |
| Local Development Plan | LDP |
| National Planning Framework 4 | NPF4 |
| National Record of the Historic Environment | NRHE |
| Non-Inventory Designed Landscape | NIDL |
| Non-Statutory Register | NSR |
| Planning Advice Note | PAN |
| Registered Organisation | RO |
| Representative Concentration Pathway | RCP |
| Scheduled Monument | SM |
| Scottish Natural Heritage (now NatureScot) | SNH |
| UK Climate Change Projections 2018 | UKCP18 |
| Written Scheme of Investigation | WSI |
| Zone of Theoretical Visibility | ZTV |